

The Central Motor Vehicles Rules, 1989

UNION OF INDIA

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The Central Motor Vehicles Rules, 1989

Rule THE-CENTRAL-MOTOR-VEHICLES-RULES-1989 of 1989

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Chapter I Preliminary

1. Short title and commencement.

(1)These rules may be called The Central Motor Vehicles Rules, 1989.(2)[Except in so far as the provisions of these rules relate to the registration of non-commercial four wheeled petrol and diesel driven vehicles in the National Capital Region, Delhi which shall come into force on and from the 1st day of June 1999, the provisions of these rules shall come into force on and from the 1st April, 2000.] [Substituted by Notification No. G.S.R. 399(E), dated 1.6.1999 (w.e.f. 2.6.1989).](3)The provisions of [rule, 9] [Inserted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989)] sub-rule (3) of rule 16, sub-rule (4) of rule 96, [* * *] [The words and figures 'sub-rule (3) of rule 103 omitted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).] sub-rule (3) of rule 105, rule 113, sub-rules (2), (3), (4) or (5) of rule 115, rules 118, 122, 124, 125, 126 and 127 shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

2. Definitions.

- In these rules, unless the context otherwise requires (a) "Act" means the Motor Vehicles Act, 1988 (59 of 1988); (b) ["agricultural tractor" means any mechanically propelled 4-wheel vehicle designed to work with suitable implements for various field operations and/or trailers to transport agricultural materials. Agricultural tractor is a non-transport vehicle; [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] (c) "agricultural trailer" means a trailer generally left uncovered with single/double axle construction which is coupled to an agricultural tractor by means of two hooks and predominantly used for transporting agricultural materials;] (ca) ["combine harvester" means an agricultural equipment vehicle, self propelled or agricultural tractor powered type (either coupled to the trailer for header assembly or any other attachment of the machine) designed to perform more than one of the following tasks namely:- [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] (i) picking, harvesting, threshing, separating, cleaning, chopping, collecting and unloading crop or agricultural produce, such as grain, sugarcane, cotton, fodder, straw or stalk, while moving through the standing crop or agricultural produce; (ii) arrangement of bagging with a pick-up attachment to use it for handling crop that has been swathed. Explanation.-For the purpose of this clause, a combine harvester shall be a non-transport motor vehicle, the driving on the road of which is incidental to the main intended use in the fields and for traveling from one field to another, for short durations, at a speed not exceeding thirty kilometer per hour;] [(cab) [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] "construction equipment vehicle" means rubber tyred (including pneumatic tyred), rubber padded or steel drum wheel mounted, self-propelled, excavator, loader, backhoe, compactor roller, dumper, motor grader, mobile crane, dozer, fork lift truck, self-loading concrete mixer or any other construction equipment vehicle or combination thereof designed for off-highway operations in mining, industrial undertaking, irrigation and general construction but modified and manufactured with "on or off" or "on and off" highway capabilities. Explanation. - A construction equipment vehicle shall be a non-transport vehicle the driving on the road of which is incidental to the main off-highway function and for a short duration at a speed not exceeding 50 kms per hour, but such vehicle does not include other purely off-highway construction equipment vehicle designed and adopted for use in any enclosed premises, factory or mine other than road network, not equipped to travel on public roads on their own power;] (cb) ["E-rickshaw" means a special purpose battery operated vehicle having three wheels and intended to provide last mile connectivity for transport of passengers for hire or reward, provided - [Inserted by Notification No. GSR 709 (E), dated 8.10.2014 (w.e.f. 2.6.1989)] (i) such vehicle is constructed or adapted to carry not more than four passengers, excluding the driver, and not more than forty kilogrammes luggage in total; (ii) the net power of its motor is not more than 2000 W; (iii) the maximum speed of the vehicle is not more than twenty-five kilometer per hour; (cc) "E-cart" means a special purpose battery operated vehicle having three wheels and intended to provide last mile connectivity for carrying goods for hire or reward, provided - (i) such vehicle is constructed or adapted for carrying goods by providing a separate load body or compartment with the maximum weight three hundred and ten kilogrammes in addition to driver; (ii) the net power of its motor is not more than 2000 W; (iii) the maximum speed of the vehicle is not more than twenty-five kilometre per hour] (d) ["financier" means a person or a title holder-cum-dealer who lets a motor vehicle on hire under an agreement of hire purchase or lease or hypothecation to the operator with a permission to get it registered in operators name as registered

owner;] [Substituted by GSR 111(E), dated 10.2.2004, for Clause (d) (w.e.f. 10.2.2004).](e)[
 [Clauses (b) and (c) relettered as Clauses (e) and (f), respectively by GSR 338(E), dated 26.3.1993
 (w.e.f. 26.3.1993).] Form means a Form appended to these rules;(f)[[Clauses (b) and (c) relettered
 as Clauses (e) and (f), respectively by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] section
 means a section of the Act;(g)[[Clauses (d) and (e) relettered as Clauses (g) and (h), respectively by
 GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] trade certificate means a certificate issued by the
 registering authority under rule 35;(h)[[Clauses (d) and (e) relettered as Clauses (g) and (h),
 respectively by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] non-transport vehicle means a
 motor vehicle which is not a transport vehicle;[(i) Category L-1 means a motorcycle with maximum
 speed not exceeding 45 Km/h and engine capacity not exceeding 50 cc if fitted with a thermic engine
 or motor power not exceeding 0.5 kilo watt if fitted with electric motor;] [Inserted by GSR 400(E),
 dated 31.5.2002 (w.e.f. 31.5.2002).] (j)[Category L-2 means motorcycle other than Category L-1]
 [Substituted by GSR 784(E), dated 12.11.2008 (w.e.f. 12.11.2008).];(k)[Category M means a motor
 vehicle with at least four wheels used for carrying passengers] [Substituted by GSR 784(E), dated
 12.11.2008 (w.e.f. 12.11.2008).];(l)[Category M-1 means a motor vehicle used for carriage of
 passengers, comprising not more than eight seats in addition to the drivers seat.] [Substituted by
 GSR 784(E), dated 12.11.2008 (w.e.f. 12.11.2008).]Note.- Definitions of type of body work for motor
 vehicles of Category M1 shall be in accordance with Annexure 1 of AIS 053:2005, as amended from
 time to time, till the corresponding BIS specifications are notified under the Bureau of Indian
 Standards Act, 1986 (63 of 1986);(m)[Category M-2 means a motor vehicle used for carriage of
 passengers, comprising nine or more seats in addition to drivers seat and having a maximum Gross
 Vehicle Weight not exceeding five tonnes;] [Substituted by GSR 784(E), dated 12.11.2008 (w.e.f.
 12.11.2008).](n)[Category M-3 means a motor vehicle used for carriage of passengers, comprising
 nine or more seats in addition to drivers seat and having a Gross Vehicle Weight exceeding five
 tonnes;] [Substituted by GSR 784(E), dated 12.11.2008 (w.e.f. 12.11.2008).](o)[Category N means a
 motor vehicle with at least four wheels used for carrying goods which may also carry persons in
 addition to the goods subject to the conditions specified in Para 3.2 of AIS 053-2005, as amended
 from time to time, till the corresponding BIS specifications are notified under the Bureau of Indian
 Standards Act, 1986 (63 of 1986);] [Substituted by GSR 784(E), dated 12.11.2008 (w.e.f.
 12.11.2008).](p)[Category N-1 means a motor vehicle used for carriage of goods and having a Gross
 Vehicle Weight not exceeding 3.5 tonnes;] [Substituted by GSR 784(E), dated 12.11.2008 (w.e.f.
 12.11.2008).](q)[Category N-2 means a motor vehicle used for carriage of goods and having a Gross
 Vehicle Weight exceeding 3.5 tonnes but not exceeding 12 tonnes;] [Substituted by GSR 784(E),
 dated 12.11.2008 (w.e.f. 12.11.2008).](r)[Category N-3 means a motor vehicle used for carriage of
 goods and having a Gross Vehicle Weight exceeding 12 tonnes; [Substituted by GSR 784(E), dated
 12.11.2008 (w.e.f. 12.11.2008).]Note.- For the motor vehicles, additional details and definitions
 specified in AIS 053-2005, as amended from time to time, till the corresponding BIS specifications
 are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986) shall be applicable;](s)[
 Smart Card means a device capable of storing data and executing commands which is a
 microprocessor chip mounted on a plastic card and the dimensions of the card and chip are
 specified in the International Organisation for Standardisation (ISO)/International Electro
 Technical Commission (IEC) 7816 specifications, as may be amended from time to time, and shall
 be as per the specifications specified in Annexure XI. [Substituted by GSR 513(E), dated 10.8.2004
 (w.e.f. 10.9.2004).]Explanation. - For the purposes of this clause, microprocessor chip shall have

non-volatile re-writable memory capacity of minimum [64 Kilo Byte] consisting of application data, file headers, security definitions, and a maximum of 350 bytes for Operating System Interfacing, as specified by the Ministry of Road Transport and Highways from time to time for Driving License and Registration Certificate applications;][Note : The microprocessor chip of smart card mentioned at para I shall conform to the specification given in the Annexure for smart card based driving license and vehicle Registration documents for transport and non-transport vehicles and shall contain the information specified under these rules.] [Inserted by G.S.R. 540(E), dated 15.6.2010.](t)[International Driving Permit means the license issued by a licensing authority in India under Chapter II of the Act to an Indian National authorising the person specified therein to drive any categories of motor vehicles as specified in Form 6-A in the areas or territories of countries other than India [that are Parties to the Convention on Road Traffic signed at Geneva on 19th day of September, 1949] [Inserted by GSR 720(E), dated 10.9.2003 (w.e.f. 10.10.2003).];](u)[Battery Operated Vehicle means a vehicle adapted for use upon roads and powered exclusively by an electric motor whose traction energy is supplied exclusively by traction battery installed in the vehicle: [Inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).][Provided that a two wheeled battery operated vehicle shall not be deemed to be a motor vehicle if all the following conditions are verified and authorised by any testing agency specified in rule 126, namely:-(a)vehicle is equipped with an electric motor having thirty minute power less than 0.25 kW;(b)maximum speed of the vehicle is less than 25 km/hr;(c)vehicle is fitted with suitable brakes and retro-reflective devices, i.e. one white reflector in the front and one red reflector at the rear;(d)unladen weight (excluding battery weight) of the vehicle is not more than 60 kg;(e)in case of pedal assisted vehicle equipped with an auxiliary electric motor, in addition to above, the thirty minute power of the motor is less than 0.25 kW, whose output is progressively reduced and finally cut off as the vehicle reaches a speed of 25 km/hr, or sooner, if the cyclist stops pedalling.](v)"Power tiller" means an agricultural machinery used for soil preparation having a single axle in which the direction of travel and its control for field operation is performed by the operator walking behind it. This equipment may or may not have a riding attachment and when coupled to a trailer can be used for the transportation of goods. The maximum speed of the power tiller when coupled to a trailer, shall not exceed 22 km/h. The maximum haulage capacity of the Power tiller coupled to a trailer shall not exceed 1.5 tons;](w)[National Capital Region shall have the meaning assigned to it in clause (f) of section 2 of the National Capital Region Planning Board Act, 1985 (2 of 1985).] [Inserted by GSR 37(E), dated 20.1.2009 (w.e.f. 20.1.2009).](x)["modular hydraulic trailer" means a trailer module intended for carrying indivisible heavy or over dimensional cargo and having the following features, namely:- [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](i)swing axles with hydraulic suspension;(ii)independently steerable axles;(iii)two or more axle rows;(iv)suitable arrangement for joining such modules longitudinally or laterally or both;(v)suitable provision for joining such separate modules with spacer beam arrangement or by bolster arrangement or by girder bridge arrangement or by loading deck arrangement;(vi)suitable drawbar arrangement for being pulled or pushed or self propelled.Explanation. - For the purpose of this clause, the expressions,-(i)"spacer beam arrangement" shall mean the arrangement of rigid steel frame used for joining two separate modular hydraulic trailer units to form a single rigid chassis for movement of long cargo;(ii)"bolster arrangement" shall mean the arrangement of two separate units of modular hydraulic trailer mounted with turn tables and the cargo rests on the turn tables, whereby cargo structure itself acts as long member of trailer chassis;(iii)"girder bridge arrangement" shall mean

the arrangement of two separate units of modular hydraulic trailers mounted with turn tables, and cargo is placed on a steel girder, which is then mounted on modular hydraulic trailer, whereby the steel girder acts as the long member of the trailer chassis;(iv)"loading deck arrangement" shall mean the arrangement of two separate units of modular hydraulic trailers mounted with turn tables, and cargo is placed on a loading deck, which is then mounted on both modular hydraulic trailers, whereby the loading deck acts as the long member of the modular hydraulic trailer chassis;(vii)fitted with suitable braking system.(y)"puller tractor" means a multi-axle haulage tractor of Category N3 vehicle having-(i)suitable arrangement to pull or push modular hydraulic trailer or combination thereof under drawbar arrangement;(ii)adequate ballast weight for providing traction;(iii)minimum engine power of 260 hp; and(iv)maximum speed not exceeding twenty five kilometre per hour while pulling load;]

Chapter II

Licensing of Drivers of Motor Vehicles

General

3. General.

- The provisions of sub-section (1) of section 3 shall not apply to a person while or gaining experience in driving with the object of presenting himself for a test of competence to drive, so long as-(a)such person is the holder of an effective learners license issued to him in Form 3 to drive the vehicle;(b)such person is accompanied by an instructor holding an effective driving license to drive the vehicle and such instructor is sitting in such a position to control or stop the vehicle; and(c)there is painted, in the front and the rear of the vehicle or on a plate or card affixed to the front and the rear, the letter L in red on a white background as under:

L

Note.- The painting on the vehicle or on the plate or card shall not be less than 18 centimetres square and the letter L shall not be 10 centimetres high, 2 centimetres thick and 9 centimetres wide at the bottom:Provided that a person,while receiving instructions or gaining experience in driving a motor cycle(with or without a side-car attached), shall not carry any other person on the motor cycle except for the purpose and in the manner referred to in clause (b).

4. [Evidence as to the correctness of address and age. [Rule 4 substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

- Every applicant for the issue of a license under this Chapter shall produce as evidence of his address and age, any one or more of the following documents in original or relevant extracts thereof duly [self attested], namely:-[* * *] [Item No. 1 '1. Ration Card'omitted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).]

2. Electoral Roll,

3. Life Insurance Policy,

[* * *] [Item No. 3-A '3-A. Janta Insurance Policy'omitted by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000). Earlier it was inserted by GSR 684(E), dated 15.10.1999 (w.e.f. 22.10.1999).]

4. Passport,

[* * *] [Item No. 5 '5. Electricity or Telephone Bill'and Item No. 7 '7. House Tax Receipt'omitted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001). Before that item Nos. 5, 6 and 7 were inserted by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000).][* * *] [Omitted "6. Pay slip issued by any office of the Central Government or a State Government or a local body," by Notification No. G.S.R. 684(E), dated 5.8.1999 (w.e.f. 2.6.1989)][* * *] [Item No. 5 '5. Electricity or Telephone Bill'and Item No. 7 '7. House Tax Receipt'omitted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001). Before that item Nos. 5, 6 and 7 were inserted by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000).]

8. School certificate,

9. Birth certificate,

10. Certificate granted by a registered medical practitioner not below the rank of a Civil Surgeon, as to the age of the applicant,

11. [Any other document or documents as may be prescribed by the State Government under clause(k) of section 28.] [Item 11 inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).]

12. [Proof of legal presence in India in addition to proof of residence in case of foreigners:] [Inserted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).]

Provided that where the applicant is not able to produce any of the above-mentioned documents for sufficient reason, the licensing authority may accept any affidavit sworn by the applicant before an Executive Magistrate, or a First Class judicial magistrate or a Notary Public as evidence of age and address.]

5. Medical certificate.

- [(1) Every application for the issue of a learners license or a driving license or for making addition of another class or description of a motor vehicle to a driving license or for renewal of a driving license to drive a vehicle other than a transport vehicle shall be accompanied by as elf-declaration as to the physical fitness as in Form 1 and every such application for a license to drive a transport

vehicle shall be accompanied by a medical certificate in Form 1-A issued by a registered medical practitioner referred to in sub-section (3) of section 8.] [Sub-Rule (1) substituted by GSR 221(E), dated 28.3.2001 (28.3.2001). Before that sub-Rule (1) substituted by GSR 684(E), dated 5.10.1999 (w.e.f. 5.10.1999).](2)[An application for a medical certificate shall contain a declaration in Form 1.(3)A medical certificate issued in Form 1-A shall be valid for a period of one year from the date of its issue. It shall be accompanied by a passport size copy of the photograph of the applicant.] [Inserted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]

6. Exemption from production of medical certificate.

- Any person who has, after the date of commencement of these rules, produced a medical certificate in connection with the obtaining of a learners license or a driving license, whether for initial issuance or for renewal there of, or for addition of another class of motor vehicles to his driving license, shall not be required to produce a medical certificate, except where the application is made for the renewal of a driving license.

7. Affixing of photograph to medical certificate.

- A photograph of the applicant shall be affixed at the appropriate place shown in [Form 1-A] [Substituted by GSR 933(E), dated 28.10.1989, for 'Form 1' (w.e.f. 28.10.1989).] and the registered medical practitioner shall affix his signature and seal to the said photograph in such a manner that the signature and the seal appear partly on the photograph and partly on the form of the medical certificate:[* * *] [Proviso omitted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]

8. [Minimum educational qualification for driving transport vehicles. [Inserted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).]

- The minimum educational qualification in respect of an applicant for obtaining a license to drive a transport vehicle shall be a pass in the eighth standard:Provided that the minimum educational qualification specified in this rule shall not apply in the case of(i)renewal of a driving license to drive a transport vehicle; or(ii)addition of another class of transport vehicle to the driving license, already held before the commencement of the Motor Vehicles (Amendment) Rules, 2007.][8-A. Minimum training required for driving E-rickshaw or E-cart. - Nothing contained in rule 8 shall apply to the applicant for obtaining a license to drive E-rickshaw or E-cart provided the applicant has undergone training at least for a period of ten days and obtained a certificate of training from the registered E-rickshaw or E-cart Association, or a manufacturer producing E-rickshaw or E-cart, as the case may be.] [Inserted by Notification No. G.S.R. 27 (E), dated 13.1.2015 (w.e.f. 2.6.1989).]

9. [Educational qualifications for drivers of goods carriages carrying dangerous or hazardous goods] [Rule 9 substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).].

- [(1) One year from the date of commencement of Central Motor Vehicles(Amendment) Rules, 1993, any person driving a goods carriage carrying goods of dangerous or hazardous nature to human life shall, in addition to being the holder of a driving license to drive a transport vehicle, also has the ability to read and write at least one Indian language out of those [specified in the VIII Schedule of the Constitution] [Sub-Rule(1) substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] and English and also possess a certificate of having successfully passed a course consisting of following syllabus and periodicity connected with the transport of such goods.]

| | |
|--------------------------------|---|
| Period of training | 3 days |
| Place of training | At any institute recognized by the State Government |
| Syllabus | - |
| A. Defensive driving | |
| Questionnaire | |
| Cause of accidents | |
| Accidents statistics | |
| Drivers personal fitness | |
| Car condition | |
| Braking distance | |
| Highway driving | |
| Road/Pedestrian crossing | |
| Railway crossing | |
| Adapting to weather | |
| B. Advanced driving skills | |
| and training | |
| (i) Discussion Before starting | Check list |
| | outside/below/near vehicle |
| | product side |
| | inside vehicle |
| During driving | correct speed/gear |
| | signaling |
| | lane control |
| | overtaking/giving side |
| | speed limit/safe distance |
| | driving on slopes |
| Before stopping | Safe stopping place, signaling, road width, condition |
| After stopping | preventing vehicle movement |
| | wheel clocks |
| | vehicle attendance |

| | | |
|--|---|---|
| [Night driving [Substituted by G.S.R. 214(E), dated 18.3.1999 (w.e.f. 18.3.1999)] | mandatory lighting requirements [Substituted by G.S.R. 214(E), dated 18.3.1999 (w.e.f. 18.3.1999)]headlamp alignment [Substituted by G.S.R. 214(E), dated 18.3.1999 (w.e.f. 18.3.1999)]use of dipped beam] [Substituted by G.S.R. 214(E), dated 18.3.1999 (w.e.f. 18.3.1999)] | Duration of training for (C) Third day. |
| (ii) Field test/training | 1 driver at a time | |
| C. Product safety UN Panel | UN classificationHazchem codeToxicity, flammability, other definitions | |
| Product information | Tremcards CIS/MSDS Importance of temperature pressure, level Explosive limits Knowledge about equipment | |
| Emergency procedure | Communication Spillage handling Use of PPE Fire fighting First Aid Toxic release control Protection of wells, rivers, lakes, etc. Use of protective equipment Knowledge about valves, etc. | |

(2)The holder of a driving license possessing the minimum educational qualification or the certificate referred to in sub-rule (1), shall make an application in writing on a plain paper along with his driving license and the relevant certificate to the licensing authority in whose jurisdiction here sides for making necessary entries in his driving license and if the driving license is in Form 7, the application shall be accompanied by the fee [as specified in the Table in rule 32] [Substituted 'as is referred to in Serial No. 8 of the Table to rule 32' by Notification No. G.S.R. 1183(E), dated 29.12.2016 (w.e.f. 2.6.1989).].(3)The licensing authority, on receipt of the application referred to in sub-rule (2), shall make an endorsement in the driving license of the applicant to the effect that he is authorised to drive a goods carriage carrying goods of dangerous or hazardous nature to human life.(4)A licensing authority other than the original licensing authority making any such endorsement shall communicate the fact to the original licensing authority.Learners license

10. Application for learners license.

- An application for the grant [* * *] [The words 'or renewal' omitted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.1989).] of a learners license shall be made in Form 2 and shall be accompanied by, (a) save as otherwise provided in rule 6, a medical certificate in [Form 1-A] [Substituted by GSR 933(E), dated 28.10.1989, for 'Form 1' (w.e.f. 28.10.1989).], (b) three copies of the applicants recent [passport size photograph] [Substituted by G.S.R. 933(E), dated 28.10.1989, for 'photograph of the size of five centimeters' (w.e.f. 28.10.1989).], (c) appropriate fee as specified in rule 32, (d) [in the case of an application for transport vehicle excluding E-rickshaw or E-cart, the driving license held by the applicant;] [Substituted by Notification No. G.S.R. 27 (E), dated 13.1.2015 (w.e.f. 2.6.1989).] (e) [proof of residence, [Inserted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)]] (f) proof of age, (g) proof of citizenship.]

11. Preliminary test.

(1) Save as otherwise provided in sub-rule (2), every applicant for a learners license shall present himself before the licensing authority on such date, place and time, as the licensing authority may appoint, for a test and satisfy such authority that the applicant possesses adequate knowledge and understanding of the following matters, namely: (a) the traffic signs, traffic signals and the rules of the road regulations made under section 118; (b) the duties of a driver when his vehicle is involved in an accident resulting in the death or bodily injury to a person or damage to property of a third party; (c) the precautions to be taken while passing an unmanned railway crossing; and (d) the documents he should carry with him while driving a motor vehicle. [(1-A) In determining as to whether an applicant possesses adequate knowledge and understanding of the matters referred to in sub-rule (1), the licensing authority shall put to the applicant questions of objective type such as specified in Annexure VI. Explanation. - For the purpose of this sub-rule, adequate knowledge means answering correctly at least 60 percent of the questions put to him.] [Inserted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] (2) Nothing contained in sub-rule (1) shall apply to the following class of applicants, namely: (a) the holder of an effective driving license, (b) the holder of a driving license which has expired but five years have not elapsed, (c) the holder of a learners license issued or renewed after the commencement of these rules, (d) [the holder of a certificate to the effect of the possession of adequate knowledge and understanding of the matters referred to in sub-rule (1), issued by any institution recognised and notified in this regard by the State Government.] [Inserted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001). Earlier Clause (d) was omitted by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000). Before that it was inserted by GSR 684(E), dated 5.10.1999 (w.e.f. 22.10.1999).]

12. Consent of parent or guardian, in the case of application by minor.

- In the case of an application for a learners license to drive a [motorcycle without gear] [Substituted by GSR 76(E), dated 31.1.2000, for 'motor cycle with engine capacity not exceeding 50cc' (w.e.f. 31.1.2000). Earlier these words were substituted by GSR 684(E), dated 5.10.1999 (w.e.f. 22.10.1999).] by an applicant under the proviso to sub-section (1) of section 4, the application shall be signed by the parent or guardian of the applicant.

13. Form of learners license.

- Every learners license issued by the licensing authority shall be in Form 3. Driving license

14. Application for a driving license.

- [(1)] [Rule 14 renumbered as sub-Rule (1) thereof by GSR 720(E), dated 10.9.2003 (w.e.f. 10.10.2003).] An application for a driving license shall be made in Form 4 and shall be accompanied by, (a) an effective learners license to drive the vehicle of the type to which the application relates; (b) [appropriate fee as specified in rule 32, for the test, or the subsequent test, as the case may be, of competence to drive for each class and for issue of licence;] [Substituted by Notification No. G.S.R. 1183(E), dated 29.12.2016 (w.e.f. 2.6.1989).] (c) three copies of the applicants recent [passport size photograph] [Substituted by GSR 933(E), dated 28.10.1989, for 'photograph of the size of five centimetres by six centimetres' (w.e.f. 28.10.1989).]; (d) save as otherwise provided in rule 6, a medical certificate in [Form 1-A] [Substituted by GSR 933(E), dated 28.10.1989, for 'Form 1' (w.e.f. 28.10.1989).]; (e) a driving certificate in Form 5 issued by the school or establishment from where the applicant received instruction, if any; (f) [proof of residence; [Inserted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).] (g) proof of age; (h) [proof of citizenship.]] (2) [An application for an International Driving Permit shall be made in Form 4-A and shall be accompanied by (a) valid driving license issued by the licensing authority under these rules; (b) appropriate fee as specified in rule 32; (c) three copies of the applicants recent passport photograph; (d) a medical certificate in Form 1-A; (e) valid proof of Indian Nationals; (f) valid proof of passport; and (g) valid proof of visa, wherever applicable.]

15. Driving test.

(1) No person shall appear for the test of competence to drive unless he has held a learners license for a period of at least [thirty days] [Substituted by GSR 933(E), dated 28.10.1989, for 'six weeks' (w.e.f. 28.10.1989).] (2) The test of competence to drive referred to in sub-section (3) of section 9 shall be conducted by the licensing authority or such other person as may be authorized in this behalf by the State Government in a vehicle of the type to which the application relates. (3) The applicant shall satisfy the person conducting the test that he is able to (a) adjust rear-view mirror; (b) take suitable precautions before starting the engine; (c) move away safely and smoothly straight ahead at an angle, while at the same time engaging all gears until the top gear is reached; (d) to change to the lower gears quickly from the top gear when the traffic conditions warrant such change; (e) change quickly to lower gears when driving downhill; (f) stop and re-start the vehicle on a steep upward incline making proper use of the hand-brake or of the throttle and the foot-brake without any rolling back, turn right and left corners correctly and make proper use of the rear-view mirror before signalling; (g) overtake, allow to be overtaken, meet or cover the path of other vehicles safely and take an appropriate course of the road with proper caution giving appropriate signals; (h) give appropriate traffic signals at the appropriate time, in clear and unmistakable manner by hand or by electrical indicators fitted to the vehicle; (i) change the lanes with proper signals and with due care; (j) stop the vehicle in an emergency or otherwise, and in the latter case, bring it to rest at an appropriate course on the road safely, giving appropriate signals; (k) in the case of vehicle having a reverse gear, driving

the vehicle backwards, reverse it into a limited opening either to the right or left under control and with reasonable accuracy;(l)cause the vehicle to face in the opposite direction by means of forward and reverse gears;(m)take correct and prompt action on the signals given by traffic signs, traffic lights, traffic controllers, policemen and take appropriate action on signs given by other road users;(n)act correctly at pedestrian crossings, which is not regulated by traffic lights or traffic police, by giving preference to persons crossing the roads;(o)keep well to the left in normal driving;(p)regulate speed to suit varying road and traffic conditions;(q)demonstrate general control of the vehicle by confident steering and smooth gear changing and braking as and when necessary;(r)make proper use of the rear-view mirror before signalling, beginning maneuvering, moving away, altering the course to overtake,turning right or stopping;(s)use proper side when driving straight, turning right, turning left and at junction of the road;(t)make proper use of accelerator, clutch, gears, brakes (hand and foot) steering and horn;(u)anticipate the actions of pedestrians, drivers of other vehicles and cyclists;(v)take precautions at cross roads and on road junctions with regard to:(i)adjustment of speed on approach,(ii)proper use of rear-view mirror,(iii)correct positioning of the vehicle before and after turning to the right or left,(iv)avoidance of cutting right hand corners,(v)looking right,left and right again before crossing or emerging;(w)concentrate in driving without his attention being distracted and to demonstrate the presence of mind;(x)show courtesy and consideration for the safety and convenience of other road users, such as pedestrians, drivers of other motor vehicles or cyclists.

16. Form of driving license.

(1)Every driving license issued or renewed by a licensing authority shall be in Form 6.(2)Where the licensing authority has the necessary apparatus, [for the issue of a laminated card type or Smart Card type driving license, such card type or Smart Card type driving license, as may be specified in the Notification issued by the concerned State Government or Union Territory Administration,] [Substituted by GSR 400(E), dated 31.5.2002, for 'for the issue of a laminated card type driving license, such card type driving license' (w.e.f. 31.5.2002).] shall be in Form 7.(3)On and from the date of commencement of this sub-rule, every driving license issued or renewed by the licensing authority shall be in Form 7.(4)[Every International Driving Permit issued by a licensing authority shall be in Form 6-A and shall be valid for a period of not more than one year from the date of issue, as the case may be, or till the validity of the driving license, whichever is earlier.(5)The automobile associations authorised by the State Government/Union Territory Administration shall be allowed to issue International Driving Permit to their own members as also others subject to counter-signature by competent authority.] [Inserted by GSR 720(E), dated 10.9.2003 (w.e.f. 10.10.2003).](6)[Every driving license issued or renewed by a licensing authority to drive an E-rickshaw or E-cart shall be valid for a period of not more than three years from the date of issued, as the case may be, or till the validity of the driving license, whichever is earlier.] [Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)]

17. Addition to driving license.

(1)An application for addition of another class or description of motor vehicle to the driving license shall be made in Form 8 to the licensing authority and shall be accompanied by(a)an effective

learners license and driving license held by the applicant;(b)[in the case of an application for transport vehicle excluding E-rickshaw or E-cart, the driving license held by the applicant;]
[Inserted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)][* * *] [Clause (c) omitted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).](d)appropriate fee as specified in rule 32.(2)The provisions of sub-section (1), sub-section (3) and sub-section (4) of section 9 shall, insofar as may be, apply in relation to an application under sub-section (1) as they apply in relation to an application for the grant of a driving license.

18. Renewal of driving license.

(1)An application for the renewal of a driving license shall be made in Form 9 to the licensing authority having jurisdiction over the area in which the applicant ordinarily resides or carries on business and shall be accompanied by(a)appropriate fee as specified in rule 32;(b)three copies of the applicants recent [passport size photograph] [Substituted by GSR 933(E), dated 28.10.1989, for 'photograph of the size of five centimetres by six centimetres' (w.e.f. 28.10.1989).], if renewal is to be made in Form 6,(c)the driving license,(d)the medical certificate in [Form 1-A] [Substituted by GSR 933(E), dated 28.10.1989, for 'Form 1' (w.e.f. 28.10.1989).].(2)Where the driving license authorises the holder of such license to drive a transport vehicle as well as any other vehicle, then the licensing authority shall, subject to the production of medical certificate, renew such license for the appropriate period as specified in sub-section (2) of section 14.(3)[Where the licensing authority renewing the driving license is not the licensing authority who issued the driving license the fact of the renewal shall be intimated to the licensing authority who issued the driving license :Provided that in case the application is for issuance of a duplicate driving license which has been lost, torn or mutilated such that the identification or authenticity of the document cannot be reasonably established, the licensing authority receiving such application shall on confirmation from the original issuing authority, issue the duplicate driving license.Provided also that if such confirmation is not received within 60 days, duplicate license shall be issued, without waiting for the confirmation.] [Inserted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).]

19. Refund of fee.

- Where the licensing authority rejects an application for the renewal of a driving license under sub-section (5) of section 15, it shall refund half of the fee paid for such renewal to the applicant, on an application made by him in that behalf not later than thirty days from the date of receipt of the order rejecting the application.

20. Driving license to drive motor vehicle belonging to the Defence Department.

- The authorities for the purpose of sub-section (1) of section 18 shall be(i)all the officers-commanding of Units of Army of and above the rank of Major;(ii)all the officers-commanding of Units of Navy of and above the rank of Lieutenant Commander;(iii)all the officers-commanding of Units of Air Force of and above the rank of Squadron

Leader.Disqualification

21. Powers of licensing authority to disqualify.

- For the purpose of clause (f) of sub-section (1) of section 19, the commission of the following acts by holder of a driving license shall constitute nuisance or danger to the public, namely:(1)Theft of motor vehicle.(2)Assault on passengers.(3)Theft of personal effects of passengers.(4)Theft of goods carried in goods carriages.(5)Transport of goods prohibited under any law.(6)[Driver, while driving a transport vehicle, engages himself in activity which is likely to disturb his concentration.] [Clause (6) substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).](7)Abduction of passengers.(8)Carrying overload in goods carriages.(9)Driving at speed exceeding the specified limit.(10)Carrying persons in goods carriage, either inside the drivers cabin in excess of its capacity or on the vehicle, whether for hire or not.(11)Failing to comply with the provisions of section 134.(12)Failure to stop when signalled to do so by any person authorised to do so.(13)Misbehaviour with and showing discourtesy to passengers, intending passengers or consignors and consignees of goods.(14)Smoking while driving public service vehicles.(15)Abandoning vehicle in a public place causing inconvenience to other road users or to passengers in the vehicle.(16)Driving vehicle while under the influence of drink or drugs.(17)Interfering with any person mounting or preparing to mount upon any other vehicle.(18)Allowing any person to sit or placing things in such away as to impede the driver from having a clear vision of the road or proper control of the vehicle.(19)Not stopping a stage carriage at approved stopping places for a sufficient period of time in a safe and convenient position upon demand or signal of the conductor or any passenger desiring to alight from the vehicle and unless there is no room in the vehicle, upon demand or signal of any person desiring to becoming a passenger.(20)Loitering or unduly delaying any journey and not proceeding to the destination as near as may be in accordance with the timetable pertaining to the vehicle, or, where there is no such time table, with all reasonable dispatch.(21)Not driving a contract carriage, in the absence of a reasonable cause, to the destination named by the hirer by the shortest route.(22)The driver of a motor cab not accepting the first offer of hire which may be made to him irrespective of the length of the journey for which such offer is made.(23)The driver of a motor cab demanding or extracting any fare in excess to that to which he is legally entitled or refusing to ply motor cab.(24)[Abandoning a transport vehicle as a mark of protest or agitation of any kind or strike in a public place or in any other place in a manner causing obstructions and inconvenience to the public or passengers or other users of such places.] [Clause (24) substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).](25)[Using mobile phone while driving a vehicle.] [Inserted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).]Endorsement in Driving License

22. Endorsement by Courts.

- A Court convicting a holder of a license, for any one of the offences specified hereunder, shall endorse or cause to be endorsed in the driving license, the particulars of such conviction, namely : (a)Driving without a license, or without a license which is effective, or without a license applicable to the vehicle driven (section 3). (b)Allowing a license to be used by another person (section 6(2)). (c)Driving when disqualified (section 23). (d)Driving an unregistered vehicle (section 39). (e)Driving a transport vehicle not covered by a certificate of fitness (section 56). (f)Driving a

transport vehicle in contravention of section 66.(g)Driving in contravention of rule 118.(h)Failure to comply with provisions of section 114.(i)Refusing or failing within specified time to produce license or certificate of registration (section 130).(j)Failing to stop vehicle as required under section132.(k)Obtaining or applying for a license without giving particulars of endorsement (section 182).(l)Driving at excessive speed (section 183).(m)Driving dangerously (section 184).(n)Driving while under the influence of drink or drugs (section 185).(o)Driving when mentally or physically unfit to drive (section 186).(p)Abetment of an offence punishable under section183 or 186.(q)Abetment of offence specified in section 188.(r)Taking part in an unauthorised race or trial of speed (section 189).(s)Using vehicle in unsafe condition (section 190).(t)Driving vehicle exceeding permissible limit or weight (section 194).(u)Altering a license or using an altered license.(v)An offence punishable with imprisonment in the commission of which a motor vehicle was used.State Register

23. State Register of driving licenses.

(1)Each State Government shall maintain a State Register of driving licenses in respect of driving licenses issued and renewed by the licensing authorities in the State in Form 10.(2)Each State Government shall send to the Director(Transport Research), Ministry of Surface Transport, New Delhi, a printed copy of the register referred to in sub-rule (1).Driving Schools And Establishments

24. Driving schools and establishments.

(1)No person shall establish or maintain any driving school or establishment for imparting instructions for hire or reward in driving motor vehicles without a license in Form 11 granted by the licensing authority.(2)An application for the grant or renewal of a license under sub-rule (1) shall be made in Form 12 or Form13, as the case may be, to the licensing authority having jurisdiction in the area in which the school or establishment is situated and shall be accompanied by appropriate fee as specified in rule 32.Explanation. - For the purposes of this rule and rules 25 to 28 licensing authority means an officer not below the rank of the Regional Transport Officer of the Motor Vehicles Department established under section 213.(3)The licensing authority shall, when considering an application for the grant or renewal of a license under this rule, have regard to the following matters, namely :-(i)the applicant and the staff working under him are of good moral character and are qualified to give driving instructions;(ii)the premises where the school or establishment is proposed to be conducted is either owned by the applicant or is taken on lease by him or is hired in his name and it has adequate provision for [conducting lecture and demonstration of models] [Substituted by GSR 933(E), dated 28.10.1989, for 'a lecture hall, room for demonstration of models, administrative section, reception room and sanitary block' (w.e.f. 28.10.1989).] besides adequate parking area for the vehicles meant to be used for imparting instructions in driving :Provided that in respect of schools or establishments imparting instructions in driving of motor vehicles or matters connected therewith immediately before the commencement of these rules, the licensing authority may permit the conducting of instruction facilities in the same premises where the school or establishment is housed for a period of six months, notwithstanding the fact that the premises do not satisfy the conditions laid down in this clause;(iii)the financial resources of the proposed school or establishment are sufficient to provide for its continued

maintenance;(iv)the applicant owns and maintains a minimum of one motor vehicle each of the type in which instruction is imparted in the school or establishment;(v)the vehicles are available exclusively for purposes of imparting instruction and all such vehicles, except motor cycles, are fitted with dual control facility to enable the instructor to control or stop the vehicle;(vi)the applicant maintains the following apparatus, equipment and other requirements, namely:(a)a blackboard,(b)a road plan board with necessary model signals and charts,(c)traffic signs chart,(d)chart on automatic signals and signals given by traffic controllers where there are no automatic signals,(e)a service chart depicting a detailed view of all the components of a motor vehicle,(f)engine gear box, [brake shoe and drums] [Substituted by GSR 933(E), dated 28.10.1989, for certain words (w.e.f. 28.10.1989).] (except where the applicant desires to impart instruction in the driving of motor cycles only),(g)puncture kit with tyre lever, wheel brace, jack and tyre pressure gauge,(h)spanners (a set each of fix spanners, box spanners, pliers, screw drivers, screw spanners, and hammer),(i)driving instructions manual,(j)benches and tables for trainees and work bench,[* * *] [Clauses (k) and (l) omitted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).][* * *] [Clauses (k) and (l) omitted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).](m)a [collection] [Substituted by G.S.R. 933(E), dated 28.10.1989, for 'library consisting' (w.e.f. 28.10.1989).] of books on automobile mechanism, driving, road safety, traffic regulations, laws relating to motor vehicles and related subjects [* * *] [The words 'both in English and the regional languages' omitted by G.S.R. 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).](n)a fully equipped first-aid box for use in emergency at the premises;[* * *] [Clause (vii) omitted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989)](viii)The applicant or any member of the staff employed by him for imparting instructions possesses the following qualifications, namely:(a)a minimum educational qualification of a pass in the 10th standard,(b)a minimum driving experience of five years in addition to a certificate in a course in motor mechanics or any other higher qualification in mechanical engineering from an institution established by the Central or a State Government or from an institution recognised by the Board of Technical Education of a State Government,(c)thorough knowledge of traffic signs specified in the Schedule to the Act and the regulations made under section 118,(d)ability to demonstrate and to explain the functions of different components, parts of the vehicles,(e)adequate knowledge of English or the regional language of the region in which the school or establishment is situated:Provided that any person who has served as an instructor for a period of not less than five years immediately before the commencement of these rules, is exempted from the requirements of this sub-clause.(4)The licensing authority may, on receipt of an application under sub-rule (2) and after satisfying that the applicant has complied with the requirements of sub-rule (3), grant or renew a license in Form 11 [within a period of ninety days from receipt of such an application] [Inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.10.2005).](5)No application for license shall be refused by the licensing authority unless the applicant is given an opportunity of being heard and reasons for such refusal are given in writing by the licensing authority.

25. Duration of a license and renewal thereof.

- A license granted in Form 11 shall be in force for a period of five years and may be renewed on an application in Form 13 made to the licensing authority which granted the license not less than sixty days before the date of its expiry:[Provided that the validity of the said license shall be subject to

fulfilling the criteria as prescribed by the State Government, which shall be certified by the licensing authority or any other authority as may be prescribed for the purpose by the State Government on an annual basis.] [Proviso added by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).]

26. Issue of duplicate license.

(1) If at any time a license granted under sub-rule (4) of rule 24 is lost or destroyed, the holder of the license shall forthwith intimate the loss to the licensing authority which granted the license and shall apply in writing to the said authority for a duplicate. (2) On receipt of an application along with the appropriate fee as specified in rule 32, the licensing authority shall issue a duplicate license clearly marked Duplicate. (3) If after the issue of a duplicate license, the original is found, the same shall be surrendered forthwith to the licensing authority by which it was issued.

27. General conditions to be observed by the holder of a license.

- The holder of a license granted under rule 24 shall, (a) maintain on an annual basis, a register in Form 14 and an alphabetical list of the names of the students admitted during the year; (b) conduct the training course according to the syllabus specified in rule 31; [* * *] [Clause (c) omitted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] (d) issue to every student who has completed the course a certificate in Form 5; (e) submit to the licensing authority which granted the license such information or return as may be called for by it from time to time for the purposes of this Chapter; (f) not shift the school or establishment from the premises mentioned in the license without the prior approval in writing of the licensing authority, which granted the license; (g) keep the premises of the school or establishment and the record and registers maintained by it at all reasonable times open for inspection by the licensing authority or by any person authorised in this behalf by the licensing authority; (h) exhibit in a conspicuous manner on all the motor vehicles used for imparting instructions the name, full address of the school or establishment and the telephone number, if any, in bold letters; (i) maintain a record separately for each trainee showing the number of driving hours spent every day in Form 15; (j) display at a prominent place in its office the following: (i) the license in original issued to the school or establishment by the licensing authority, and (ii) the names and addresses of instructors employed by the school or establishment; (k) not act in a manner calculated to mislead any person making an application to receive instructions from the school or establishment as to his ability to procure a license for such person other than in accordance with these rules or to connive with any person in acts of commission or omission with a view to circumventing the provisions of this Chapter.

28. Power of the licensing authority to suspend or revoke license.

(1) If the licensing authority which granted the license is satisfied, after giving the holder of the license an opportunity of being heard, that he has (a) failed to comply with the requirements specified in sub-rule (3) of rule 24; or (b) failed to maintain the vehicles in which instructions are being imparted in good condition; or (c) failed to adhere to the syllabus specified in rule 31 in imparting instruction; or (d) violated any other provision of rule 27, it may, for reasons to be recorded in writing, make an order, (i) suspending the license for a specified period; or (ii) revoking

the license.(2)Where the license is suspended or revoked under sub-rule (1), the license shall be surrendered to the licensing authority by the holder thereof.

29. Appeal.

- Any person aggrieved by any order of the licensing authority under sub-rule (5) of rule 24, rule 25 or rule 28 may, within thirty days of the date of receipt of such order, appeal to the Head of the Motor Vehicles Department established under section 213.

30. Procedure for appeal.

(1)An appeal under rule 29 shall be preferred in duplicate in the form of a memorandum, setting forth the grounds of objections to the order of the licensing authority and shall be accompanied by a certified copy of the order appealed against and appropriate fee as specified in rule 32.(2)The appellate authority, after giving an opportunity to the parties to be heard and after such further enquiry, if any, as it may deem necessary, pass appropriate orders [within a period of forty five days from the date of receipt of such an appeal] [Inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.10.2005).].

31. Syllabus for imparting instructions in driving of motor vehicles.

(1)The syllabus for imparting instructions in driving of motor vehicles of the schools or establishments shall be as follows (see tables below):A. Driving Theory-I

1. Know your vehicle Simple introduction to automobile engines and their working.
2. Vehicle control

| | |
|----------------|---|
| Foot controls | Foot brake, accelerator, clutch-dipper (not in present models) |
| Hand controls | Steering wheel, hand brake, horn, light, wipers, ignition switch, starter, dipper and indicators |
| Other controls | Rear-view mirror (right and left side), instrument cluster, gauges, dials, windscreen-their purpose |
3. Pre-driving checks (i)Before sitting on driver's seat and(ii)After sitting on driver's seat.
Precautions just before moving, While moving Bitting point, Moving,
4. Beginning to drive Steering control, Changing of gear, Stopping, Braking, Accelerator(gradual, sudden)Traffic sense, road sense, judgment, parking and positioning according to road users, Reversing.
5. Driving on the road Anticipation, judgment and road positioning according to other road users.
6. Driving at inter-sections Mirror Signal and Manoeuvre (MSM) and Position Speed and Look (PSL)
7. Manoeuvres Merging and diverging manoeuvres-turning manoeuvres to left, right, about, 3-point turn, 5-point turn and U-turn, overtaking stationary vehicle,

- moving vehicle in left side and right side
8. Reversing Locating reverse gear in sitting position, speed control, steering in reverse gear, weaving the 'S' bend and common errors.
 9. Parking Parallel, angular, perpendicular, parking facing uphill, parking facing downhill, common errors.
 - Driver's Driving behaviour, consideration for other road-users, courtesy and
 10. responsibility on competitiveness, over-confidence, impatience and defensive
 - the road driving.Distance between cars while driving at Railway crossing.
 11. Priority for certain Emergency vehicles Fire engines, and Ambulance
 - vehicles
- B. Traffic Education-I
1. Driving regulations Road use regulations made under section 118 of the Motor Vehicles Act, 1988
 2. Hand signals
 3. Traffic signals Schedule to the Motor Vehicles Act, 1988
 4. Hand signals of Traffic constables/Traffic warden
 5. Introduction to automatic light signals
 6. Introduction to road markings
 7. Speed regulations on highways and city roads
 8. Parking at objectionable places
 - Some important provisions of the Motor Vehicles Act,
 9. 1988- Sections 122, 123, 125, 126 and 128 of the Motor Vehicles Act, 1988.
 10. Test of competence to drive Sub-rule (3) of rule 15 of the Central Motor Vehicles Rules, 1989
- C. Light Vehicles Driving Practice
1. Identification of various parts of the vehicles
 2. Pre-driving checks (i)Before sitting on driver's seat, and(ii)After sitting on driver's seat.
 3. Steering practice Push and pull method
 4. Bitting point
 5. Moving and gear changing
 6. Stopping Normal stopping
Emergency stopping
 7. Developing judgment and anticipation to drive on road
 8. Reversing In straight

In 'S' bends.

9. Turning about and parking

10. Licensing

D. Vehicle Mechanism And Repairs

1. Layout of vehicle

2. Function of diesel and petrol engines

3. Fuel system

Fuel lines

Fuel injection pump

Automiser

Air lock

Oil block

4. Cooling system

Purpose

Radiator

Water pump

Fan leaf/fan belt

Radiator water boiling

Rectification

5. Lubrication system

Purpose

Engine lubrication

Chassis lubrication

Oil grade number unit wise.

6. Transmission system

(a)Clutch:

Function

Slip

Rising

Linkages

(b)Gear box:

Function

Purpose

Parts

(c)Propeller shaft:

Function/purpose

Yoke joint

C.J.bearing slip

"U" joint

Lubrication

(d)Differential:

Purpose

Function/Noise.

7. Suspension system

Purpose

Springs

- Shackle, shackle pin bushes
 - Shock absorber and its bushes.
- 8. Steering system
 - Purpose
 - Steering geometry
 - Steering linkages
 - Steering box
- 9. Brake system
 - Purpose
 - Hydraulic brake and its know-how
 - Air assisted hydraulic brake and its know-how
 - Air brake and its know-how
 - Brake adjustment of the entire system
- 10. Electrical system
 - Battery and its condition
 - Dynamo/Alternator
 - Self-motor-Starter motor regulators
 - Lights-Knowledge to read the charging rate in the Ampere meter.
- 11. Tyres
 - Study of tyres
 - Maintenance
 - Effect of defective tyres and wheel alignment.
- Instruments cluster, dash board
- 12. meters and their purposes and functions.
- E. Medium And Heavy Vehicle Driving:Driving Theory-II
 - Patience, responsibility, self-confidence, anticipation, concentration, courtesy, defensive driving, knowledge of road rules/regulations, knowledge of vehicle controls, maintenance and simple mechanism.
- 1. Qualities of a good driver
- 2. Knowledge of vehicle controls
 - Major controls
 - Minor controls
- 3. Response to controls
 - Accelerator
 - Brake-Gradual/Sudden/Sudden fierce
 - Clutch
 - Steering
- 4. Pre-driving checks
 - (i)Before sitting on driver's seat, and(ii)After sitting on driver's seat.
- 5. Holding steering wheel
 - Push and pull method practice
 - On the move

- While gear changing
- While turning
- While sounding horn
- While operating dash board switches
- While signaling
- On emergency
- 6. Gear changing
 - Double de-clutching, importance and procedure single clutching.
 - Gear up procedure, shifting to lower gears
 - Gear down procedure, shifting to higher gears.
- 7. Beginning to drive
 - I gear
 - II gear
 - III gear
 - IV gear
 - V gear
 - Reverse gear
 - Over drive/optional.
- 8. M.S.M and P.S.L Routines
- 9. Manoeuvres
 - Passing
 - Merging
 - Diverging
 - Overtaking
 - Crossing
 - Turning
 - Cornering
 - Reversing
 - Parking
- 10. Stopping
 - Normal stopping
 - Emergency stopping
 - Use of engine brake/exhaust brake.
- 11. Stopping distance
 - Reaction distance
 - Braking distance
- 12. Following distance
 - Meaning
 - Distance method
 - Car length method
 - 2 seconds time rule method
- 13. Identification, prediction, decision and execution

(IPDE) principle

14. Defensive driving techniques
 - Judgment
 - Anticipation
 - Escape route
 15. Night driving
 - Location of head light switch
 - Procedure
 - Obligation to light the lamps, restriction on lighting the lamps.
 16. Hill driving
 - Starting in hill using the parking brake method
 - Slipping the clutch method
 - Driving uphill
 - Driving downhill.
 17. Emergency manoeuvres
 - Prevention is better than cure in case of skidding, horn struck
 - Fire, wheels coming out
 - Brake failure
 - Broken stub axle
 - Burst of front tyre
 - Sterring wobbling
 - Snapping of steering linkages
 - Jamming of accelerator pedal
 - Snapping of clutch rod
 - Under special circumstances like chances of collision with a disabled vehicle
 - Brake failure during downhill
 - Sudden obstruction in front of the vehicle
 18. Driving under special conditions
 - In wet weather
 - In dawn, dusk and misty roads
 - In dense traffic.
 19. Towing (trailer driving)
 - Procedure
 - On tow board
 - Speed of towing
 - Reversing and positioning the vehicle with trailers.
 20. Fuel saving methods
 21. Reports-Discussions.
- F. Traffic Education-II
1. Know your road
 - Functional classification
 - Design speeds
 - Road geometrics

| | |
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| | Surface types and characteristics |
| | Slopes and elevation |
| 2. Slight distance | At bends |
| | At intersections. |
| 3. Road junctions | Principles and types |
| | T junctions |
| | Y junctions |
| | 4-Arm junctions |
| | Staggered junctions |
| | Controlled junctions |
| | Uncontrolled junctions |
| 4. Traffic islands | Types of roundabouts |
| | Channelisers, median |
| 5. Bye-pass, subway, over-bridge and fly-overs | Driving procedures. |
| 6. Bus stop, bus terminus, bus stand | Ingress |
| | Egress |
| | Method |
| 7. Road markings | White line: continuous and broken |
| | Yellow line |
| | Land marking |
| | Zebra crossing |
| | Stop line |
| | Parking markings |
| | Sense of road signals. |
| 8. Lane selection and lane discipline | |
| 9. Automatic light signals | |
| 10. Road users characteristics | Pedestrian, drunkards, children and blind, deaf and dumb |
| | Youth, aged women with children |
| | Slow-moving vehicles |
| | Mopeds and motor cycles |
| | Autos, tempos, vans |
| | Buses and trucks |
| | VIP, ambulance, fire engine |
| | Animals. |
| 11. Accidents | Types of accidents |

- Causes of accidents
- Preventive methods
- Driver's duties and responsibilities on the occurrence of accident.
- Certain definitions
- Driving license and its renewal
- Carrying driving license, certificates of registration, fitness and insurance, permit taxation card or tax token and production of such document on demand by checking officers.
- Traffic offences and penalties stipulated under the Act and Rules
- Relevant Extracts of Petroleum Act, 1934
- City Police Act
- Indian Penal Code, 1860
12. Important provisions in Motor Vehicles Act, 1988 (59 of 1988), Central Motor Vehicles Rules, 1989, and the State Motor Vehicles Rules
- .G. Public Relations For Drivers
- Some basic aspects about ethical and courteous behaviour with other road users
- H. Heavy Vehicle Driving Practice
1. Introduction of various instruments Dial gauges and controls.
 2. Pre-driving checks (i) Before sitting on driver's seat, and (ii) After sitting on driver's seat.
 3. Beginning to drive Bitting point, moving, changing gear including double de-clutch steering, stopping, hand signals.
 4. Rural road driving Application of IBDE-principle
 5. Development of judgment Passing, overtaking, merging, diverging, M.S.M and P.S.L. routine method of practice, defensive driving technique, proper following.
 6. Development of anticipation Turning, meeting, entering and emerging in junctions, lane selection and lane discipline, intersection, observation.
 7. Developing skill to drive in crowded streets
 8. Night driving
 9. Cross country practice and hill driving
 10. Internal-trade test.
 11. Reversing and parking practice
 12. Licensing
- I. Fire Hazards
- Fire-fighting and prevention methods on vehicle
- J. Vehicle Maintenance
1. Factors affecting the vehicle parts due to bad and negligent driving
 2. General day-to-day maintenance and periodical maintenance.
 3. Battery maintenance
 4. Tyre maintenance and tube vulcanizing

5. Engine tune up
6. Checking wheel alignment
7. Brake adjustment
8. Accelerator, brake, clutch-pedal adjustment
9. Fan belt adjustments.
10. Observation of dash-board meters.
11. Lubrication.
12. Removal of air lock and oil block.

K. First-Aid

1. Introduction to first-aid
2. Outline of first-aid
3. Structure and functions of the body.
4. Dressings and bandages
5. The circulation of the blood.
6. Wounds and haemorrhage
7. Haemorrhage from special regions.
8. Shock.
9. Respiration
10. Injuries to bones
11. Burning scales
12. Unconsciousness (insensibility)
13. Poisons

(2)[The lessons for training drivers of non-transport vehicles shall cover Parts A, B, C, F, G and K of the syllabus referred to in sub-rule (1) and the training period shall not be less than twenty-one days:Provided that in case of motor cycles, it shall be sufficient compliance with the provisions, if portion of Part C of syllabus as applicable to such vehicles are covered.(3)The lessons for training drivers of transport vehicles shall cover Parts E, F, G, H, I, J and K of the syllabus referred to in sub-rule (1)and the training period shall not be less than thirty days:Provided that this sub-rule shall not apply in respect of drivers holding driving license to drive medium goods vehicle or medium passenger motor vehicle who had undergone the lessons after the commencement of this rule, and desiring to obtain a driving license to drive heavy goods vehicle or heavy passenger motor vehicle.(4)The actual driving hours for trainees in driving non-transport vehicles shall not be less than ten hours and actual driving hours for trainees in driving transport vehicles shall not be less than fifteen hours:Provided that in the case of drivers holding driving license to drive medium goods vehicle or medium passenger motor vehicles undergoing training for heavy motor vehicles, it shall be sufficient if they undergo training in driving for a period of not less than five hours.(5)[Nothing in this rule shall apply in the case of an applicant whose driving license authorises him to drive a motor cycle or a three-wheeler non-transport vehicle or a motor car, applying for a license to drive a motor cab of the respective type, or in the case of an applicant holding a driving license to drive a tractor, applying for a license to drive a tractor-trailer combination.] [Substituted by G.S.R. 933(E),

dated 28.10.1989, for sub-Rules (2), (3) and (4) (w.e.f. 28.10.1989)](6)Where any trainee possesses first-aid certificate issued by St. John Ambulance Association, he need not undergo Part K of the syllabus referred to in sub-rule (1).] [Inserted by GSR 720(E), dated 10.9.2003 (w.e.f. 10.10.2003).][31A. Temporary license. - (1) Where there is no school or establishment as is referred to in sub-section (4) of section 12 or granted a license under sub-rule (4) of rule 24, in any Taluk within the jurisdiction of the licensing authority, the licensing authority may, notwithstanding anything contained in sub-rules (3) and (4) of rule 24 or rule 25, grant a temporary license to any establishment or any person for imparting instructions in the driving of a transport vehicle, subject to the following conditions, namely: (a) the temporary license shall be valid for a period of one year from the date of its issue: Provided that as long as the Taluk does not have any school or establishment, the licensing authority may renew a temporary license granted under this sub-rule for a further period not exceeding one year at a time; (b) the person imparting instructions in the driving of a transport vehicle shall possess the following qualifications, namely: (i) a minimum driving experience of five years in the class of vehicles in which instructions are proposed to be imparted; (ii) adequate knowledge of the regional language of the region in which the school or establishment is situated; (iii) thorough knowledge of traffic signs specified in the Schedule to the Act and the Regulations made under section 118; (iv) ability to demonstrate and explain the functions of different components and parts of a vehicle; (c) the applicant shall maintain a motor vehicle each of the type in which the instruction is imparted and also the following apparatus, namely: (i) a blackboard; (ii) traffic sign chart; (iii) a service chart depicting a detailed view of all the components of a motor vehicle; (iv) puncture kit with tyre lever, wheel brace, jack; (v) spanners (a set each of fixed spanners, box spanners, screw driver, screw spanners and hammer). (2) The driving schools run by a State Transport Undertaking or an Industrial Training Institute set up by the Central Government or any State Government and other establishments run by the Central Government or a State Government which have facilities for imparting training for drivers, shall be authorised to issue driving certificates in Form 5, subject to the condition that the training imparted in these schools shall be in accordance with the syllabus referred to in rule 31.] [Inserted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).][32. Fees. - The fees which shall be charged under the provisions of this Chapter shall be as specified in the table below: Provided that the States may levy [fee lower than the amount specified in the table and may also levy] [Substituted by Notification No. G.S.R. 1183(E), dated 29.12.2016 (w.e.f. 2.6.1989).] additional amounts to cover the cost of automation and technology utilised for conducting the testing or providing value added services. Table

| Sl. No. | Purpose | Amount | Rule | Section |
|---------|--|------------------------------|--------------|---------|
| (1) | (2) | (3) | (4) | (5) |
| 1. | Issue of learner's licence in Form 3 for each class of vehicle | One hundred and fifty rupees | 10 | 8 |
| 2. | Learner's licence test fee or repeat test fee, as the case maybe | Fifty rupees | | 27(q) |
| 3. | For test, or repeat test, as the case may be, of competence to drive (for each class of vehicle) | Three hundred rupees | 14 (1)(b) | 9 |

| | | | | |
|-----|--|---|----------|-------|
| 4. | Issue of a driving licence Two hundred rupees 14 (1)(b) 9 | | | |
| 5. | Issue of International Driving Permit One thousand rupees 14(2)(b) 9 | | | |
| 6. | Addition of another class of vehicle to driving licence | Five hundred rupees | 17(1)(d) | 11 |
| 7. | Endorsement or renewal of authorisation for vehicle carrying hazardous goods | One hundred rupees | 9 | 27(q) |
| 8. | Renewal of driving licence | Two hundred rupees | 18(1)(a) | 15 |
| 9. | Renewal of a driving licence for which application is made after the grace period | Three hundred rupees. Note.: - Additional fee at the rate of one thousand rupees for delay of each year or part thereof reckoned from the date of expiry of the grace period shall be levied. | | 15 |
| 10. | Issue or renewal of licence to a school or establishment for imparting instructions in driving | Ten thousand rupees | 24(2) | 12 |
| 11. | Issue of duplicate licence to a school or establishment for imparting instructions in driving | Five thousand rupees | 26(2) | 12 |
| 12. | An appeal against the orders of licensing authority referred to in rule 29 | Five hundred rupees | 30(1) | 17 |
| 13. | Any application for change in address or any other particulars recorded in the driving licence e.g. address etc. | Two hundred rupees | | 27(q) |

Note. 1. Where a Smartcard Type driving licence is issued in Form 7, an additional fee of two hundred rupees shall be levied.

2. The fees specified at serial numbers 1, 2 and 3 of the Table above shall be paid collectively at the time of submission of application for issue of learner's licence or driving licence or for endorsement of another class of vehicle, as the case may be.]

32. Fees.- The fees which shall be charged under

the provisions of this Chapter shall be as specified in the Table below:[Table]
[Substituted by G.S.R. 221(E), dated 28.3.2001 (w.e.f. 28.3.2001). Earlier the Table was substituted by G.S.R 76(E), dated 31.1.2000 (w.e.f. 31.1.2000). Before that the Table was substituted by G.S.R. 684(E), dated 5.10.1999 (w.e.f. 22.10.1999).]{|

| Serial No. | Purpose | Amount | Rule | Section |
|--|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| 1. | In respect of issue[***] [The words 'or renewal' omitted by G.S.R. 276 (E), dated 10-4-2007 (w.e.f. 10-4-2007)]of learner's license for each class of vehicle | Thirty rupees | 10 | 8 |
| 2. | In respect of issue of a driving license in Form 6 | Forty rupees | 14(b) | 9 |
| [2-A. [Inserted by G.S.R. 720(E), dated 10.9.2003 (w.e.f. 10.10.2003)] | In respect of issue of International Driving Permit in Form 6-A [Inserted by G.S.R. 720(E), dated 10.9.2003 (w.e.f. 10.10.2003)] | Five hundred rupees [Inserted by G.S.R. 720(E), dated 10.9.2003 (w.e.f. 10.10.2003)] | 14(2)(b) [Inserted by G.S.R. 720(E), dated 10.9.2003 (w.e.f. 10.10.2003)] | 9] [Inserted by G.S.R. 720(E), dated 10.9.2003 (w.e.f. 10.10.2003)] |
| 3. | In respect of issue of driving license in Form 7. | [Two hundred rupees] [Substituted by G.S.R. 400(E), dated 31.5.2002, for 'One hundred and | 14(b) | 9 |

| | | | | | |
|---|---|---|--|---|--|
| | | fifty rupees; (w.e.f. 31.5.2002)]including the cost of computerized chip | | | |
| 4. | For test of competence to drive | Fifty rupees | 14(b) | 9 | |
| 5. | In respect of addition of another class of vehicle to driving license in Form 6 | Thirty rupees | 17(1)(d) | 11 | |
| 6. | In respect of renewal of driving license in Form 6. | [Fifty rupees] [Substituted by G.S.R. 400(E), dated 31.5.2002, for 'Thirty rupees' (w.e.f. 31.5.2002)] | 18(1)(a) | 15 | |
| 7. | In respect of renewal of a driving license in Form 6 to drive a motor vehicle for which application is made after the grace period | [Hundred rupees and an additional fee at the rate of fifty rupees for a period of delay of one year or part thereof reckoned from the date of expiry of the grace period] [Substituted by G.S.R. 720(E) dated 10.9.2003, for 'Thirty rupees' (w.e.f. 10.10.2003).] | | 15 | |
| 8. [[Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | In respect of addition of another class of motor vehicle to the driving license in Form 7 [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | Two hundred rupees including the cost of computerised chip [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | 17(1)(d) [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | 11 [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | |

| | | | | |
|---|---|---|---|--|
| 8-A [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | In respect of renewal of driving license in Form 7 [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | Two hundred fifty rupees including the cost of Smart Card [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | 18(1)(d) [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | 11 [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] |
| 8-B. [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | In respect of renewal of driving license in Form 7 for which application is made after the grace period. [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | Two hundred rupees including the cost of computerised chip and additional fee at the rate of fifty rupees for a period of delay of one year or part thereof reckoned from the date of expiry of the grace period [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | 18(1)(d) [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] | 15] [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007)] |
| 9. | In respect of issue and renewal of license to a school or establishment for imparting instructions in driving | Two thousand and five hundred rupees | 24(2) | 12 |
| 10. | In respect of issue of duplicate license to the school or establishment imparting instructions in driving | Two thousand and five hundred rupees | 26(2) | 12 |
| 11. | In respect of an appeal against the orders of licensing authority referred to in rule 30. | One hundred rupees | 30(1) | 17] |

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Chapter III

Registration of Motor Vehicles

Trade certificate

33. Condition for exemption from registration.

- For the purpose of the proviso to section 39, a motor vehicle in the possession of a [dealer or manufacturer of automobiles or automobile ancillaries or a test agency specified in rule 126] [Substituted by Notification No. 291 (E) dated 24.4.2014] shall be exempted from the necessity of registration subject to the condition that he obtains a trade certificate from the registering authority having jurisdiction in the area in which the [dealer or manufacturer of automobiles or automobile ancillaries or a test agency specified in rule 126] [Substituted by Notification No. 291 (E) dated 24.4.2014] has his place of business in accordance with the provisions of this Chapter.

34. Trade certificate.

(1)An application for the grant or renewal of a trade certificate shall be made in Form 16 and shall be accompanied by the appropriate fee as specified in rule 81.(2)Separate application shall be made for each of the following classes of vehicles, namely:(a)motor cycle;(b)invalid carriage;(c)light motor vehicle;(d)medium passenger motor vehicle;(e)medium goods vehicle;(f)heavy passenger motor vehicle;(g)heavy goods vehicle;(h)[E-rickshaw; [Inserted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)](i)E-cart;(j)any other motor vehicle of a specified description.]

35. Grant or renewal of trade certificate.

(1)On receipt of an application for the grant or renewal of a trade certificate in respect of a vehicle, the registering authority may, if satisfied that the applicant is a bona fide [dealer or manufacturer of automobile or automobiles ancillary or a test agency specified in rule 126] [Substituted by Notification No. 291 (E) dated 24.4.2014] and requires the certificates specified in the application, issue to the applicant one or more certificates, as the case may be, in Form 17 [within thirty days from the date of receipt of such an application] [Inserted by G.S.R. 589(E), dated 16.9.2005 (w.e.f. 16.10.2005)] and shall assign in respect of each certificate a trade registration mark consisting of the registration mark referred to in the notification made under sub-section (6) of section 41 and followed by two letters and a number containing not more than three digits for each vehicle, for example:AB Represent State Code.

12Registration. District Code.

TC1Trade certificate number for the vehicle.(2)No application for trade certificate shall be refused by the registering authority unless the applicant is given an opportunity of being heard and reasons for such refusal are given in writing.

36. Refund.

- Where the registering authority refuses to issue or renew a trade certificate, it shall refund to the applicant fifty per cent of the fee paid along with the application.

37. Period of validity.

- A trade certificate granted or renewed under rule 35 shall be in force for a period of twelve months from the date of issue or renewal thereof and shall be effective throughout India.

38. Issue of duplicate certificate.

(1) If at any time the trade certificate is lost or destroyed, its holder shall report to the police station in the jurisdiction of which the loss or destruction has occurred and intimate the fact in writing to the registering authority by whom the certificate was issued and apply in Form 18 to the said authority for a duplicate certificate accompanied by the appropriate fee as specified in rule 81. (2) On receipt of an application along with the fee, the registering authority may issue a duplicate Trade Certificate clearly marked Duplicate. (3) If after the issue of a duplicate certificate the original is traced, the same shall be surrendered forthwith to the registering authority by which it was issued.

39. Use of trade registration mark and number.

(1) A trade registration mark and number shall not be used upon more than one vehicle at a time or upon any vehicle other than a vehicle bona fide in the possession of the [dealer or manufacturer of automobile or automobile ancillaries or a test agency specified in rules 126] [Substituted by Notification No. 291 (E) dated 24.4.2014] in the course of his business or on any type of vehicle other than the one for which the trade certificate is issued. (2) The trade certificate shall be carried on a motor vehicle in a weather-proof circular folder and the trade registration mark shall be exhibited in a conspicuous place in the vehicle.

40. Restrictions on use of trade certificate or trade registration mark and number.

- A trade certificate shall be used only by the person to whom it is issued and such person shall not allow or offer or cause the certificate or the number assigned in connection therewith to be used by any other person: Provided that the provision of this rule shall not apply where the person to whom the certificate is granted, or a person bona fide in his employment and acting under his authority, or any other person bona fide acting on behalf of the holder of a trade certificate is present in the vehicle, or if such vehicle is designed for use by only one person and is being used by a prospective purchaser of that vehicle for the purpose of reasonable test or trial.

41. Purposes for which motor vehicle with trade certificate may be used.

- The holder of a trade certificate shall not use any vehicle in a public place under that certificate for any purpose other than the following:(a)for test, by or on behalf of the holder of a trade certificate during the course of, or after completion of, construction or repair; or(b)for proceeding to or returning from a weigh bridge for or after weighment, or to and from any place for its registration; or(c)for a reasonable trial or demonstration by or for the benefit of a prospective purchaser and for proceeding to or returning from the place where such person intends to keep it; or(d)for proceeding to or returning from the premises of the dealer or of the purchaser or of any other dealer for the purpose of delivery; or(e)for proceeding to or returning from a workshop with the objective of fitting a body to the vehicle or painting or for repairs;or(f)for proceeding to and returning from airport,railway station, wharf for or after being transported; or(g)for proceeding to or returning from an exhibition of motor vehicles or any place at which the vehicle is to be or has been offered for sale; or(h)for removing the vehicle after it has been taken possession of by or on behalf of the financier due to any default on the part of the other party under the provisions of an agreement of hire-purchase, lease or hypothecation.

42. Delivery of vehicle subject to registration.

- No holder of a trade certificate shall deliver a motor vehicle to a purchaser without registration, whether temporary or permanent.

43. Register of trade certificate.

(1)Every holder of a trade certificate shall maintain a register in Form 19 in duplicate which shall be in a bound book, with pages numbered serially.(2)The particulars referred to in Form 19 except the time of return under column 7, shall be entered in the register before the commencement of each trip by the holder of the trade certificate or his representative and a duplicate copy of Form 19 made prior to the commencement of each trip shall be carried during the trip by the driver of the vehicle and shall be produced on demand by any officer empowered to demand production of documents by or under the Act.(3)The holder of a trade certificate shall, at the end of a trip, fill in column 7 of Form 19 (both original and duplicate), and the register and the duplicate shall be open for inspection by the registering authority.

44. Suspension or cancellation of trade certificate.

- If the registering authority has reason to believe that the holder of any trade certificate has not complied with the provisions of rules 39 to 43, it may, after giving the holder an opportunity of being heard, suspend or cancel the trade certificate held by him.

45. Appeal.

- Any person aggrieved by an order of the registering authority under rule 35 or rule 44 may, within thirty days of the receipt of any such order, appeal to the head of the Motor Vehicles Department established under section 213.

46. Procedure for appeal.

(1)The appeal referred to in rule 45 shall be preferred in duplicate in the form of a memorandum, setting forth the grounds of objections to the order of the registering authority and shall be accompanied by appropriate fee as specified in rule 81 and a certified copy of the order appealed against.(2)The appellate authority, after giving an opportunity to the parties to be heard and after such enquiry, if any, as it deems necessary,pass appropriate orders [within the period of thirty days from the date of receipt of such an appeal] [Inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.10.2005).].Registration

47. Application for registration of motor vehicles.

(1)An application for registration of a motor vehicle shall be made in Form 20 to the registering authority within a period of [seven days] [Substituted by GSR 933(E), dated 28.10.1989, for 'two days'(w.e.f. 28.10.1989).] from the date of taking delivery of such vehicle, excluding the period of journey and shall be accompanied by(a)sale certificate in Form 21;(b)valid insurance certificate;(c)[copy of the proceedings of the State Transport Authority or Transport Commissioner or such other authorities as may be prescribed by the State Government for the purpose of approval of the design in the case of a trailer or a semi-trailer] [Clause (c) substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](d)original sale certificate from the concerned authorities in Form 21 in the case of ex-army vehicles;(e)proof of address by way of any one of the documents referred to in rule 4;(f)temporary registration, if any;(g)road-worthiness certificate in Form 22 from the manufacturers, [Form 22-A from the body builders] [Added by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).];(h)[customs clearance certificate in the case of imported vehicles along with the license and bond, if any: [Clause (h) substituted by GSR 83(E), dated 5.2.2003 (w.e.f. 5.2.2003).]Provided that in the case of imported vehicles other than those imported under the Baggage Rules,1998, the procedure followed by the registering authority shall be same as those procedure followed for registering of vehicles manufactured in India; and](i)appropriate fee as specified in rule 81;(j)[proof of citizenship; [Inserted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).](k)proof of legal presence in India in addition to proof of residence in case of foreigners.](l)[technical specifications and any other document as may be required by the registering authority in respectof the modular hydraulic trailer.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] [Provided that upto 31st December, 2016, on and from the date of publication of the Central Motor Vehicles (Amendment) Rules, 2015 published on 13th January, 2015, in respect of the models of the E-rickshaws and E-carts existing prior to publication of the Central Motor Vehicles (Sixteenth Amendment) Rules, 2014 and the notification published vide S.O. 2590(E) dated the 8th October, 2014, the application for registration under this sub-rule shall be made in Form 20 to the registering authority within a period of seven days from the date of issue of Form-21 and Form-22

and shall be accompanied by -(i)road worthiness certificate in Form-22 to be issued by the manufacturer or dealer or registered E-rickshaw or E-cart Association or any agency authorised by State Government; and(ii)sale certificate in Form 21 to be issued by manufacturer or dealer or registered E-rickshaw or E-cart Association or any agency authorised by State Government for presentation along with the application for registration.](2)In respect of vehicles temporarily registered,application under sub-rule (1) shall be made before the temporary registration expires.[(4) The modular hydraulic trailers registered under these rules] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall ply in public place in laden condition subject to such other conditions as may be determined by the Central Government from time to time.] [Substituted by Notification No. G.S.R. 903 (E) dated 23.9.2016 (w.e.f. 2.6.1989)](5)[All types of trailers and semitrailers covered under rule 125D, shall be registered independently.Provided that, if the owner or registering party, requests to register the trailer or semitrailer jointly with compatible towing vehicle as a single vehicle, the registering authority shall register them as a single vehicle.] [Inserted by Notification No. G.S.R. 1482(E), dated 7.12.2017 (w.e.f. 2.6.1989).]

48. Issue of certificate of registration.

- On receipt of an application under rule 47 and after verification of the documents furnished therewith, the registering authority shall, subject to the provisions of section 44, issue to the owner of the motor vehicle a [certificate of registration in Form 23 or Form 23-A, as may be specified in the Notification issued by the concerned State Government or Union Territory Administration] [Substituted by GSR 400(E), dated 31.5.2002, for 'certificate of registration in Form 23'(w.e.f. 31.5.2002).][within the period of thirty days from the receipt of such an application] [Added by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).]:[Provided that where the certificate of registration pertains to a transport vehicle it shall be handed over to the registered owner only after recording the certificate of fitness in Form 38 [within the period of thirty days from the date of receipt of such an application] [Added by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993).].]

49. Registration records to be kept by the registering authority.

- Every registering authority shall keep in Form 24 a permanent register of motor vehicles registered by it under section 41 and of motor vehicles of other States for which new registration marks are assigned by it under sub-section (2) of section 47 and shall also enter in such record under the respective registration numbers, all changes made with reference to the provisions of sub-section (10) or sub-section (14) of section 41,sub-section (5) of section 49, sub-section (6) of section 50, sub-sections (1),(2),(3) and (5) of section 51, sub-section (4) of section 52, orders of suspension under section 53 and order of cancellation under sections 54 and 55.

50. [Form and manner of display of registration marks on the motor vehicles] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).].

- [(1) On or after commencement of this rule, the registration mark referred to in sub-section (6)of

section 41 shall be displayed both at the front and at the rear of all motor vehicles clearly and legibly in the form of security license plate of the following specifications, namely:(i)the plate shall be a solid unit made of 1.0mm aluminium conforming to DIN 1745/DIN 1783 or ISO 7591. Border edges and corners of the plate shall be rounded to avoid injuries to the extent of approx. 10 mm and the plates must have an embossed border. The plate shall be suitable for hot stamping and reflective sheet has to be guaranteed for imperishable nature for minimum five years. The fast colouring of legend and border to be done by hot stamping;(ii)the plate should bear the letters IND in blue colour on the extreme left center of the plate. The letter should be one-fourth of the size of letters mentioned in rule 51 and should be buried into the foil or applied by hot stamping and should be integral part of the plate;(iii)each plate shall be protected against counterfeiting by applying chromium-based hologram, applied by hot stamping. Stickers and adhesive labels are not permitted. The plate shall bear a permanent consecutive identification number of minimum seven digits, to be laser branded into the reflective sheeting and hot stamping film shall bear a verification inscription;(iv)apart from the registration marks on the front and rear, the third registration mark in the form of self-destructive type, chromium based hologram sticker shall be affixed on the left-hand topside of the windshield of the vehicle. The registration details such as registration number, registering authority, etc., shall be printed on the sticker. The third registration mark shall be issued by the registering authorities/approved dealers of the license plates manufacturer along with the regular registration marks, and thereafter if such sticker is destroyed it shall be issued by the license plate manufacturer or his dealer;(v)the plate shall be fastened with non-removable/non-reusable snap lock fitting system on rear of the vehicle at the premises of the registering authority;The license plates with all the above specifications and the specified registrations for a vehicle shall be issued by the registering authority or approved the license plates manufacturers or their dealers. The Central Road Research Institute, New Delhi or any of the agency authorised by the Central Government shall approve the license plates manufacturers to the above specification;(vi)the size of the plate for different categories of vehicles shall be as follows:

| | |
|---|---------------------------|
| For two and three-wheelers | 200 x100 mm |
| For Light Motor Vehicles/Passenger cars | 340 x 200 mm/500 x 120 mm |
| For medium commercial vehicles, heavy commercial vehicles and Trailer/combination | 340 x 200 mm: |

Provided that this sub-rule shall apply to already registered vehicles two years from the date of commencement:] [Sub-Rule(1) substituted by GSR 221(E), dated 28.3.2001 as amended by S.O. 938(E), dated 24.9.2001, S.O. 499(E), dated 9.5.2002 and S.O. 59(E), dated 21.1.2003 (w.e.f. 1.1.2004).][Provided further that the size of the registration plates for agricultural tractors shall be as follows] [Inserted by GSR 720(E), dated 10.9.2003 (w.e.f. 10.10.2003).] :-

Front - 285x45 mm

Rear - 200x100mm]:

[Provided also that the size of registration plate for combine harvester shall be 340mm X 200 mm and exhibited at the front and at the rear of combine harvester and at the rear of trailer for header assembly used during transport:] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)][Provided also that the size of registration plate for power tiller shall be 285x45 mm

and shall be exhibited at the front. Further, in case of trailer coupled to power tiller, the size of registration plate shall be 200x100 mm and shall be exhibited on its rear:] [Third proviso inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).][Provided also that in case of a motor cycle, the size of 285x45 mm for front registration plate shall also be permitted.] [Fourth proviso inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).](2) In the case of motor cycles the registration mark in the front shall be displayed parallel to the handle bar or on any part of the vehicle including mudguard facing the front instead of, on a plate in line with the axis of the vehicle: Provided that (a) the registration mark exhibited at the rear of a transport vehicle shall be affixed to the vehicle on the right hand side at a distance not exceeding one metre from the ground as may be reasonably possible having regard to the type of the body of the vehicle; (b) the registration mark shall also be painted on the right and left side on the body of the vehicle in the case of a transport vehicle; (c) the registration mark shall also be painted and exhibited on the partition provided between the driver and the passengers, facing the passengers seats or, where there is no such partition, on the front interior of the vehicle near the roof to the left side of the drivers seat facing the passengers seats in the case of a stage carriage or a contract carriage and in the case of a motor cab or a taxi cab it shall be sufficient if the registration mark is painted on the dash-board; (d) [the letters of the registration mark shall be in English and the figures shall be in Arabic numerals and shall be shown: [Clause (d) substituted by GSR 901(E), dated 13.12.2001 (w.e.f. 13.12.2001). Earlier Clause (d) was substituted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).](A) in the case of transport vehicles in black colour on yellow background; and (B) in other cases, in black colour on white background, the registration mark on the trailer shall be exhibited on the left hand side in black colour on yellow background. In addition, the registration mark on the drawing vehicle shall be exhibited on the trailer also and this shall be done on the right hand side at the rear of the trailer or the last trailer as the case may be, in black colour on retro-reflective type yellow background: Provided that where provisions of this clause have not been complied with in respect of motor vehicle, on or before the commencement of the Central Motor Vehicles (8th Amendment) Rules, 2001, then the provisions shall be complied with, (i) in respect of transport vehicle, on or before 1st February, 2002; and (ii) in other cases, on or before 1st July, 2002.](3) [The registration mark shall be exhibited in two lines, the State code and registering authority code forming the first line and the rest forming the second line, one below the other: [Provided that the registration mark in the front may be exhibited in one line in case, in 200mm x 100mm size plate, there is no sufficient space to exhibit the registration mark in one line, the alpha numeric of the registration mark shall be displayed as under:] [Added by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](i) where the total number of alpha numeric characters in the registration mark is even, then, equal number of alpha numeric character in each line; and (ii) where the total number of alpha numeric characters in the registration mark is odd, then any extra alpha numeric character shall be exhibited on the second line, and all dimensions shall be maintained as per rule 51 without disturbing security features in the plate: Provided further that in models of vehicles having no sufficient provision at the rear to exhibit the registration mark in two lines, it shall be sufficient if in such vehicles registration mark is exhibited in a single line: Provided further that registration mark on a light motor vehicle may be in the centre with illumination. (4) Every motor vehicle, except motor cab and motor car, manufactured on and from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1993, shall be provided with sufficient space in the rear for display of registration mark in two lines. (5) In case of agricultural tractors, the registration mark need not be inclined to the [vertical plane by

more than 45 degrees] [Substituted by GSR 111(E), dated 10.2.2004, for 'vertical by more than 30 degrees'(w.e.f. 10.8.2004).].(6)The registration mark of the drawing agricultural tractor may not be exhibited on the agricultural trailer or trailers.](7)[The registration mark of the modular hydraulic trailer may not be exhibited on the puller tractor.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]

51. [Size of letters and numerals of the registration mark. [Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993).]

- The dimension of letters and figures of the registration mark and the space between different letters and numerals and letters and edge of the plain surface shall be as follows:]

| Sl.No. | Class of vehicle | | Dimensions not less than | | |
|--|---|-------------------------------------|--------------------------|-----------|---------------|
| | | | Height | Thickness | Space between |
| (1) | (2) | | (3) | (4) | (5) |
| 1 | All motor cycles and three-wheeled invalidcarriages | Rear-letter | 35 | 7 | 5 |
| 2 | All motor cycles and three-wheeled invalidcarriages | Rear-numeral | 40 | 7 | 5 |
| 3 | Motor cycles with engine capacity less than 70cc | Front-letters and numerals | 15 | 2.5 | 2.5 |
| 4 | Other motor cycles | Front-letters and numerals | 30 | 5 | 5 |
| [5 [Substituted by G.S.R. 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).] | Three-wheelers of engine capacity not exceeding500 cc[E-rickshaws and E-carts] [Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)] | Rear and Front numerals and letters | 35 | 7 | 5 |
| 6 | Three-wheelers of engine capacity exceeding 500cc | Rear and Front numerals and letters | 40 | 7 | 5] |
| 7 | All other motor vehicles | Rear and Front numerals and letters | 65 | 10 | 10 |
| [8 [Inserted by G.S.R. 589(E), dated 16.9.2005 | Power tillers | Front numerals and letters | 15 | 2.5 | 2.5 |

(w.e.f. 16.9.2005)]

| | | | | | |
|---|---|------------------------------------|----|----|-----|
| 9 | Trailers coupled to power tillers | Rear letters and numerals | 30 | 5 | 5] |
| [10 [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] | | | | | |
| | Combine harvester | Font and rear letters and numerals | 65 | 10 | 10 |
| 11 | Trailer for header assembly of combine harvesters | Rear letters and numerals | 65 | 10 | 10] |

52. Renewal of certificate of registration.

(1)An application by or on behalf of the owner of a motor vehicle, other than a transport vehicle, for the renewal of a certificate of registration, shall be made to the registering authority in whose jurisdiction the vehicle is, in Form 25 not more than sixty days before the date of its expiry, accompanied by the appropriate fee as specified in rule 81.(2)On receipt of an application under sub-rule (1), the registering authority shall refer the vehicle to the authority referred to in sub-section (1) of section 56 and after obtaining a certificate of fitness from that authority, renew the certificate of registration:Provided that in a case where the certificate of fitness is granted on a date after the expiry of a certificate of registration, the renewal shall be made from the date of grant of the certificate of fitness for a period of five years.(3)A motor vehicle other than a transport vehicle shall not be deemed to be validly registered for the purposes of section 39, after the expiry of the period of validity entered in the certificate of registration and no such vehicle shall be used in any public place until its certificate of registration is renewed under sub-rule (2).

52A. . Renewal of certificate of registration of Government vehicles .

(1)Notwithstanding anything contained in rule 52 ,the certificate of registration in respect of a motor vehicle owned by -(i)the Central Government ;or(ii)the State Government or Union Territory administrations ;or(iii)any Municipal Corporation or Municipality or Panchayat ;or(iv)a State transport undertaking established under the Road Transport Corporation Act ,1950 (64 of 1950)and the Companies Act ,2013 (18 of 2013);or a Public sector undertaking ;or an autonomous body owned or controlled by the Central Government or the State Government , shall expire after the lapse of fifteen years , as provided in sub -section (7) of section 41 , from the date of initial registration of the vehicle :Provided that the certificate of registration of government vehicle if already renewed before lapse of fifteen years from the date of initial registration ,such certificate shall be treated as cancelled on completion of fifteen years from the date of initial registration of the vehicle :Provided further that ,this rule shall not apply to the special purpose vehicles (armoured and other specialised vehicles) used for operational purposes for defense of the country and for the maintenance of law and order and internal security .(2)Disposal of such vehicles shall ,after the expiry of the fifteen years from the date of initial registration of the vehicle , be ensured through the Registered Vehicle Scrapping Facility set up in accordance with the Motor Vehicles (Registration and Functions of Vehicle Scrapping Facility)Rules ,2021 ,as amended from time to time .

53. Issue of duplicate certificate of registration.

(1) If at any time, the certificate of registration is lost or destroyed the owner shall report to the police station in the jurisdiction of which the loss or destruction has occurred and intimate that fact in writing to the registering authority by whom the certificate of registration was issued. (2) An application for the issue of a duplicate certificate of registration shall be made to the [last registering authority] [Substituted by GSR 221(E), dated 28.3.2001, for 'original registering authority' (w.e.f. 28.3.2001). Earlier these words were substituted by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000).] in Form 26 and shall be accompanied by the appropriate fee as specified in rule 81.

53A. Application for temporary registration. - An application for temporary registration in case the motor vehicle is being registered in a state other than the state in which the dealer is situated or in case of a purchased chassis on which the body has to be fabricated separately, shall be made electronically on the Portal by the owner to any registering authority or other authority as may be prescribed by the State Government, in Form 20, and shall be accompanied by the documents required to be submitted along with an application for registration of motor vehicles as per sub-rule (1) of rule 47 along with the appropriate fee as specified in rule 81.

53B. Issue of temporary certificate of registration. - (1) The temporary registration certificate shall be generated electronically in Form 23B immediately on receipt of application for temporary registration along with requisite fees.

(2) Any temporary registration granted under sub-rule (1) shall be valid for an initial period of six months from the date of its issue: Provided that where the motor vehicle registered under sub-rule (1), is a chassis to which a body has not been attached and the same is detained in a workshop beyond the said period of six months for being fitted with a body or due to any unforeseen circumstances beyond the control of the owner, the registering authority may, on submission of application in Form 20B and payment of appropriate fee as specified in rule 81 by the owner, extend the initial period of validity one or more times by 30 days each, as the registering authority may deem fit. (3) Upon granting an extension of the initial period of validity of certificate of temporary registration by any further period or periods under sub-rule (2), the registering authority shall make an appropriate entry in Form 23B.

53C. Assignment of temporary registration marks. -

(1) The authority granting a temporary certificate of registration shall assign a temporary registration mark to the vehicle, for example: -T- Represent temporary certificate;

08.

- Month of issuance of temporary certificate of registration 20- Year of issuance of temporary certificate of registration; AB- Represent State Code;

1234.

- Serial Number of Temporary Registration;AB- Alphabet of Temporary Registration (Except O and I).(2)The owner shall ensure that the said mark is affixed to the front and rear of the motor vehicle.][Inserted by 2021 amendment rules]

54. Assignment of new registration mark.

(1)An application for the assignment of a new registration mark under sub-section (1)of section 47 shall be made in Form 27 and shall be accompanied by a no objection certificate in Form 28 along with the appropriate fee as specified in rule 81, within a period of thirty days from the date of expiry of the period specified in the said section:Provided that where a motor vehicle is intended to be kept in a State for a period exceeding twelvemonths and the owner of such vehicle makes a declaration to that effect, the application may be made at any time within the said period of twelve months.(2)On receipt of an application under sub-rule (1), the registering authority shall, subject to the provision of section 44, assign to the vehicle the registration mark.

55. Transfer of ownership.

(1)Where the ownership of a motor vehicle is transferred, the transferor shall report the fact of transfer in Form 29 to the registering authorities concerned in whose jurisdiction the transferor and the transferee reside or have their places of business.(2)An application for the transfer of ownership of a motor vehicle under sub-clause (i) of clause (a) of sub-section (1) of section 50 shall be made by the transferee in Form 30, and shall be accompanied by(i)the certificate of registration;(ii)the certificate of insurance; and(iii)the appropriate fee as specified in rule81.(3)An application for transfer of ownership of a motor vehicle under sub-clause (ii) of clause (a) of sub-section (1) of section 50 shall be made by the transferee in Form 30 and shall, in addition to the documents and fee referred to in sub-rule (2), be accompanied by one of the following documents, namely :-(a) a no objection certificate granted by the registering authority under sub-section (3) of section 48; or(b)an order of the registering authority refusing to grant the no objection certificate under sub-section (3) of section 48; or(c)where the no objection certificate or the order, as the case may be, has not been received, a declaration by the transferor that he has not received any such communication together with(i)the receipt obtained from the registering authority under sub-section (2) of section 48; or(ii)the postal acknowledgement received from the registering authority where the application for no objection certificate has been sent by post.

56. Transfer of ownership on death of owner of the vehicle.

(1)Where the owner of a motor vehicle dies, the person succeeding to the possession of the vehicle may for a period of three months, use the vehicle as if it has been transferred to him where such person has, within thirty days of the death of the owner informs the registering authority of the occurrence of the death of the owner and of his own intention to use the vehicle.(2)The person referred to in sub-rule (1) shall apply in Form 31 within the period of three months to the said registering authority for the transfer of ownership of the vehicle in his name, accompanied by(a)the appropriate fee as specified in rule 81;(b)the death certificate in relation to the registered owner;(c)the certificate of registration; [* * *] [Omitted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)](d)the certificate of insurance; [and] [Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)](e)[driving license and permit in case of E-rickshaw and E-cart.]

57. Transfer of ownership of vehicle purchased in public auction.

(1)The person who has acquired or purchased a motor vehicle at a public auction conducted by or on behalf of the Central Government or a State Government shall make an application in Form 32 within thirty days of taking possession of the vehicle to the registering authority accompanied by(a)the appropriate fee as specified in rule 81;(b)the certificates of registration and insurance;(c)the certificate or order confirming the sale of the vehicle in his favour duly signed by the person authorised to conduct the auction; [* * *] [Omitted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)](d)the certified copy of the order of the Central Government or State Government authorising the auction of the vehicle; [and] [Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)](e)[driving license and permit in case of transfer of ownership of E-rickshaw and E-cart.](2)Where the vehicle auctioned is a vehicle without any registration mark, or with a registration mark which on verification is found to be false, the registering authority shall, subject to the provisions of section 44, assign a new registration mark to the vehicle in the name of the Department of the Central Government or State Government auctioning the vehicle and thereafter record the entries of transfer of ownership of the vehicle giving the name and address of the person to whom the vehicle is sold:[Provided that motor vehicle in the name of the Central Government or State Government shall not be transferred by the concerned registering authority without verifying the proceeding of the auction or disposal of the concerned vehicle.] [Inserted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.2.2004).]

58. No objection certificate.

(1)An application for the issue of no objection certificate under section 48 in respect of a motor vehicle shall be made in Form 28 to the registering authority by which the vehicle was previously registered, accompanied by(a)the certified copy of the certificate of registration;(b)the certified copy of the certificate of insurance;(c)evidence of payment of motor vehicle tax up-to-date;(d)where no tax is payable for a certain period a certificate from the tax collecting authority that no tax is due from the vehicle for the said period.(2)In the case of a transport vehicle, in addition to the documents referred to in sub-rule (1), documentary evidence in respect of the following matters

shall also be furnished, namely:(a)that the vehicle is not covered by any permit issued by any transport authority;(b)that the sum of money agreed upon to be paid by the holder of the permit under sub-sections (5) and (6) of section 86, if any, is not pending recovery;(c)evidence of payment of tax on passengers and goods under any law for the time being in force up to the date of application for no objection certificate.(3)On receipt of an application under sub-rule (1), the registering authority shall fill Part III of Form 28 and return that part to the applicant duly signed.(4)Where the registering authority grants or refuses to grant the no objection certificate, it shall return the duplicate copy of the said Form to the applicant and the triplicate copy to the other registering authority after duly filling and signing Part II thereof.

59. Change in residence.

- An application for recording a change in the residence in the certificate of registration of a motor vehicle shall be made by the owner of the vehicle in Form 33 accompanied by the certificate of registration and proof of address in the manner specified in rule 4 and the appropriate fee as specified in rule 81.

60. Endorsement of hire-purchase agreements, etc.

- An application for making an entry of hire-purchase, lease or hypothecation agreement in the certificate of registration of a motor vehicle required under sub-section (2) of section 51 shall be made in Form 34 duly signed by the registered owner of the vehicle and the financier and shall be accompanied by the certificate of registration and the appropriate fee as specified in rule 81.

61. Termination of hire-purchase agreements, etc.

(1)An application for making an entry of termination of agreement of hire purchase, lease or hypothecation referred to in sub-section (3) of section 51 shall be made in Form 35 duly signed by the registered owner of the vehicle and the financier, and shall be accompanied by the certificate of registration and the appropriate fee as specified in rule 81.(2)The application for the issue of a fresh certificate of registration under sub-section (5) of section 51 shall be made in Form 36 and shall be accompanied by a fee as specified in rule 81.(3)Where the registered owner has refused to deliver the certificate of registration to the financier or has absconded then the registering authority shall issue a notice to the registered owner of the vehicle in Form 37.Certificate of fitness

62. Validity of certificate of fitness.

(1)A certificate of fitness in respect of a transport vehicle granted under section 56 shall be in Form 38 and such certificate when granted or renewed shall be valid for the period as indicated below:

- | | |
|---|-----------|
| (a) new transport vehicle | two years |
| (b) renewal of certificate of fitness in respect of vehicles mentioned in (a) above [***] [Certain words omitted by | one year |

G.S.R. 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]

(ba) renewal of certificate of fitness in respect of E-rickshaw and E-cart three years

(c) [renewal of certificate of fitness in respect of vehicles covered under rule 82 of these rules [Substituted by G.S.R. 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).] One year]

(d) fresh registration of imported vehicles Same period as in the case of vehicles manufactured in India having regard to the date of manufacture:

[Provided that the renewal of a fitness certificate shall be made only after an [Inspecting Officer or authorized testing stations as referred to in sub-section (1) of section 56 of the Act] [Proviso added by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001). Earlier the Proviso was omitted by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000). Before that the Proviso was added by GSR 684(E), dated 5.10.1999 (w.e.f. 22.10.1999).] has carried the tests specified in the Table given below, namely:] [Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)][Table] [Substituted by Notification No. GSR 345 (E) dated 19.5.2014 (w.e.f. 2.6.1989)]

| Sl.No. | Item | Check Fitment | Check make/type/rating etc. as per original equipment recommendations | Check conditions | Check Functioning | T |
|--------|---|---------------|---|------------------|-------------------|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| (1) | Spark Plug/Suppressor cap/ High Tension cable | Yes | Yes | Yes | No | N |
| (2) | Head Lamp Beams | Yes | No | Yes | Yes | C |
| (3) | Other Lights | Yes | No | Yes | Yes | N |

| | | | | | | |
|------|----------------------|-----|-----|-----|-----|---|
| (4) | Reflectors | Yes | No | Yes | No | N |
| (5) | Bulbs | Yes | Yes | Yes | No | N |
| (6) | Rear View Mirror | Yes | No | Yes | No | N |
| (7) | Safety Glass | Yes | Yes | Yes | No | N |
| (8) | Horn | Yes | No | Yes | Yes | N |
| (9) | Silencer | Yes | No | Yes | Yes | N |
| (10) | Dash Board Equipment | Yes | No | Yes | Yes | N |
| (11) | Wind shield wiper | Yes | No | Yes | Yes | N |
| (12) | Exhaust emission | No | No | No | No | Y |
| (13) | Braking System | Yes | No | Yes | Yes | Y |

| | | | | | | |
|---|--|-----|----|-----|-----|--------|
| (14) | Speedometer | Yes | No | Yes | Yes | N |
| (15) | Steering gear | Yes | No | Yes | Yes | C p |
| (16) [[Inserted by Notification No. G.S.R. 677 (E), dated 3.9.2015 (w.e.f. 2.6.1989).] | Rear Under run Protecting Device For N2, N3, T3 and T4 gear | Yes | No | Yes | No | N |
| (17) | Lateral Side Protection Device For N2, N3, T3 and T4 | Yes | No | Yes | No | N |

[Provided further that in case of E-rickshaw and E-cart, the renewal of fitness certificate shall be made only after carrying out tests specified out tests specified in the Table given below :-

| Items | Check Fitment | Check make or Type rating, etc., as per original equipment recommendation | Check conditions | Check functioning | Test | Remarks |
|---------------------|------------------|---|---------------------|----------------------|------|--|
| Maximum No speed | No | No | No | No | Yes | The vehicle shall be driven in unladen condition (with full charge and at full accelerator position) on straight or flat road and when the |

vehicle attains full speed, the maximum speed shall be calculated by measuring time taken to travel fixed distance (say 50 metres).]

[Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)] [Provided also that if the tests specified in the Table under the first proviso are conducted by an Inspecting Officer or authorized testing station in a State/ Union Territory other than the State/ Union Territory where the vehicle is registered, the Inspecting Officer who conducted the tests shall, on the same day or on the following working day, upload his inspection report in Form 38A at the portal <http://parivahan.gov.in/vahan> and also send the inspection report signed under his hand and seal to the registering authority by speed post for issue of certificate of fitness by the registering authority within fifteen days from the date of the inspection report, if the vehicle is found by the Inspecting Officer to be in compliance with the provisions of the Act and rules and a copy shall be given to the driver of the vehicle: [Inserted by the Notification No. G.S.R. 1096, dated 28.11.2016 (w.e.f. 2.6.1989).] Provided also that the next fitness certificate is obtained from the inspecting officer or an authorized testing station in the State/ Union Territory of the registering authority where the vehicle is registered.] [Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)] Explanation. - Inspecting Officer means an Officer appointed by a State Government under section 213 of the Act. (2) The fee for the grant or renewal of a certificate of fitness shall be as specified in rule 81. (3) [The fee for testing of a vehicle when tested by an Inspecting Officer or authorised testing station, other than the Inspecting Officer in the office of the registering authority, shall be as specified in rule 81.] [Inserted by the Notification No. G.S.R. 1096, dated 28.11.2016 (w.e.f. 2.6.1989).]

63. Regulation and control of authorized testing stations.

(1) No operator of an authorised testing station shall issue or renew a certificate of fitness to a transport vehicle under section 56 without a letter of authority in Form 39 granted by the registering authority. (2) An application for grant or renewal of a letter of authority under sub-rule (1) shall be made in Form 40 to the registering authority having jurisdiction in the area in which the service station or garage is situated and shall be accompanied by, (a) the appropriate fee as specified in rule 81; (b) a security deposit of [rupees one lakh] [Substituted by GSR 338(E), dated 26.3.1993, for 'rupees ten thousand' (w.e.f. 26.3.1993).] in such manner as may be specified by the State Government. Explanation. - For the purpose of this rule and rules 64 to 72, the registering authority means an officer not below the rank of the regional transport officer of the Motor Vehicles Department established under section 213. (3) A registering authority shall, when considering an application for the grant or renewal of a letter of authority, have regard to the following matters, namely: (a) the applicant or at least one of the members of the staff employed by him for the inspection of transport vehicles for the purpose of issue or renewal of certificate of fitness possesses

the following minimum qualifications:(i)a [three years] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] diploma in automobile engineering or mechanical engineering or an equivalent qualification;(ii)experience of minimum service of five years in an automobile workshop undertaking repairs of heavy goods vehicles,heavy passenger motor vehicles, medium motor vehicles and light motor vehicles;(iii)a driving license to drive motor cycle,heavy passenger motor vehicle and heavy goods vehicle with a minimum driving experience of not less than five years;(iv)thorough knowledge of the Act and the rules made thereunder, especially the Chapters relating to registration of motor vehicles and construction, equipment and maintenance of motor vehicles;(b)the premises where the authorised testing station is to be housed is either owned by the applicant or is taken on lease by him or is hired in his name and it has [minimum of one acre of land] [Certain words substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] for administrative section, reception room and [sanitary block and space for erection] [Certain words substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993).] of testing equipments and other apparatus;(c)inspection lanes are provided adjacent to the building in the same compound or at other places approved by the registering authority;(d)testing equipments and apparatus are installed in such manner that vehicles may pass through with ease and speed;(e)[the applicant maintains in good condition, the equipment and apparatus for undertaking test pertaining to [exhaust gas, engine tuning, engine analysis] [Clause (e) substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).],smoke emission, brake system, head-lights, wheel alignments, compressors,speedometers and other like components;](f)the financial resources of the applicant are sufficient to provide for its continued maintenance;(g)the applicant maintains an up-to-date copy of the Act, these Rules and the concerned State Motor Vehicles Rules.(4)The registering authority shall also, when considering an application under this rule, take into consideration the fact that the setting up of the authorised testing station will improve the availability of testing facilities in the area both in relation to the number of vehicles and proximity to such facilities.(5)The registering authority may, on receipt of an application under sub-rule (2) and after satisfying himself that the applicant has complied with the requirements of sub-rules (3) and (4), grant or renew the letter of authority in Form 39:Provided that no application for a letter of authority shall be refused by the registering authority unless the applicant is given an opportunity of being heard and reasons for such refusal are given in writing by the registering authority.

64. Duration of letter of authority.

- A letter of authority granted or renewed shall be effective for a period of five years from the date of grant or renewal.

65. General conditions to be observed by the holder of letter of authority.

- The holder of a letter of authority shall(a)maintain a register with a separate page for each vehicle containing the registration number of the vehicle for which the certificate of fitness is granted or renewed, the make and model of the vehicle, the engine number and the chassis number of the vehicle along with the pencil print of the chassis number, the name and address of the owner of the vehicle, particulars of any permit of such vehicle, period of validity of certificate of fitness granted or renewed and the signature of the owner of the vehicle or his authorised representative;(b)forward

the particulars of the transport vehicles for which certificates of fitness have been granted or renewed and the period of validity of such certificate, within two days of grant or renewal of the certificate of fitness, to the authority which has granted the permit and where the transport vehicle is not covered by a permit, to the transport authority in whose jurisdiction the vehicle is kept;(c)issue to every transport vehicle satisfying the requirements of section 56, a certificate of fitness in accordance with the provisions of rule 62;(d)not shift the place of business mentioned in the letter of authority without the prior approval in writing of the registering authority which granted the letter of authority;(e)keep the premises of the testing station and the records and registers maintained by it and all the machinery, equipment and apparatus in the premises at all reasonable time open for inspection by the registering authority or any person of the Motor Vehicles Department of the State Government established under section 213 authorised in this behalf by the registering authority;(f)display at a prominent place in its main office the following:(i)the letter of authority in original issued to the authorised testing station by the registering authority;(ii)the name and address of the person authorised to issue or renew the certificate of fitness;(iii)the qualifications of the persons referred to in clause (a) of sub-rule (3) of rule 63;(g)not charge a fee for inspection of a vehicle for the purpose of issue or renewal of the appropriate certificate of fitness in excess of the fee specified in rule 81;(h)surrender to the Regional Transport Authority having jurisdiction over the area, the register referred to in clause (a)as soon as entries in all the pages in the register are completed and in any case not later than two days after such completion.

66. Issue of duplicate letter of authority.

(1)If at any time the letter of authority granted or renewed under sub-rule (5) of rule 63 is lost or destroyed, the holder of the letter of authority shall report to the police station in the jurisdiction of which the loss or destruction has occurred and intimate the fact in writing to the registering authority which granted or renewed the letter of authority and shall apply for a duplicate.(2)On receipt of an application along with the appropriate fee as specified in rule 81, the registering authority may issue a duplicate letter of authority clearly marked Duplicate.(3)If after the issue of a duplicate letter of authority, the original is traced, the same shall be surrendered forthwith to the registering authority by which it was issued.

67. Supervision of authorised testing stations.

- The registering authority or any officer of the Motor Vehicles Department of the State Government duly authorised in this behalf by the registering authority may, at any time, conduct test checks at the premises of the authorised testing station with a view to ensure that the vehicles are properly tested by the authorised testing station.

68. Power of registering authority or Regional Transport Authority to call for information.

- The authorised testing station shall submit to the registering authority or the Regional Transport Authority having jurisdiction in the area, such information or returns as maybe called for by such

authority from time to time.

69. Power of registering authority to suspend or cancel the letter of authority or forfeit security deposit.

(1) If the registering authority is satisfied after giving the holder of a letter of authority an opportunity of being heard, that he has (a) failed to maintain the equipment, machinery and apparatus referred to in sub-clause (e) of sub-rule (3) of rule 63 in good condition; or (b) failed to comply with the other requirements laid down in sub-rule (3) of rule 63; or (c) failed to observe correct standards of testing before granting or renewing certificates of fitness as noticed at the time of test-checking referred to in rule 67 or the frequency of accidents involving transport vehicles covered by certificates of fitness granted or renewed by the authorised testing station attributable to any mechanical defect of the vehicle, it may (i) suspend the letter of authority for a specified period; or (ii) cancel the letter of authority; or (iii) order forfeiture of the security deposit furnished by the authorised testing station. (2) Where the letter of authority is suspended or cancelled under sub-rule (1), the holder of the letter of authority shall surrender the same to the registering authority forthwith. (3) Where the security deposit is forfeited under sub-rule (1), the holder of the letter within thirty days of the receipt of the order of forfeiture, remit to the registering authority the amount ordered to be forfeited so that the requirement of sub-rule (2) of rule 63 in relation to deposit of security is complied with.

70. Appeal.

- Any person aggrieved by an order of the registering authority under sub-rule (5) of rule 63 or sub-rule (1) of rule 69, may, within thirty days of the receipt of the order, appeal to the Head of the Motor Vehicles Department of the State Government established under section 213.

71. Procedure for appeal.

(1) An appeal under rule 70 shall be preferred in duplicate in the form of a memorandum, setting forth the grounds of objections to the order of the registering authority and shall be accompanied by the appropriate fee as specified in rule 81 and a certified copy of such order. (2) The appellate authority may, after giving an opportunity to the parties to be heard and after such enquiry as it may deem necessary, pass appropriate orders.

72. Voluntary surrender of letter of authority.

(1) The holder of a letter of authority may, at any time, surrender the letter of authority issued to him, to the registering authority which has granted the letter of authority and on such surrender, the registering authority shall cancel the letter of authority forthwith. (2) On cancellation of the letter of authority under sub-rule (1), the registering authority shall refund to the holder of the letter of authority, the amount of security deposit referred to in sub-rule (2) of rule 63 in full and without any interest.

73. Tax clearance certificate to be submitted to the testing station.

- No authorised testing station shall accept an application for the grant or renewal of a certificate of fitness unless the same is accompanied by a tax clearance certificate in such form as may be specified by the State Government, from the Regional Transport Officer or motor vehicle inspector having jurisdiction in the area to the effect that the vehicle is not in arrears of motor vehicle tax or any compounding fee referred to in sub-sections (5) and (6) of section 86. Registration of vehicles belonging to the Central Government used for defence purposes

74. Assignment of registration marks to the vehicles belonging to the Central Government used for defence purposes.

- The authority referred to in sub-section (1) of section 60 shall assign registration marks to the vehicles belonging to the Central Government and used for defence purposes in the following manner, namely: A group of figures followed by a single capital letter, a broad arrow, not more than six figures and a capital letter or a group of letters. The registration mark shall be in English letters and Arabic numerals. State Register of Motor Vehicles

75. State register of motor vehicles.

(1) Each State Government shall maintain a State register of motor vehicles in respect of motor vehicles registered in the State in Form 41. (2) Each [State Government shall, if so desired by the Central Government] [Substituted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001). Earlier these words were omitted by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000). Before that words were inserted by GSR 684(E), dated 5.10.1999 (w.e.f. 22.10.1999).] send to the Director (Transport Research), Ministry of Surface Transport, New Delhi, a printed copy of the register referred to in sub-rule (1). Special provision for registration of motor vehicles of diplomatic officers, etc.

76. Registration of vehicles of diplomatic and consular officers.

(1) Every application for registration of a motor vehicle under sub-section (1) of section 42 by or on behalf of any diplomatic officer or consular officer shall be made in triplicate by the head of the mission or consular officer in Form 42 and be addressed to the registering authority through the Competent Authority accompanied by the relevant documents and fees referred to in rule 47. (2) The Competent Authority shall forward one copy of the application to the registering authority concerned together with a statement certifying the status of the person applying for registration and shall return one copy of the application to the applicant. The third copy of the application may be retained by the Competent Authority for record. (3) The registering authority shall, on receipt of the application duly endorsed under sub-rule (2), register the vehicle, subject to the provision of section 44. (4) The registering authority shall issue to the owner of a motor vehicle registered by it under sub-rule (3), a certificate of registration in Form 43 and shall enter in a register to be kept by it, particulars of such certificate. (5) The registering authority shall assign to the motor vehicle for display thereon in the manner specified in rule 77, the registration mark in accordance with sub-rule

(6) or sub-rule (7), as the case may be. (6) [A motor vehicle belonging to a diplomatic mission in Delhi or to any of its diplomatic officer shall be assigned a registration mark consisting of the letters CD preceded by the number allotted to the mission by the Ministry of External Affairs of the Government of India and followed by a number allotted to the vehicle by the registering authority in the following manner, namely : (i) an official vehicle meant for the use of the head of a mission shall be allotted the number 1; (ii) personal vehicles of the head of the mission shall be allotted the number 1, followed consecutively, in alphabetical order, by a letter beginning with the letter A; (iii) official vehicles, other than those referred to in clause (i), shall be allotted consecutive numbers beginning with the number 2; (iv) vehicles belonging to other officers of the mission shall be allotted numbers in consecutive order after the last number allotted under clause (iii); (v) vehicles acquired by a mission or by its diplomatic officer other than heads of missions, shall be allotted numbers in consecutive order after the last number allotted under clause (iv) irrespective of whether such vehicle is for official or personal use of the mission or any of its officers; (vi) a number allotted to a vehicle under any of the clauses (i) to (iv), which is lying unutilised due to sale or export of such vehicle or cancellation of its number may be allotted to another vehicle under the same clause in respect of which an application has been made under sub-rule (1).] (7) A motor vehicle belonging to a consular post [headed by a Carrier Counsellor Officer] [Substituted by GSR 221(E), dated 28.3.2001, for 'outside Delhi' (w.e.f. 28.3.2001).] or to any of its officers shall be assigned a registration mark consisting of the letters CC preceded by the number of the post allotted to it by the Ministry of External Affairs of the Government of India and followed by a number allotted to the vehicle by the registering authority out of a block of numbers allotted for that post in the following manner, namely: (i) an official vehicle meant for the use of the head of a consular post shall be allotted the first number from the block of numbers allotted to that post; (ii) personal vehicles of the Consul-General shall be allotted the number referred to in clause (i), followed consecutively in alphabetical order, by a letter beginning with the letter A; (iii) official vehicles other than those referred to in clause (i), shall be allotted consecutive numbers beginning with the second number from the block of numbers allotted to the post; (iv) vehicles belonging to other officers of the post shall be allotted numbers in consecutive order after the last number allotted under clause (iii); (v) vehicles acquired by a post, or by its consular officers, other than the head of the post shall be allotted numbers in consecutive order after the last number allotted under clause (iv) irrespective of whether such vehicle is for official or personal use of the post or any of its officers; (vi) a number allotted to a vehicle under any of the clauses (i) to (v), which is lying unutilised due to sale or export of such vehicle or cancellation of its number, may be allotted to another vehicle under the same clause in respect of which an application has been made under sub-rule (i). [Explanation. - For the purposes of this rule and rules 77, 78 and 79, competent authority means: (i) in relation to a diplomatic officer or a consular officer who has his residence in Delhi, the Chief of Protocol to the Government of India in the Ministry of External Affairs; and (ii) in relation to a diplomatic officer or a consular officer who has his residence at any other place, the Secretary (Transport) to the State Government.] (8) [Consular posts headed by Honorary Consular Officers shall use standard size number plates bearing ordinary registration number provided by the concerned registration authorities. They may, however, use the word name of the country followed by CC (Honorary) in the same font and colour (i.e., the numbers and letters in white colour on black background) but in letters smaller than the registration number on a maximum of two of their vehicles.] [Inserted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).] [76-A. Application of rules 76 to 80 to

organisations notified under the United Nations(Privileges and Immunities) Act, 1947. [Inserted by GSR 644, dated 25.9.1995.]- The provisions of rules 76 and 77 to 80 shall apply to the motor vehicles of diplomatic officers of the organisations notified under the United Nations (Privileges and Immunities) Act, 1947 (46 of 1947) as they apply to a diplomatic officer or consular officer with the modification that in rule 76,(a)in sub-rule (6), for the letters CD, the letters UN shall be substituted; and(b)in sub-rule (7), for the letters CC, the letters UN shall be substituted.][76-B. Registration of vehicles of home-based non-diplomatic officials of diplomatic missions or consular posts. [Inserted by GSR 395(E), dated 16.7.1997 (w.e.f. 16.7.1997).](1)A motor vehicle belonging to a non-diplomatic official of a diplomatic mission or a consular post in Delhi shall be assigned a registration mark consisting of letters CDP preceded by the number allotted to the mission or post by the Ministry of External Affairs of the Government of India and followed by a number allotted to the vehicle by the registering authority.(2)A motor vehicle belonging to a home-based non-diplomatic official of a consular post outside Delhi shall be assigned a registration mark consisting of the letters CCP preceded by the number of the post allotted to it by the Ministry of External Affairs of the Government of India and followed by the number allotted to the vehicle by the registering authority.] [Substituted by GSR 129(E), dated 16.2.2000 (w.e.f. 16.2.2000).]

77. Exhibition of registration mark.

(1)The registration mark assigned under sub-rules (5) to (7) of rule 76 shall be clearly exhibited in reflecting colour both at the front and rear of the vehicle on the plain surface of a plate or part of the vehicle and the size of which shall be 41 centimetres by 14 centimetres(i)with deep blue background, the registration mark and the number being in white in the case of motor vehicles referred to in sub-rule (6) of rule 76;(ii)[with deep blue background, the registration mark and the number being in yellow] [Substituted 'with yellow background, the registration mark and the number being in black' by Notification No. G.S.R. 633(E), dated 23.6.2017 (w.e.f. 2.6.1989).], in the case of motor vehicles referred to in sub-rule (7) of rule 76;(iii)[with light green background, the registration mark and the number being in white in case of motor vehicles referred to in rule 76-B.] [Inserted by GSR 395(E), dated 16.7.1997 (w.e.f. 16.7.1997).](2)The registration mark shall be in English letters and Arabic numerals and(i)save in the case of a motor cycle or an invalid carriage, the letters shall be not less than 6 centimetres high and 2centimetres thick at any part, the numerals shall be not less than 9centimetres high and 2 centimetres thick at any part, and there shall be as pace between any letter and any numeral and between any letter or any numeral and the edge of the plain surface of not less than 1 centimetre and a space between any two letters and between any two numerals of not less than 1centimetre; and(ii)in the case of a motor cycle or an invalid carriage, the dimensions of the letters and figures shall not be less than two-thirds of those specified in clause (i).(3)The plain surface referred to in sub-rule (2) shall not be inclined from the vertical by more than thirty degrees. The letters and numerals shall be exhibited as follows:(i)in the case of a transport vehicle, the registration mark shall be exhibited in two separate horizontal lines, the number allotted to the mission or post and the letters forming the first line followed by the number allotted by the registering authority in the second line; and(ii)in all other cases, the registration mark may exhibit the letters and numerals either in two horizontal lines as aforesaid or in one horizontal line.(4)Notwithstanding anything contained in sub-rule (1), the registration mark exhibited at the front of a motor cycle or an invalid carriage may be displayed on a plate in line with the axis of the

vehicle and shall, in such a case, be displayed on both sides of the plate.(5)In the case of a trailer(i)the registration mark shall be exhibited on a plate or surface on the left hand side of the trailer, the dimensions of the letters and figures being not less than two-thirds of the dimensions specified in sub-rule (2);(ii)the registration mark of the drawing motor vehicle to be affixed to the rear of the trailer shall be in conformity with the provisions of these rules relating to the registration mark affixed to the rear of the motor vehicle.(6)The registration mark shall also be painted on the right and left side of the body of a transport vehicle.

78. Assignment of new registration mark on removal of vehicle to another State.

(1)Every application for assignment of new registration mark on removal to another State under sub-section (1) of section 47 by or on behalf of a diplomatic officer or consular officer shall be made in triplicate in Form 44 and shall be addressed to the registering authority through the competent authority accompanied by the relevant documents and fees referred to in rule 54.(2)The provisions of sub-rules (2) to (7) of rule 76 shall apply to an application made under sub-rule (1) as they apply to an application made under sub-rule (1) of rule 76.

79. Suspension and cancellation of registration of vehicle registered under rule 76.

- If, under the provisions of section 53, section 54 or section 55, the registration of a motor vehicle made in accordance with rule 76 is suspended or cancelled, then a copy of the order of suspension or cancellation shall be sent to the competent authority in addition to each of the authorities or persons to whom a copy has to be sent under the said sections.

80. Transfer or disposal of motor vehicle registered under rule 76.

(1)Where a motor vehicle registered in accordance with rule 76 is transferred by way of sale or otherwise, the transferor shall, within fourteen days, report the fact of the transfer along with the full name and address of the person to whom the vehicle is transferred to the registering authority within whose jurisdiction the transfer is effected and shall simultaneously send copies of the said report to:(a)the transferee;(b)the competent authority;(c)the Collector of Customs of the port of importation of the vehicle and where it is not possible to locate the port of importation, to the Collector of Central Excise and Customs nearest to the headquarters of the transferee; and(d)the original registering authority in whose records the registration of the vehicle is recorded, if the transfer is effected in the jurisdiction of another registering authority, and shall also surrender the number plate in respect of the vehicle to the registering authority in whose records the registration of the vehicle is recorded, when the transfer is to a person other than a diplomatic officer or a consular officer.(2)Where the transferee is a diplomatic officer or a consular officer, an application by him or on his behalf shall be made to the registering authority for registration of the vehicle in accordance with the provision of rule 76.Fees

81. [Fees. [Substituted by Notification No. G.S.R. 1183(E), dated 29.12.2016 (w.e.f. 2.6.1989).]

- The fees which shall be charged under the provisions of this Chapter shall be as specified in the Table below: Provided that the States may levy [fee lower than the amount specified in the table and may also levy] [Sub-Rule(6) substituted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).] additional amounts to cover the cost of automation and technology utilized for conducting the testing or providing value added services. Table

| Sl. No. | Purpose | Amount | Rule | Section |
|----------------------|--|---------------------|------------------------------|---------|
| (1) | (2) | (3) | (4) | (5) |
| 1. | Grant or renewal of trade certificate in respect of each class of vehicle: | | 34(1) | |
| (a) Motorcycle | Five hundred rupees | | | |
| (b) Invalid Carriage | Five hundred rupees | | | |
| (c) Others | One thousand rupees | | | |
| 2. | Duplicate trade certificate: | | 38(1) | |
| (a) Motorcycle | Three hundred rupees | | | |
| (b) Invalid Carriage | Three hundred rupees | | | |
| (c) Others | Five hundred rupees | | | |
| 3. | Appeal under rule 46 | One thousand rupees | 46(1) | |
| 4. | Issue or renewal of certificate of registration and assignment of new registration | | 47(1)52(1)54(1)76(1)and78(1) | |

mark:

| | |
|---|---|
| (a) Invalid Carriage | |
| (b) Motor cycle | Fifty rupees |
| (c) Three wheeler/ Quadricycle/ Light Motor Vehicles: | Three hundred rupees |
| i) Non transport; | Six hundred rupees |
| ii) Transport | One thousand rupees |
| (d) Medium goods vehicle | One thousand rupees |
| (e) Medium passenger motor vehicle | One thousand rupees |
| (f) Heavy goods vehicle | One thousand and five hundred rupees |
| (g) Heavy passenger motor vehicle | One thousand and five hundred rupees |
| (h) Imported motor vehicle | Five thousand rupees |
| (i) Imported motor cycle | Two thousand and five hundred rupees |
| (j) Any other vehicle not mentioned above | Three thousand rupees |

Note 1: Additional fee of two hundred rupees shall be levied if the certificate of registration is a smart card type issued or renewed in Form 23A. Note 2: In case of delay in applying for renewal of certificate of registration, an additional fee of three hundred rupees for delay of every

month or part thereof
in respect of motor cycles
and five hundred rupees
for delay of every month or
part thereof in respect of
other classes
of non-transport vehicles
shall be levied.

| | | | |
|----|--|--|--|
| 5. | Issue of duplicate certificate of registration | Half of the fee mentioned against Serial No.4 | 53(2) |
| | | Half of the fee mentioned against Serial No.4. Note: In case of delay in submission of 'No Objection Certificate', an additional fee of rupees three hundred for delay of each month or part thereof in case of motor cycles and five hundred rupees for each month of delay or part thereof for other vehicles shall be levied. | |
| 6. | Transfer of ownership | Half of the fee mentioned against Serial No.4. Note: In case of delay in submitting 'No Objection Certificate' for change of | 55(2)(iii), 55(3), 56(2)(a) and 57(1)(a) |
| 7. | Change of residence | Half of the fee mentioned against Serial No.4. Note: In case of delay in submitting 'No Objection Certificate' for change of | 59 |

residence, an additional fee of rupees three hundred for delay of each month or part thereof in case of motor cycles and five hundred rupees for each month of delay or part thereof for other vehicles shall be levied.

| | | |
|--|--|---|
| 8. | Recording alteration in the certificate of registration | Half of the fee mentioned against Serial No.4 |
| 9. | Endorsing hire purchase/ lease/ hypothecation agreement- | 60 |
| (a) Motorcycle | Five hundred rupees | |
| (b) Three wheeler/quadracycle/light motor vehicle | One thousand and five hundred rupees | |
| (c) Medium or heavy vehicle | Three thousand rupees | |
| Note: No separate fee will be levied for cancellation of lease, etc, or for issue of fresh Certificate of Registration thereafter. | | |
| 10. | Conducting test of a vehicle for grant or renewal | 62(2) |

| | | | |
|---|--|---|-------|
| | of certificate of fitness | | |
| | (i) Manual: | | |
| | Two hundred rupees | | |
| (a) Motorcycle | (ii) Automated: | | |
| | Four hundred rupees | | |
| | (i) Manual : | | |
| | Four hundred rupees | | |
| (b) Three wheeled or light motor vehicle or quadricycle | (ii) Automated: | | |
| | Six hundred rupees | | |
| | (i) Manual: Six hundred rupees | | |
| (c) Medium or heavy motor vehicle | (ii) Automated: | | |
| | One thousand rupees | | |
| | | Two hundred rupees. | |
| | | Note: Additional | |
| | Grant or renewal of certificate of fitness for motor vehicle | fee of fifty rupees for each day of delay after expiry of certificate of fitness shall be levied. | |
| 11. | | 62(2) | |
| | Grant or renewal of letter of authority | Fifteen thousand rupees | |
| 12. | | 63(2)(a) | |
| | Issue of duplicate letter of authority | Seven thousand and five hundred rupees | |
| 13. | | 66(2) | |
| | Appeal under rule 70 | Three thousand rupees | |
| 14. | | 71(1) | |
| 15. | Any application not covered under entries | Two hundred rupees | 64(p) |

at Serial Nos. 1
to 14 above

Note 1: For the removal of doubts, it is hereby clarified that medium passenger motor vehicles, heavy goods vehicles, imported motor vehicles or any other vehicles not mentioned against Serial No.4 of the above Table include both transport and non-transport vehicles. Note 2: Where the certificate of registration issued is in the form of any Smart Card Type, an additional fee of rupees two hundred shall be charged except in the case of issue of fresh certificate of registration after cancellation of hire purchase or lease or hypothecation agreement.]

81. Fees.- The fee which shall be charged under the provisions of this Chapter shall be as specified in the table below: [Table]
[Substituted by G.S.R. 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).
Earlier the Table was substituted by G.S.R. 76(E), dated 31.1.2000 (w.e.f. 31.1.2000).
Before that the Table was substituted by G.S.R. 684 (E), dated 5.10.1999 (w.e.f. 22.10.1999).]

| Sl.No. | Purpose | Amount | Rule | Section |
|--------|--|--------------------|-------|---------|
| 1. | Grant or renewal of trade certificate in respect of each vehicle | | 34(1) | - |
| | Motor cycle | Fifty rupees | | |
| | Invalid carriage | Fifty rupees | | |
| | Others | Two hundred rupees | | |

| | | | |
|----|---|---------------------------------|---------|
| 2. | Duplicate trade certificate | 38(1) | - |
| | Motor cycle | Thirty rupees | |
| | Invalid carriage | Thirty rupees | |
| | Others | One hundred rupees | |
| 3. | Appeal under rule 46 | One hundred rupees | 46(1) - |
| 4. | Issue, renewal of certificates of registration and assignment of new registration mark: | 47(1),52(1),54(1),76(1)and78(1) | |
| | Invalid carriage | Twenty rupees | |
| | Motor cycle | Sixty rupees | |
| | Light motor vehicle: | | |
| | (i) Non-Transport | Two hundred rupees | |
| | (ii) Light Commercial Vehicle | Three hundred rupees | |
| | [E-rickshaw or E-cart | | |
| | [Susbstituted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)] | Three hundred rupees] | |
| | Medium goods vehicle | Four hundred rupees | |
| | Medium passenger motor vehicle | Four hundred rupees | |
| | Heavy goods vehicle | Six hundred rupees | |
| | Heavy passenger motor vehicle | Six hundred rupees | |

| | | | | |
|-----|---|---|--------------------------------------|---|
| | Imported motor vehicle | Eight Hundred rupees | | |
| | Imported motor cycle | Two hundred rupees | | |
| | Any other vehicle not mentioned above | Three hundred rupees | | |
| 5. | Issue of duplicate certificate of registration | Half of the fee mentioned in Serial No. 4 | 53(2) | - |
| 6. | Transfer of ownership | Half of the fee mentioned in Serial No. 4 | 55(2)(iii),55(3),56(2)(a)and57(1)(a) | - |
| 7. | Change of residence | Twenty rupees | 59 | |
| 8. | Recording alteration in the certificate of registration | Fifty rupees | 52(4) | - |
| 9. | Endorsing hire-purchase/ lease/ hypothecation agreement | One hundred rupees | 60 | - |
| 10. | Cancellation of hire-purchase/ lease/ hypothecation agreement or issue of fresh certificate of registration | One hundred rupees | 61(1) and (2) | - |
| 11. | Conducting test of a vehicle for grant and renewal of certificate of fitness: | | | |
| | (i) Two/ three-wheeled | One hundred rupees | 62(2) | - |

| | | | | |
|--|--|---|----------|---|
| | vehicle | | | |
| | (ii) Light motor vehicle | Two hundred rupees | | |
| | (iii) Medium motor vehicle | Three hundred rupees | | |
| | (iv) Heavy motor vehicle | Four hundred rupees | | |
| | Conducting test of a vehicle by an Inspecting Officer or Authorized testing station | | | |
| 11A. [[Inserted by Notification No. G.S.R. 1096 (E), dated 28.11.2016 (w.e.f. 2.6.1989).] | other than the Inspecting Officer in the office of the registering authority for grant or renewal of certificate of fitness by the registering authority | Manual: Two hundred rupees | 62(2) | |
| | Motorcycle | Automated : Four hundred rupees | | |
| | Three wheeled or light motor vehicle or quadricycle | Manual : Four hundred rupees Automated : Six hundred rupees | | |
| | Medium or heavy motor vehicle | Manual : Six hundred rupees Automated : One thousand rupees] | | |
| 12. | Grant or renewal or certificate of fitness for motor vehicle | One hundred rupees | 62(2) | - |
| 13. | Grant or | Five thousand | 63(2)(a) | - |

| | | | | |
|-----|--|----------------------|-------|---|
| | renewal of letter of authority | rupees | | |
| 14. | Issue of duplicate letter of authority | Five thousand rupees | 66(2) | - |
| 15. | Appeal under rule 70 | Four hundred rupees | 71(1) | - |

Note.- For the removal of doubts, it is hereby declared that medium passenger motor vehicle, heavy goods vehicle, imported motor vehicle and any other vehicle not mentioned in Serial No. 4 of this Table include both transport and non-transport vehicles:}] [Provided that in case for any purpose referred to in Serial Numbers 4, 5, 6, 7, 8, 9 and 10 of this Table is issued on any Smart Card, an additional amount of fee of Rupees Two hundred shall be charged for each such card.] [Inserted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).]

Chapter IV

Control of Transport Vehicles

Tourist permits

82. Tourist permits.

(1) An application for the grant of permit in respect of a tourist vehicle (hereinafter referred to in these rules as a tourist permit) shall be made in Form 45 to the State Transport Authority. (2) [* * *] [Clause (a) of sub-Rule (2) omitted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] (a) [A tourist permit shall be deemed to be invalid from the date on which the motor vehicle covered by the permit completes 9 years in the case of a motor cab and 8 years where the motor vehicle is other than a motor cab, unless the motor vehicle is replaced;] [Clause (b) of sub-Rule (2) renumbered as Clause (a) and Clause (a) as so renumbered substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] (b) [Clause (c) of sub-Rule (2) renumbered as Clause (b) by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] Where a vehicle covered by a tourist permit is proposed to be replaced by another, the latter vehicle shall not be more than two years old on the date of such replacement. Explanation. - For the purposes of this sub-rule, the period of [9 years or 8 years] [Substituted by GSR 338(E), dated 26.3.1993, for '2 years, 5 years or 7 years' (w.e.f. 26.3.1993).] shall be computed from the date of initial registration of the motor vehicle.

83. Authorisation fee.

(1) An application for the grant of authorisation for a tourist permit shall be made in Form 46 and shall be accompanied by a fee of Rs. 500 per annum in the form of a bank draft. (2) [Every authorisation shall be granted in Form 23-A, in case the certificate of registration is issued on Smart Card or shall be granted in Form 47, in case the authorisation is in paper document mode subject to the payment of taxes or fees, if any, levied by the concerned State. The authority which grants the

authorisation shall issue to the permit holder separate receipts for such taxes or fees in respect of each bank draft and such receipts shall be security printed watermark paper carrying such hologram as may be specified by the concerned State/Union Territory: Provided that the bank drafts received in respect of taxes or fees shall invariably be forwarded by the authority which grants the authorisation to the respective States: Provided also that the use of such security printed watermark paper carrying such hologram shall come into force on or before six months from the date of commencement of the Central Motor Vehicles (Third Amendment) Rules, 2002.] [Sub-Rule(2) substituted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).] [(2-A) The authority which grants the authorisation shall inform the State Transport Authorities concerned the registration number of the motor vehicle, the name and address of the permit holder and the period for which the said authorisation is valid:] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] [Provided that where the permit holder undertakes to pay the tax direct to the concerned State Transport Authority at the time of entry in his jurisdiction, the authorisation shall expressly state that it has been issued subject to payment of taxes to the concerned State Transport Authority.] [Inserted by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000). Earlier Proviso was omitted by GSR 684(E), dated 5.10.1999 (w.e.f. 22.10.1999).] (3) The period of validity of an authorisation shall not exceed one year at a time [* * *] [The words 'and shall expire on the 31st day of March of the year' omitted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).].

84. Right of operation.

- No tourist permit shall be deemed to confer the right of operation in any State not included in the authorisation referred to in rule 83 nor shall it exempt the owner of a vehicle from the payment of tax or fee, if any, leviable in any State.

85. Additional conditions of tourist permit.

- The following shall be the additional conditions of every tourist permit granted to a tourist vehicle other than a motor cab under sub-section (9) of section 88, namely: (1) The permit holder shall cause to be prepared in respect of each trip a list in triplicate of tourist passengers to be carried in the vehicle, [* * *] [Certain words omitted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] giving full particulars as under: -(a) name of the passengers, (b) address of the passengers, (c) age of the passengers, (d) starting point and the point of destination. (2) [One copy of the list referred to in sub-rule (1) shall be carried in the tourist vehicle and shall be produced on demand by the officers authorised to demand production of documents by or under the provisions of the Act and the Rules, and the second copy shall be preserved by the permit holder.] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] (3) The tourist vehicle shall either commence its journey, or end its journey, circular or otherwise, in the home State, subject to the condition that the vehicle shall not remain outside the home State for a period of more than [three months.] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] The permit holder shall see that every return of the tourist vehicle to the home State is reported to the authority which issued the permit: Provided that where the contracted journey ends outside the home State, the vehicle shall not be offered for hire within that State or from that State to any other State except for the return journey to any point in the home State. (4) The tourist vehicle may operate circular tours of places lying exclusively in the

home State or in the home State and outside the State if such circular tours are in the list approved by the tourist department of the home State to visit places of tourist, historical or religious importance and the tour is duly advertised before hand:[Provided that where such tourist vehicle is registered in the National Capital Region, it shall not operate circular tours of places lying exclusively in the National Capital Region unless it conforms to the mass emission standards [(Bharat Stage-IV) specified in sub-rule (15) of rule 115] [Inserted by GSR 37(E), dated 20.1.2009 (w.e.f. 20.1.2009).].](5)The permit holder or his authorized agent shall issue a receipt to the hirer and the counterfoil of the same shall be kept available with him and produced on demand to the officers empowered to demand documents by or under the Act.(6)The tourist vehicle shall not be parked on any bus stand used by stage carriage and shall not operate from such bus stand.(7)[The tourist vehicle shall exhibit the word "Tourist" within a circle of sixty centimetres diameter in a contrast colour on both sides of the vehicle, so as to be visible clearly.] [Substituted by Notification No. G.S.R. 586 (E) dated 25.7.2012 (w.e.f. 2.6.1989)](8)The permit holder shall display in the front top of the tourist vehicle a board in yellow with letters in black with the inscription Tourist permit valid in the State(s) of in English and Hindi and also,if he so prefers, in regional language of the home State.(9)The permit holder shall not operate the tourist vehicle as a stage carriage.(10)The permit holder shall maintain a day-to-day logbook indicating the name and address of the permit holder and the registration mark of the vehicle, name and address of the driver with the particulars of his driving license and the starting and destination points of the journey with the time of departure and arrival and the name and address of the hirer.(11)The permit holder shall furnish once in every 3 months the information contained in condition (10) to the State Transport Authority which granted the permit and the logbook shall be preserved for a period of 3years and shall be made available to the said authority on demand along with the records referred to in conditions (2) and(4).Explanation. - In this rule, home State means the State which has granted the permit under sub-section(9) of section 88.

85.

-A. The following shall be the additional conditions of every tourist permit in respect of motor cabs.(1)The words "Tourist vehicle" shall be painted on both the sides of the vehicle within a circle of twenty-five centimetres diameter.(2)A board with the inscription "Tourist permit valid in the State(s) of....." in black letters in yellow background shall be displayed in the front of the vehicle above the registration number plates:[Provided that this rule shall not apply to motor cabs covered under the Rent a Cab Scheme, 1989.] [Added by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]National permits

86. Application for national permit.

- An application for the grant of a national permit shall be made in Form 48 to the authority referred to in section 69.

87. Form, contents and duration of authorisation.

(1)An application for the grant of an authorisation for a national permit shall be made in Form 46 and shall be accompanied by a fee of [Rs. 1000] [Substituted by G.S.R. 386(E), dated 7th May, 2010.] per annum in the form of a bank draft. [(2) Every authorisation shall be granted in Form 23-A, in case the certificate of registration is issued on Smart Card or in Form 47, in case the authorisation is in paper document, subject to payment of as consolidated fee of rupees fifteen thousand per annum to be deposited in the national permit account for the permit granted to operate throughout the territory of India; [Substituted by GSR 386 (E), dated 7.5.2010.](2A)The consolidated fee deposited in the national permit account shall be distributed by the Central Government among the States and Union territories on pro rata basis as per the following specification, namely :-

Percentage share of nth State/ Union territory = | Total consolidated fee received by nth State/ Union territory in the base year | Total consolidated fee received by all the State Union territories in the base year where national permit is in operation | x 100

Note:- The base year shall be the average of the latest three financial years and the share of the States and Union territories shall be notified by the Central Government from time to time. Explanation. - For the purpose of sub-rule (2) and sub-rule (2A), the "national permit account" means an account established by the Central Government and notified in the Official Gazette. [(3)The period of validity of an authorisation shall not exceed one year at a time [* * *] [The words 'and shall expire on the 31st day of March of the year' omitted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]

88. [Age of motor vehicle for the purpose of national permit. [Rule 88 substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

(1)No national permit shall be granted in respect of a goods carriage, other than multi-axle vehicle, which is more than [twelve years] old at any point of time. (2)No national permit shall be granted for a multi-axle goods carriage which is more than fifteen years old at any point of time. (2A)[No national permit shall be granted for a puller tractor which is more than fifteen years old at any point of time: Provided that the national permit may be extended for another period of five years subject to certificate of fitness granted by the manufacturer or a chartered engineer, in case the manufacturer ceases to operate in India.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] (3)A national permit shall be deemed to be invalid from the date on which a goods carriage covered by the permit completes fifteen years in case of a multi-axle goods carriage and [twelve years] [Substituted by G.S.R. 799(E), dated 30-12-1993, for 'nine years' (w.e.f. 30-12-1993).] where the vehicle is other than a multi-axle goods carriage, unless such goods carriage is replaced. Explanation. - For the purpose of this rule, the period of [twelve years] [Substituted by G.S.R. 799(E), dated 30-12-1993, for 'nine years' (w.e.f. 30-12-1993).] or fifteen years, as the case may be, shall be computed from the date of initial registration of the motor vehicle covered under its permit or the prime mover in case of an articulated vehicle. [(4)[No national permit shall be granted in respect of a multi-axle trailer approved to carry a gross vehicle weight of more than 50 tonnes,

which is more than 25 years old at any point of time, the period of 25 years being computed from the date of initial registration of the said trailer.Explanation. - For the purpose of this rule, multi-axle trailer means a trailer having more than two axles.] [Inserted by G.S.R. 221(E), dated 28-3-2001 (w.e.f. 28-3-2001)](4A)[No national permit shall be granted in respect of a modular hydraulic trailer, which is more than twenty five years old at any point of time, the period of twenty five years being computed from the date of initial registration of the said modular hydraulic trailer:Provided that the national permit may be extended for another period of five years subject to certificate of fitness granted by the manufacturer or a chartered engineer or approving authority, in case the manufacturer ceases to operate in India:Provided further that the national permit shall be valid irrespective of the combination of modular hydraulic trailers subject to the condition that each individual modular hydraulic trailer is having valid national permit.Explanation. - For the purposes of this section, "national permit" means a permit issued to ply the motor vehicle under this section, throughout the territory of India.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](5)[A national permit shall be in such security printed watermark paper and shall carry such hologram as the State Government or the State Transport Authority, as the case may be,issuing such permit, may specify:Provided that the use of such security printed watermark paper carrying such hologram shall come into force on or before six months from the date of commencement of the Central Motor Vehicles (Third Amendment) Rules,2002.] [Inserted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).]

89.

[* * *] [Rule 89 omitted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001). Earlier Rule 89 was inserted GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000). Before that Rule 89 was omitted by GSR 684(E), dated 5.10.1999 (w.e.f. 22.10.1999).]

90. Additional conditions for national permit.

- The national permit issued under sub-section(12) of section 88 shall be subject to the following additional conditions,namely:(1)[All motor vehicles other than a trailer or modular hydraulic trailer] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] plying under a national permit shall be painted in dry leaf brown colour with thirty centimetres broad white borders and the words National permit shall be inscribed on both sides of the vehicle in bold letters within a circle of sixty centimetres diameter:Provided that the body of a tanker carrying dangerous or hazardous goods shall be painted in white colour with a dry leaf brown ribbon of 5 centimetres width around in the middle at the exterior and that of the drivers cabin in orange colour.(2)A board with the inscription National permit valid in the State(s) of with blue letters on white background shall be carried in front top of [such vehicles other than a trailer or modular hydraulic trailer for which the same shall appear on both sides of the vehicle] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)].(3)No such vehicle shall carry any goods without a bill of lading in Form 50.(4)The vehicle shall have a minimum of two drivers and shall be provided with a seat across its full width behind the drivers seat providing facility for the spare driver to stretch himself and sleep:[Provided that this sub-rule shall apply to light motor vehicle and medium goods vehicles only from a date to be notified by the Central Government.] [Inserted by GSR 338(E), dated

26.3.1993 (w.e.f. 26.3.1993).](5)The vehicle shall at all times carry the following documents and shall be produced on demand by an officer empowered to demand documents by or under the Act, namely:(i)Certificate of fitness,(ii)Certificate of insurance,(iii)Certificate of registration,(iv)National permit,(v)Taxation certificate,(vi)Authorisation.(6)The vehicle shall be subject to all local rules or restrictions imposed by a State Government.(7)The vehicle shall not pick up or set down goods between two points situated in the same State [other than the home State] [Inserted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]:[Provided that where such vehicle is registered in the National Capital Region, it shall not pick up or set down goods between two points situated in the National Capital Region unless it conforms to the mass emission standards [(Bharat Stage-IV) specified in sub-rule (15) of rule 115] [Inserted by GSR 37(E), dated 20.1.2009 (w.e.f. 20.1.2009).].]

Chapter V

Construction, Equipment and Maintenance of Motor Vehicles

Preliminary

91. Definitions.

- In this Chapter, unless the context otherwise requires,(a)class label, in relation to any dangerous or hazardous goods, means the class label specified in column 3 of the Table to rule 137;(b)consignor, in relation to dangerous or hazardous goods intended for transportation by a goods carriage, means the owner of such dangerous or hazardous goods;(c)dangerous or hazardous goods, means the goods of dangerous or hazardous nature to human life specified in Tables I, II, and III to rule 137;(d)emergency information panel, means the panel specified in rule 134;(e)primary risk, in relation to any dangerous or hazardous goods, means the most potent risk which such goods give rise to;(f)subsidiary risk, in relation to any dangerous or hazardous goods, means the subsidiary risk which such goods are likely to give rise to in addition to the primary risk.

92. General.

(1)No person shall use or cause or allow to be used in any public place any motor vehicle which does not comply with the provisions of this Chapter:[Provided that nothing contained in this rule shall apply to vehicles manufactured prior to the coming into force of the Central Motor Vehicles (Amendment) Rules, 1993.] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](2)Nothing in this rule shall apply to a motor vehicle(a)which has been damaged in an accident or to a vehicle stopped or impeded owing to shortage of fuel or other temporary defects while at the place at which the accident or defect occurred;(b)which is defective or damaged and is being removed to the nearest place of repair or disposal; or(c)which is more than fifty years old from the date of its registration and is being driven for taking part in a vintage car rally:Provided that where a motor vehicle can no longer remain under the effective control of the person driving, the same shall not be used in a public place except by towing.[Explanation. [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] - For the purposes of this rule, motor vehicle includes construction equipment vehicle.](3)[Testing of components conforming to standards in lieu of

Indian Standards: Whenever apart, component or assembly is used in a vehicle complying with standards in lieu of those notified in these rules such as an international standard (for example, EEC/ECE/IEC/ISO or such other standards) or a foreign national standard, permission for use of such parts, component or assembly complying with such standards shall be approved by the Central Government. In such cases, the compliance of parts, components or assemblies to such international or foreign national standards will be established for the purpose of rule 126, by a certificate of compliance issued by an authorised certifying agency or by an accredited certifying agency of the country of origin for such international or foreign national standards and vetted by a testing agency as referred to in rule 126.] [Inserted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).] Overall dimension

93. Overall dimension of motor vehicles.

(1) The overall width of a motor vehicle, measured at right angles to the axis of the motor vehicle between perpendicular planes enclosing the extreme points, [shall not exceed 2.6 metres.] [Substituted by GSR 221(E), dated 28.3.2001, for 'shall not exceed' (w.e.f. 28.3.2001).] [* * *] [Clauses. (i) and (ii) omitted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).] [* * *] [Clauses. (i) and (ii) omitted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).] Explanation. - For purposes of this rule, a rear-view mirror, or guard rail or a direction indicator [rub-rail (rubber beading) having maximum thickness of 20 mm on each side of the body] [Substituted by GSR 221(E), dated 28.3.2001, for '(when in operation)' (w.e.f. 28.3.2001).] shall not be taken into consideration in measuring the overall width of a motor vehicle. [(1-A) The overall width of a construction equipment vehicle, measured at right angles to the axis of the construction equipment vehicle between perpendicular planes enclosing the extreme points, shall not exceed 3 metres while in the travel mode and such construction equipment vehicle [shall be painted by yellow and black zebra stripes on the portion of the width that exceeds 2.6 metres] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] on the front and rear sides duly marked for nighttime driving/parking suitably by red lamps at the front and rear:] [Provided that the zebra stripes need not be used on attachments.] [Inserted by GSR 116(E), dated 27.2.2002 (w.e.f. 27.8.2002).] (1B) [The overall width of a combine harvester measured at right angles to the axis of the combine harvester between perpendicular planes enclosing the extreme points shall not exceed 3.3 meters while in the travel mode; and such combine harvesters shall be painted by yellow and black zebra stripes on the portion of the width that exceeds 2.6 meters on the front; and rear sides duly marked for night time driving and parking suitably by white or amber lamps at the front and red lamps at the rear: Provided that the zebra stripes need not be used on attachments, if any.] (1C) The overall width of modular hydraulic trailer, measured at right angles to the axis of the modular hydraulic trailer between perpendicular planes enclosing the extreme points shall not exceed three metres.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] (2) [The overall length of a motor vehicle other than a trailer shall not exceed (i) in the case of motor vehicle other than transport vehicle having not more than two axles, 6.5 metres; (ii) in the case of transport vehicle with rigid frame having two or more axles, 12 metres; (iii) in the case of articulated vehicles having more than two axles, 16 metres; [Provided that on and after the 1st April 2017, in case of articulated vehicles, engaged by automobile manufacturers to carry motor vehicles from their factories to different sale outlets in the country, 18.75 meters;] [Sub-Rule(2) substituted by GSR 221(E), dated 28.3.2001

(w.e.f. 28.3.2001).](iv)in the case of truck-trailer or tractor-trailer combination, 18 metres;[Provided that, on and after the 1st April 2017, in case of truck-trailer or tractor-trailer vehicles engaged by automobile manufacturers to carry motor vehicles from their factories to different sale outlets in the country, 18.75 meters:Provided further that on and after the 1st April 2017, articulated or truck-trailer or tractor-trailer vehicles engaged by automobile manufacturers to carry motor vehicle from their factories to different sale outlets in the country, shall be provided with a sliding inspection window on the container body, to allow verification of motor vehicles carried in the container and the sliding inspection window shall be minimum of 400 millimeters in length and 300 millimeters in height and at least one sliding inspection window shall be fitted to the middle third of the vehicle, the foremost sliding inspection window being not further than 3 meters from the front and in the case of trailers, account shall be taken of the length of the drawbar for the measurement of this distance and the distance between two adjacent sliding inspection windows shall not exceed 4 meters and the height of the upper edge of the sliding inspection window shall not be more than 1.8 meters from the ground;] [Inserted by Notification No. G.S.R. 963 (E), dated 7.10.2016 (w.e.f. 2.6.1989).](v)in the case of 3axle passenger transport vehicles, 15 metres;(va)[in the case of a puller tractor having three or more axles, ten meters; [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](vb)in the case of a modular hydraulic trailer, any single module with maximum eight axle rows shall not exceed nineteen metres;](vi)in the case of single articulated (vestibule type) passenger transport vehicle, 18 metres (Please see the conditions given in note below);(vii)in the case of double articulate passenger transport vehicles, 25 metres (Please see the conditions given in note below).Note .In the case of single articulated passenger transport vehicles of 18 metres length and double articulated passenger transport vehicles up to 25 metres, permission of the State Government shall be obtained regarding their plying on selected routes depending upon local road conditions, width, manoeuvrability of the vehicle in traffic, as deemed fit. These passenger transport vehicles will also be required to have a closed circuit TV system for proper visibility in and around the passenger transport vehicle by the driver to maintain safety. Intercom system shall also be provided in such passenger transport vehicle. In addition,the standing passenger will be allowed only on the lower deck of double articulated passenger transport vehicle.](viii)[in the case of E-rickshaw and E-cart, shall not exceed 1.8 metres.] [Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)](3)In the case of an articulated vehicle or a tractor-trailer combination specially constructed and used for the conveyance of individual load of exceptional length,(i)if all the wheels of the vehicle are fitted with pneumatic tyres,or(ii)if all the wheels of the vehicle are not fitted with pneumatic tyres,so long as the vehicle is not driven at a speed exceeding twenty-five kilometres per hour, the overall length shall not exceed 18 metres.Explanation. - For the purposes of this rule overall length means the length of the vehicle measured between parallel planes passing through the extreme projection points of the vehicle exclusive of(i)a starting handle;(ii)any hood when down;(iii)any fire-escape fixed to a vehicle;(iv)any post office letter-box, the length of which measured parallel to the axis of the vehicle,does not exceed 30 centimetres;(v)any ladder used for loading or unloading from the roof of the vehicle or any tail or indicator lamp or number plate fixed to a vehicle;(vi)any spare wheel or spare wheel bracket or bumper fitted to a vehicle;(vii)any towing hook or other fitment which does not project beyond any fitment covered by clauses (iii)to (vi).[(3-A) [The overall length of theconstruction equipment vehicle and combine harvester] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).], in travel shall not exceed 12.75 metres :Provided that in the case of construction

equipment vehicle with more than two axles, the length shall not exceed 18 metres. [Provided further that in case of combine harvester exclusively used for harvesting sugarcane, the overall length in travel shall not exceed 15 metres.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] Explanation. - For the purposes of this sub-rule overall length means the length of the vehicle measured between parallel planes through the extreme projection points of the vehicle, exclusive of (i) any fire-escape fixed to a vehicle; (ii) any ladder used by the operator to board or alight the vehicle; (iii) any tail or indicator lamp or number plate fixed to a vehicle; (iv) any sphere wheel or sphere wheel bracket or bumper fitted to a vehicle; (v) any towing hook or other fitments; (vi) any operational attachment on front, rear or carrier chassis of construction equipment vehicle in travel mode.] (3B) [The overall length of puller tractor and modular hydraulic trailer combination shall not exceed 29 metres: Provided that movement of larger combinations with more than eight axle lines shall be subject to prior approval of the concerned authorities.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] (4) The overall height of a motor vehicle measured from the surface on which the vehicle rests, (i) in the case of a vehicle other than a double-decked [transport vehicle] [Substituted by GSR 589(E), dated 16.9.2005, for 'motor vehicle' (w.e.f. 16.9.2006).], shall not exceed 3.8 metres; (ii) [in the case of a double decked transport vehicle, shall not exceed 4.75 metres; [Clause (ii) substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).] (ii-a) in the case of tractor-trailer goods vehicle, shall not exceed 4.20 metres;] (iib) [in the case of modular hydraulic trailer or combination of such modular hydraulic trailers, shall not exceed 4.75 metres;] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] (iii) [in the case of a laden trailer carrying ISO series 1 Freight Container or in the case of fabricated containerised motor vehicle, shall not exceed 4.52 metres] [Clause (iii) substituted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).] : Provided that the provisions of clauses (i) to (iii) shall not apply to fire-escape tower wagons and other special purpose vehicles exempted by general or special order of registering authority. [(4-A) The overall height of a construction equipment vehicle [or combine harvester] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] measured from the surface on which the vehicle rests shall not exceed 4.75 metres, while in the travel mode: Provided that the provisions of this sub-rule shall not apply to any other special purpose attachment to the construction equipment vehicle [or combine harvester] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] exempted by general or special order of the registering authority.] (5) The overhang of a tractor [or puller tractor] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall not exceed 1.85 metres. (6) [The overhang of the motor vehicle [other than a tractor and construction equipment vehicle] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] [tractor, construction equipment vehicle and combine harvester] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall not exceed 60% of the wheel base. Explanation I. - For the purpose of this rule wheel base means, (a) in the case of vehicles with only two axles, the distance measured horizontally and parallel to the longitudinal axis of the vehicle, between the centre points of the front axle and rear axle; (b) in case of a vehicle having only three axles, and the front axle is only the steered axle, the distance measured horizontally and parallel to longitudinal axis of the vehicle between the centre of the front axle and centre point between the two rear axles;] (c) [in case of vehicles having more than three axles, and fitted with or without retractable axle, wheelbase shall be the distance measured between the centre of the front-most axle and the centre point of rear combination of non-steered axles. [Substituted by Notification No. G.S.R. 625 (E) dated 8.8.2012 (w.e.f. 2.6.1989)] Note: (i) 'retractable axle' means an axle which can be raised or lowered by the

axle-lift device in accordance with first indent;(ii)'axle-lift device' means a device permanently fitted to a vehicle for the purpose of reducing or increasing the load on the axle(s), according to the loading conditions of the vehicle, either by raising the wheels clear off the ground or lowering them to the ground or without raising the wheels off the ground (e.g., in the case of air suspension systems, or other systems), in order to reduce the wear on the tyres when the vehicle is not fully laden, or make starting (moving off) on slippery ground easier for motor vehicles or vehicle combinations, by increasing the lead on the driving axle.];[Explanation II] [Renumbered by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] - For the purpose of this rule, overhang means the distance measured horizontally and parallel to the longitudinal axis of the vehicles between two vertical planes at right angles to such axis passing through the two points specified hereunder:(A)The rearmost point of the vehicle exclusive of(i)any hood when down;(ii)any post office letter-box, the length of which measured parallel to the longitudinal axis of the vehicle, does not exceed thirty centimetres;(iii)any ladder forming part of a turn-table fire-escape fixed to a vehicle;(iv)any ladder used when the vehicle is at rest for loading or unloading from the roof of the vehicle, or any tail lamp or number plate fixed to a vehicle;(v)any spare wheel or spare wheel bracket fitted to a vehicle;(vi)any luggage carrier fitted to a motor vehicle constructed solely for carriage of passengers and their effects and adapted to carry not more than seven passengers exclusive of the driver;(vii)any towing hook or other fitment which does not project beyond any fitment mentioned in clauses (ii) to (vi);(viii)[any mounted implement on a 3-point linkage of a tractor:] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]Provided that in the case of a stage carriage:(a)the projection of any bumper or advertisement panel fitted at the rear of the vehicle shall not exceed fifteen centimetres;(b)the projection in respect of an advertisement panel shall not be such as to obstruct either the vision from the rear view mirror or project through the emergency exit at the rear or both;(B)(i)In the case of a vehicle having only two axles, one of which is not a steering axle,the centre point of that axle; or(ii)[in the case of a vehicle having only three axles and the front axle is the only steering axle, the centre point of the rearmost axle, irrespective of rear axle(s) being 'fixed' or 'retractable (lift axle)'.] [Substituted by Notification No. G.S.R. 625 (E) dated 8.8.2012 (w.e.f. 2.6.1989)];(iii)in the case of any vehicle registered in India before the commencement of these rules it shall suffice if the overhang does not exceed 7/24ths of the overall length of the vehicle;(iv)[in the case of a vehicle having only three axles where two front axles are steering axles, the centre point of the rearmost axle, irrespective of rear axle(s) being 'fixed' or 'retractable (lift axle)'.] [Substituted by Notification No. G.S.R. 625 (E) dated 8.8.2012 (w.e.f. 2.6.1989)];(v)[in the case of a vehicle having four or more than four axles; the centre point of the rearmost axle, irrespective of rear axle(s) being 'fixed' or 'retractable (lift axle)'.] [Substituted by Notification No. G.S.R. 625 (E) dated 8.8.2012 (w.e.f. 2.6.1989)](vi)in any other case, a point situated on the longitudinal axis of the vehicle such that a line drawn from it at right angle to that axis will pass through the centre of the minimum turning circle of the vehicle.[(6-A) The overhang of the construction equipment vehicle [or combine harvester] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] shall not exceed 7.5 metres in front or rear while in the travel mode.[Provided that in case of a combine harvester exclusively used for harvesting sugarcane, the overhang shall not exceed 8.5 meters in rear while in travel mode.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]Explanation. - For the purpose of this sub-rule, overhang means the length/height measured horizontally and parallel to the longitudinal axis of the construction equipment vehicle [or combine harvester] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]

between two vertical planes at right angles to such axis passing through (i) the front most point of the vehicle and the centre point of the front axle, for the front overhang, (ii) the rearmost point of the vehicle and centre point of the rear axle, for the rear overhang, exclusive of the parts or fitments mentioned at items (i) to (vi) of the Explanation to sub-rule (3-A). (7) [Renumbered by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] No part of the vehicle other than a direction indicator, when in operation, or a driving mirror, shall project laterally more than 355 millimetres beyond the centre line of the rear wheels, in the case of a single rear wheels or more than 152 millimetres beyond the extreme outer edge of the outer tyres, in the case of dual rear wheels: [* * *] [Proviso omitted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004). Earlier proviso was added by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] Provided that the State Government or any authority authorised in this behalf by the State Government, if it is satisfied that it is necessary because of the nature of any road or bridge or in the interest of public safety, may prohibit or restrict the operation of a motor vehicle in a specified route or area unless such vehicle complies with the requirements specified by the State Government for such route or area. (7-A) No part of the construction equipment vehicle [or combine harvester] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] in travel mode other than a direction indicator, or a driving mirror, shall project laterally more than 300 millimetres beyond the extreme outer edge of the tyres or wheel drums regardless of single or dual tyres or rollers. (8) [Renumbered by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] No motor vehicle shall be loaded in such a manner that the load or any part thereof extends, (i) laterally beyond the side of the body; (ii) to the front beyond the foremost part of the load body of the vehicle; (iii) to the rear beyond the rear most part of the vehicle; (iv) to a height beyond the limits specified in sub-rule (4): Provided that clause (iii) shall not apply to a goods carriage when loaded with any pole or rod or indivisible load so long as the projecting part or parts do not exceed the distance of one metre beyond the rear most point of the motor vehicle. [93-A. Overall dimension for agricultural tractors. [Inserted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).] (1) The overall width of the agricultural tractor shall not exceed 2.6 metres. (2) The overall length of the agricultural tractor shall not exceed 6.5 metres. (3) The overall height of the agricultural tractor shall not exceed 3.8 metres. (4) The overhang of the agricultural tractor shall not exceed 1.85 metres : Provided that lateral projection up to 700 millimetres beyond the central line of the rear wheel shall be permitted.] [93-B. Overall dimension for power tillers. [Rule 93-B inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).] (1) The overall length of the power tiller with a riding attachment shall not exceed 3.5 metres. (2) The overall width of the power tiller with a riding attachment including case wheelers shall not exceed 1.5 metres. (3) The maximum overall height of the power tiller shall not exceed 2.0 metres. (4) The overall length of the power tiller when coupled to a trailer shall not exceed 6.0 metres. (5) The maximum overall width of the power tiller when coupled to a trailer shall not exceed 1.7 metres. (6) The maximum overall height of the power tiller when coupled to a trailer shall not exceed 2.0 metres.]

93C. [Overall dimension for Airport Passenger Bus (Tarmac Bus). [Inserted by Notification No. G.S.R. 594(E), dated 13.6.2016 (w.e.f. 2.6.1989).] - (1) The Overall Length of the Airport Passenger Bus shall not exceed fifteen meters.

(2) The Overall Width of the Airport Passenger Bus shall not exceed 3.2 meters. Explanation. - For the purposes of this rule, the term "Airport Passenger Bus (Tarmac Bus)" means the Bus having

doors on both sides which is exclusively used for the carrying the passengers from airport terminal to and from the aircraft and plying on the air side on the Air port terminal with maximum speed not exceeding thirty kilometre per hour.]Size, nature and condition of tyres

94. Condition of tyres.

- [(1) [Every motor vehicle including agricultural tractor and its trailer] [Substituted by G.S.R 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] [and the combine harvester and modular hydraulic trailers] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall be fitted with pneumatic tyres and every construction equipment vehicle, other than steel drum rollers of vibratory compactors or compactor rollers or road roller or a track laying vehicle, shall be fitted with pneumatic tyres or solid rubber tyres.](2)The pneumatic tyres of [a motor vehicle including agricultural tractor and its trailer] [Substituted by GSR 111(E), dated 10.2.2004, for 'a motor vehicle' (w.e.f. 10.8.2004).] [and the combine harvester] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall be kept properly inflated and in good and sound condition.(3)For the purpose of sub-rule (2), a tyre shall not be deemed to be of good and sound condition if(i)any of the fabric of its casing is exposed by wear of the tread or by any unvulcanised cut or abrasion in any of its parts; or(ii)it shows signs of incipient failure by local deformation or swelling; or(iii)it has been patched or repaired by an outside gaiter or patch other than a vulcanised repair;(iv)[the Non-Skid Depth (NSD), shall not be less than 0.8 mm in the case of two-wheeler and three-wheeler and 1.6 mm in the case of other motor vehicles, below the Tread Wear Indicator (TWI) embedded in tyres at the time of manufacture:] [Inserted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.9.2001).]Provided that the requirement specified in clause (iii) shall not apply to a temporary repair effected to enable the vehicle to be moved to the nearest place where the tyre can be repaired or replaced:Provided further that where a motor vehicle, other than road roller or track laying vehicle, is not fitted with pneumatic tyres, it shall not be used in a public place unless it is fitted with shoes or other suitable device so that plying of such vehicle does not damage the road:[Provided also that the requirements of the Non-Skid Depth (NSD) and Tread Wear Indicator (TWI)specified in clause (iv) shall not be applicable for the agricultural tractor tyres.] [Inserted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).]

95. Size and ply rating of tyres.

- [(1) The tyres including radial tyres used on all motor vehicles manufactured or imported on and after the 1st day of April, 2006, other than agricultural tractors, construction equipment vehicles [or a combine harvester] [Sub-Rule (1) substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).] and power tillers shall comply with the requirements specified in is: 15627-2005 or [IS: 15633-2005 or IS: 15636-2005 applicable] [Substituted by GSR 784(E), dated 12.11.2008 (w.e.f. 1.4.2009).]:Provided that the selection and fitment of tyres for motor vehicles manufactured or imported on and from the 1st day of April, 2006 shall be in accordance with AIS:050:2004 in the case of two and three-wheelers and AIS:051:2004 in the case other motor vehicles, till such time the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986):Provided further that Central Institute of Road Transport, Pune and any other agency which may be authorised by Central Government from time to time can carry tests for verification against

AIS:044:2004 for tyres for the purposes of rule 126.][* * *] [Sub-rule (2) Omitted by Notification No. G.S.R. 76(E), dated 31.1.2000 (w.e.f. 2.6.1989).][[(2-A) The size of the tyres of a construction equipment vehicle] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] specified in column (1) of the Table below shall have a ply rating specified in the corresponding entry in column (2) of the said Table in respect of maximum weight permitted to be carried by such tyre specified in the corresponding entry in column (3) thereof: Provided that the maximum safe load for single axle with two or more tyres shall not exceed 10.2 tonnes.] Off-The-Road Service Conventional and Wide Base Diagonal Ply Tyres Table

AGRICULTURAL TRACTOR DRIVE WHEEL

| Tyre size Designation | Ply rating | Maximum weight permitted to be carried (Kgs.) |
|-----------------------|------------|---|
| 8.3/8-24 | 46 | 630825 |
| 8.3/8-32 | 46 | 730925 |
| 11.2/10-28 | 468 | 90011201320 |
| 12.4/11-24 | 468 | 95012151450 |
| 12.4/11-28 | 4681012 | 10301285155016001650 |
| 12.4/11-36 | 46 | 11501450 |
| 12.4/11-38 | 468 | 118015001750 |
| 13.6/12-28 | 4681012 | 11201450165017501800 |
| 16.9/14-28 | 681012 | 1850218024302725 |

ROAD GRADER

| Tyre size Designation | Ply rating | Maximum weight permitted to be carried (Kgs.) |
|-----------------------|------------|---|
| 13.00-24 | 812 | 20402485 |
| 14.00-24 | 12 | 3015 |

OFF THE ROAD HAULAGE SERVICE TYRES

| Tyre size Designation | Ply rating | Maximum weight permitted to be carried (Kgs.) |
|-----------------------|--------------|---|
| 12.00-20 | 1416 | 26502900 |
| 12.00-24/25 | 1416 | 30003250 |
| 13.00-24/25 | 18 | 3875 |
| 14.00-24/25 | 162024 | 400046255150 |
| 16.00-24/25 | 202428 | 545060006700 |
| 18.00-24/25 | 121620242832 | 475056006500730080008750 |

WIDE BASE

| Tyre size Designation | Ply rating | Maximum weight permitted to be carried (Kgs.) |
|-----------------------|------------|---|
|-----------------------|------------|---|

23.5-25

12162024

5300615073008000

Note.- [1.] [The existing note numbered as '1' by GSR 116(E), dated 27.2.2002 (w.e.f. 27.8.2002).]
The load rating for tyres not covered by the above Table may be notified by the Central Government as and when such tyres are introduced on construction equipment vehicles, and until these are notified, the provisional load rating declared by the construction equipment vehicle manufacturer may be certified by the certifying test agency referred to in rule 126.]

2. [The maximum axle loading capacities shall be verified based on the safe loading capacities of the tyres. In cases where the axle load exceed 10.2 tonnes, the vehicle manufacturer shall ask the user to seek the prior permission of the concerned Regional or State Transport Authorities in whose jurisdiction the construction equipment vehicle is expected to ply depending upon the conditions of roads/bridges, where deemed fit. Such construction equipment vehicles whose axle load exceeds 10.2 tonnes shall display permanently on the vehicle a placard indicating NOT FOR PLYING ON ROADS. These conditions shall be mentioned in the certificate, issued by the testing agencies referred to in the rule 126, where the axle load exceeds 10.2 tonnes.] [Inserted by GSR 116(E), dated 27.2.2002 (w.e.f. 27.8.2002).]

(3) No tyre shall have a ply rating more than 20, for applications of on-highway and such ply rating shall not be prescribed by either vehicle manufacturer or employed by vehicle user on this class of vehicle. (4) Check on sub-rule (3) of rule 95 on commercial vehicles will be conducted by the authority indicated in sub-rule (1) of rule 126, while conducting the checks. (5) [Every tyre manufacturer shall, in addition to any trade mark or size of the tyre, also emboss on it the following, namely: (i) Week and year code or month and year code of manufacture; and (ii) maximum load carrying capacity.] (6) [In the case of Indian manufactured vehicles and imported vehicles (new and old), the size of tyres if included in the International Standards, namely, ECE, JATMA, ETRTO and T RA besides Bureau of Indian Standards may also be accepted under this rule: Provided that the following conditions shall be complied with : (i) that testing agencies referred to in rule 126 shall satisfy themselves about the load and speed rating of the tyre with reference to the Indian conditions; (ii) that the test report/certificate issued by the testing agency of the country of origin shall be verified for acceptance by the testing agency referred to in rule 126; (iii) that for tubeless tyres fitted on imported vehicles confirming to conditions (i) and (ii) shall also be allowed.] (7) [Temporary use spare wheel or tyre and Run Flat Tyre for vehicles of categories M1 and N1, if they are different from the normal tyre used on the vehicle shall conform to AIS 110: 2009, as amended from time to time, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [Inserted by Notification No. G.S.R. 625 (E) dated 8.8.2012 (w.e.f. 2.6.1989)] [95-A. Size and ply rating of tyres for agricultural tractor. [Inserted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).] (1) The tyre of the agricultural tractor shall have load carrying capacity as may be specified by the tyre manufacturer, subject to the condition that the maximum load specified by the agricultural tractor manufacturer shall not be greater than the load permitted by the tyre manufacturer. (2) The agricultural tractor manufacturer shall select only that rim size as

recommended by the tyre manufacturer. Note.- For compliance to the above two sub-rules, the following shall be referred to IS:13154-1991 as amended from time to time Tyres for agricultural tractor, implements and power tillers. In case a particular size of tyre is not listed in IS: 13154-1991, any equivalent International Standard like Economic Commission of Europe (ECE), Japanese Automotive Tyre Manufacturers Association (JATMA), European Tyre and Rim Technical Organisation (ETRTO), The Tyre and Rim Association Inc. (TRA) and Indian Tyre Technical Advisory Committee (ITTAC), etc., shall be accepted.][95-B. Size and ply rating of tyres for power tillers. [Rule 95-B inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).](1)The tyre should have load carrying capacity as specified by the tyre manufacturer, however, the maximum load specified by the power tiller manufacturer shall not be greater than that permitted by the tyre manufacturer.(2)The power tiller manufacturer shall select there commended/preferred rim sizes only, as suggested by the tyre manufacturer. Note.- For compliance to this rule, the following standards shall be referred to, namely:(i)IS:13154 -1991,as amended from time to time-Tyre for agricultural tractor, implement and power tillers.(ii)In case a particular size of tyre is not listed in IS:13154 -1991, as amended from time to time, any equivalent International Standard like ECE, JATMA, ETRTO, TNRA,ITTAC, etc.][95C. Size and ply rating of tyres for modular hydraulic trailers - (1) The tyres including radial tyres used on modular hydraulic trailers shall be in accordance with IS 15636: 2005 as amended from time to time.(2)The tyre of modular hydraulic trailers shall have load carrying capacity as specified by the tyre manufacturer, however, the maximum load specified by the modular hydraulic trailers manufacturer shall not be greater than that permitted by the tyre manufacturer.(3)The modular hydraulic trailer manufacturer shall select the recommended or preferred rim sizes only, as suggested by the tyre manufacturer and the wheel rims shall confirm to IS 9438:1980. Note.- For compliance to this rule, any equivalent national or international standards such as Indian Standards (IS), Automotive Industry Standard (AIS), ECE (Economic Commission of Europe), Japan Automobile Tyre Manufacturers Association (JATMA), European Tyre and Rim Technical Organisation (ETRTO), Tyre and Rim Association Inc. (TRA), Indian Tyre Technical Advisory Committee (ITTAC), etc., may be referred.

95D. Limited road trials.

- The Hydraulic Modular Trailer with specified Gross Vehicle Weight or maximum load carrying capacity shall be subjected to minimum hundred kilometres run preferably on plain roads with speed less than ten kilometres per hour.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] Brakes, steering gears, safety glass and windscreen wipers

96. Brakes.

- [(1) Every motor vehicle, other than a motor cycle, three-wheeled invalid carriage, trailer or a road roller shall be equipped with two independent and efficient braking systems, namely, the parking brake and foot operated service brake: Provided that a motorcycle and three-wheeled invalid carriage shall be equipped with the independent and efficient braking systems, either both hand operated or one foot operated and the other hand operated.] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](2)The braking system shall be of strength capable of stopping the vehicle within the distance specified in sub-rule (8) and of holding it at rest in all conditions and all

such brakes at all time be properly connected and maintained in efficient condition.[* * *] [Proviso omitted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](3)In every motor vehicle [other than agricultural tractors,] [Added by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] the brakes operated by one of the means of operation shall act directly upon the wheel and not through the transmission gear.(4)[Every motor vehicle manufactured on and after the 1st day of April, 2006 shall have a braking system whose performance shall conform to the following Indian Standard, namely : (i)for [two wheelers, three wheelers, E-rickshaw and E-cart] IS:14664:1999, as amended from time to time.(ii)all motor vehicles, other than two-wheelers,three-wheelers, trailers, semi-trailers, construction equipment vehicles, [two wheelers, three wheelers , E-rickshaw and E-cart] [Substituted for the words 'agricultural tractors and power tillers'by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)], IS:11852 (Part 1): 2001, 11852 (Part2): 2001, 11852 (Part 3): 2001, 11852 (Part 4): 2001, 11852 (Part 5): 2001,11852 (Part 6) : 2001, 11852 (Part 7): 2001 and 11852 (Part 8): 2001, as amended from time to time:[(4 A). Notwithstanding anything contained in clause (i) of sub-rule (4),-(a)New vehicle models of category L2 with;(i)engine capacity \square 125 cc;(ii)maximum continuous rated or net power \square 11kw; and(iii)power/weight ratio \square 0.1 kw/kg,manufactured on and after the 1st April, 2018 shall be fitted with anti-lock braking system or combined braking system conforming to IS: 14664: 2010;(b)Existing vehicle models of category L2 with : (i)engine capacity \square 125 cc;(ii)maximum continuous rated or net power \square 11kw; and(iii)power/weight ratio \square 0.1 kw/kg,manufactured on and after the 1st April, 2019 shall be fitted with anti-lock braking system or combined braking system conforming to IS: 14664: 2010:Provided that all other category of two wheeled vehicles which does not fall in the criteria as mentioned above in clause (a) and (b) shall be fitted with anti-lock braking system conforming to IS: 14664: 2010 on and after the 1st April, 2018 for new vehicle models and on and after the 1st April, 2019 for existing vehicle models.] [Inserted Notification No. G.S.R. 310(E), dated 16.3.2016 (w.e.f. 2.6.1989).][* * *] [Omitted Proviso by Notification No. G.S.R. 225(E), dated 1.4.2015 (w.e.f. 2.6.1989)][Provided that] [Substituted by Notification No. G.S.R. 225(E), dated 1.4.2015 (w.e.f. 2.6.1989)] IS: 11852:2003 (Part 9) shall be applicable for vehicles manufactured on and after the 1st day of October, 2006 fitted with Anti-Lock Braking System.] [Sub-Rule(4) substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).](4B)[The motor vehicles of category M1 and M2 shall-(i)on and after the 1st April 2018, in the case of new models; and(ii)on and after the 1st April 2019, in the case of all models.be fitted with Anti-lock braking systems as per IS: 15986:2015, specifications in case of Category M1 vehicles and per IS: 11852:2003 (Part -9), specifications in case of Category M2 vehicles.] [Inserted by Notification No. G.S.R. 120 (E), dated 10.2.2017 (w.e.f. 2.6.1989).](5)Except in the case of a motor cycle, the braking system or one of the braking systems of a motor vehicle shall be so constructed and maintained that it can be so set as effectively to prevent at least two, or in the case of a motor vehicle having three wheels, at least one of the wheels from revolving when the vehicle is left unattended.(6)The braking system or part thereof which functions in the aforesaid manner shall be known as parking brake and where such a parking brake is designed to be operated by hand, it shall be known as hand-brake.(7)[(a) In the case of motor vehicles, other than three-wheelers of gross vehicle weight not exceeding 1000 kgs. and motor cycles, the service brake shall be acting on all the wheels of the vehicle.(b)In case of three-wheelers of gross vehicle weight not exceeding 1000 kgs. if the foot operated brake does not act on all the wheels, the following conditions shall be fulfilled, namely:(i)the foot operated brake shall act on the two wheels which are on the same axle, and(ii)in addition to the parking brake, there shall be an independent brake acting

on the other wheel of the vehicle with an independent hand-operated control.(c)In the case of motor cycles, the braking system operated with the foot or left hand shall act at least on the rear wheel and the brake operated by right hand at least on the front wheel.(d)In the case of agricultural tractors, the braking system shall act as on both the rear wheels, either directly or through the transmission gear.](8)[The service braking system in the case of vehicle other than three-wheelers and motorcycles, and the braking system operated by one of the means of operation other than the parking brake in the case of three-wheelers and motor cycles shall be capable to bring the vehicles to halt within the distance specified in the following Table when tested in accordance to the condition prescribed correspondingly in the Table. The test shall be conducted on a dry level hard road in good condition. During the test the accelerator control shall be fully released and in the case of vehicles with manual gear shifting control, the top gear and the clutch shall be engaged.] [Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993).]

| Sl. No. | Type of vehicle | Load | Test speed (The speed at which the brake should be applied)(Kmph) | Type of brake | Stopping distance (m) |
|---------|--|--|---|---|-----------------------|
| 1. | All vehicles other than motor cycles, three-wheelers and agricultural tractors | Laden to the registered GVW or unladen or Laden or Unladen | 30304040 | Foot operated service"" | 13212121 |
| 2. | Motor cycles | Unladen | 30 | Foot or hand operated | 21 |
| 3. | Three-wheelers including three-wheeler tractors for trailers | Unladen | 30 | Foot operated (brakes operating on at least two wheels) | 13 |
| 4. | Agricultural tractors | Laden to test mass | 25 | Foot operated service | 10 |
| 5. | All other than three-wheelers of engine capacity not exceeding 500cc, motor cycles and agricultural tractors | Laden to the registered GVW or unladen | 30403040 | -do--do--do--do- | 12.715.09.312.0 |
| | Puller Tractors | GVW | 20 | | 13] |

6. [[Inserted
by
Notification
No. G.S.R.
212 (E) dated
20.3.2015
(w.e.f.
1.4.2015)]

Foot operated
service

For the purpose of this test for vehicles other than motor cycles the unladen means the vehicle is without any load and shall carry only the driver and another person for specific purpose of supervising the test, and the instruments, if any. In the case of motor cycles, the unladen means that vehicle will carry only the single rider and the measuring instrument, if any.(9)[The following category of vehicles shall be fitted with Anti-Lock Braking System conforming to IS:11852:2003 (Part 9):] [Sub-Rule (9) inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005)](i)N2 [***] [omitted by notification no. 389(E) dated by 9.6.2014 (w.e.f. 1.10.2014)] category of vehicles other than tractor-trailer combination manufactured on and after the 1st day of October, 2006 meant for carrying hazardous goods and liquid petroleum gas;(ii)[new models of M3 and N3 categories of vehicles manufactured on and after the 1st April, 2015;] [substituted by notification no. 389(E) dated by 9.6.2014 (w.e.f. 1.10.2014)](iii)[existing models of M3 and N3 categories of vehicles manufactured on and after the 1st October, 2015] [substituted by notification no. 389(E) dated by 9.6.2014 (w.e.f. 1.10.2014)](iv)[the following categories of vehicles manufactured prior to the dates specified in clauses (ii) and (iii) shall be fitted with Anti-lock Braking System conforming to IS: 11852:2003 (Part 9)- [Substituted by Notification No. G.S.R. 52 (E) dated 23.1.2015 (w.e.f. 2.6.1989)](a)N3 categories of vehicles other than tractor-trailer combination manufactured on and after the 1st day of October, 2006 meant for carrying hazardous goods and liquid petroleum gas;(b)N3 categories of vehicles manufactured on and after the 1st day of October, 2007, that are double decked transport vehicles;(c)N3 categories of vehicles manufactured on and after the 1st day of October, 2007, that are used as tractor-trailer combinations;(d)M3 categories of buses that ply on All India Tourist Permit, manufactured on and after the 1st day of October, 2007.][96-A. Brakes for construction equipment vehicle. [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).](1)Construction equipment vehicle with hydrostatic transmission shall employ either hand or foot operated hydrostatic braking system both for service and parking brake system acting at least on two wheels on the same axle or drum.] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](2)The braking system shall be of a strength capable of stopping the vehicle within the distance specified in sub-rule (8) and of holding it at rest in all conditions, and all such brakes shall at all times be properly conducted and maintained in efficient condition.(3)In every construction equipment vehicle, other than those having hydrostatic transmission, the brakes operated by any of the means of operation shall act directly upon the wheel or at a suitable location in the power train provided that such an action does not dis couple, disengage or isolate the braking action from the wheels.(4)Every construction equipment vehicle which manufactured on or after the commencement of the Motor Vehicles (Sixth Amendment) Rules,2000, shall have a braking system whose performance shall [conform to the test and stopping distance formula as specified in sub-rule (7)] [Substituted by GSR 116(E), dated 27.2.2002 (w.e.f. 27-8-2002)].(5)The braking system or one of the braking systems of construction equipment vehicle, shall be so constructed and maintained

that it can effectively prevent at least two wheels or drums from revolving when the vehicle is left unattended and it shall be designed to be applied through hand or foot or automatically when engine is not running.(6)In the case of construction equipment vehicles with four or more than four wheels, the service brake shall work on at least two wheels of the vehicle.(7)[The service braking system of the construction equipment vehicle shall be capable of bringing the vehicle to a halt within the stopping distance as calculated by the formula given below, when tested in unladen condition and attachment carry position at a speed corresponding to 80 percent. of the design maximum speed. The test shall be conducted in the forward direction of travel on a dry level hard road in good condition and during the test the acceleration control or travel shall be fully released and in the case of vehicle with manual gear shifting control, the top gear and the clutch shall be engaged.]

[Substituted by GSR 116(E), dated 27.2.2002 (w.e.f. 27.8.2002).]Stopping Distance Formula $S = 0.15V + (V^2/130)$, Where S is the Stopping distance in metres, V is the test speed corresponding to 80% of design maximum speed in Km/h., Control force F - 700 Newtons. Explanation. - For the purposes of this sub-rule, unladen means the construction equipment vehicle in travel mode without any load except the driver and another person for the specific purpose of supervising the test and the instruments, if any: Provided that while the stopping distance formula mentioned above remain unchanged, the construction equipment using hydrostatic transmission, the brake test shall be performed by positioning the gear change lever to the neutral position. [[96-B. High Speed Braking Requirements] [Inserted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).]- For high speed braking, the following test procedure shall be followed, namely:(a)in the case of Category M-1, the P type, service brake test as defined under IS : 11852-2001 Part 3, shall be carried out in the engine connected mode at a test speed of 120 km/h or at 80% of the design maximum speed of the vehicle, whichever is lower.(b)the stopping distance requirements shall be according to the following formula, namely: $S = 0.1 V + (V^2/130)$: where, S is the Stopping Distance in mtrs. V is the test speed in km/h, and Control force - 500 Newtons. Provided that this sub-rule shall be applicable in case of new vehicles yet to be type approved after six months, and in case of already type approved vehicles, twelve months, from the date of the commencement of the Central Motor Vehicles (Third Amendment) Rules, 2002.] [Inserted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).][96-C. Brakes for agricultural tractor. [Inserted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).]- The braking system of the agricultural tractor shall conform to IS: 12061-1994 and IS: 12207-1999, as amended from time to time.] [Inserted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.9.2001).][96-D. Braking requirements for power tillers. [Rule 96-D inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).]- The power tillers when coupled to a trailer shall meet the following requirements, namely :-(i)the brake test for the power tiller coupled to a trailer shall be carried out with a gross combination weight not exceeding 1.5 tons as declared by the manufacturer;(ii)The brake test shall be conducted at a speed of 15 km/h to meet the stopping distance requirement of 7.5 metres with the pedal effort not exceeding 600N;(iii)The trailer coupled to the power tiller shall be fitted with a parking brake capable of holding the combination on an up-slope and down-slope gradient of 12%.][96-E. Brakes for combine harvester. - (1) The brake test shall be conducted in forward direction on dry hard road in good condition with the clutch disengage and cutter bar trailer with header assembly attached to reel of combine harvester.(2)The service braking system of the unladen combine harvester shall be capable of bringing the vehicle to a halt within a specified stopping distance when brake is applied at the standard test speed as mentioned in the Table below:Table

| S.No. | Type of Combine | Load(Unloader) | Test Speed | Stopping Distance |
|-------|-----------------|----------------|------------|-------------------|
|-------|-----------------|----------------|------------|-------------------|

| | | | | |
|----|----------------------------------|---|---|----------|
| 1. | SelfPropelled Combine harvester | - | 20 km/h or max speed whichever is less | 10 meter |
| 2. | TractorPowered Combine harvester | - | 24 km/h or max speed whichever is less | 10 meter |

Maximum pedal force should not be more than 600 N.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]

97. Brakes for trailers.

(1)[[Every trailer including modular hydraulic trailer] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).], other than a tractor-drawn trailer, having five hundred kilogrammes and more of weight] shall have an efficient braking system which are capable of being applied when it is being drawn,(i)in the case of trailer having not more than two axles, to at least all the wheels of one axle; or(ii)in the case of a trailer having more than two axles, to at least all the wheels of two axles:Provided that the braking system shall be so constructed that it is not rendered ineffective by the non-rotation of the engine of the drawing vehicle.(2)The provision of sub-rule (1) shall not apply to,(i)any land implement drawn by a motor vehicle;(ii)any trailer designed for use and used by a local authority for street cleansing or by the fire service for fire fighting,which does not carry any load other than its necessary gear and equipment;(iii)any disabled vehicle which is being drawn by a motor vehicle in consequence of its disablement.(3)[***] [Omitted by Notification No. GSR 1464(E), dated 27.11.2017 (w.e.f. 2.6.1989).][Provided that every agricultural trailer manufactured on or after the 1st February, 2016 shall meet the following requirements for compliance to agricultural trailer brake system as per AIS:043-2005 specification, as amended from time to time, namely:-(a)fitment of the hydraulic braking system or inertia over-run braking system such as foundation brake (drum or disc, etc.) actuation systems on the the trailer including the proportional or control valve;(b)type approval of agricultural trailer braking system requirements as per AIS-043-2005, as amended from time to time.]

98. Steering gears.

(1)The steering gear of every motor vehicle shall be maintained in good and sound condition,free from back-lash exceeding 30 degrees on the steering wheel, [all ball joints connecting the steering linkage,] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] shall be protected by rubber caps and where the connections are secured with bolts or pins, the bolts or pins shall be effectively locked.(2)[On and after the 1st day of April 2019, the steering gear of motor vehicles of categories L,M and N, shall conform to the Indian Standard IS: 12222-2011, as amended from time to time.] [Substituted by Notification No. G.S.R 1463(E), dated 27.11.2017 (w.e.f. 2.6.1989).](3)[[On and after 1st May, 2003] [Sub-Rule(3) substituted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).], the steering effort of all motor vehicles other than three-wheelers not fitted with

steering wheel, motor cycles, [and invalid carriages] [Substituted by GSR 111(E), dated 10.2.2004, for 'invalid carriages and agricultural tractors' (w.e.f. 10.8.2004).] manufactured shall conform to the Indian Standard IS: 11948-1999, as amended from time to time.] [Inserted by Notification No. G.S.R. 492(E), dated 15.6.2015 (w.e.f. 2.6.1989)] [Provided that on and after the 1st day of April, 2019 the steering effort of all motor vehicles other than three wheelers not fitted with steering wheel, motor cycles and invalid carriages manufactured, shall conform to the Indian Standard IS: 11948-2010, as amended from time to time] [Inserted by Notification No. G.S.R. 1463(E), dated 27.11.2017 (w.e.f. 2.6.1989)] (4) [Every heavy passenger motor vehicle manufactured after expiry of six months from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 2000 (including the date of such commencement), shall be fitted with power steering gears.] [Inserted by GSR 65(E), dated 25.1.2000 (w.e.f. 25.1.2000).] (5) [The power steering shall be fitted in, (a) the Category N3 multi-axle vehicles on and from 1st May, 2004; and (b) other than multi-axle vehicles of Category N3 on and from 1st December, 2004.] [98-A. Steering gears for construction equipment vehicles. [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] (1) The steering system of every construction vehicle shall be maintained in good and sound condition, with backlash not exceeding 30 degrees on the steering wheel when tested with the engine running; ball-joints connecting the steering linkage of the mechanical steering system shall be protected by rubber caps and where the connections are secured with bolts or pins, the bolts or pins shall be effectively locked; in the case of hydrostatic steering system the moving parts shall be effectively sealed and protected from dust ingress. (2) The steering system of the construction equipment vehicle shall be adequately designed to ensure efficient and effective control of the vehicle under all the driving conditions and shall be so constructed as to conform to the Indian Standards IS: 12222-(1987), as modified from time to time. (3) The steering effort of the construction equipment vehicles during normal unladen operation shall not exceed 11.7 kg push/pull for hydrostatic steering system and 20 kg for manual steering wheel system when evaluated as per clauses 5.1 to 5.4 of Indian Standards IS: 11948-(1986) as specified by the Bureau of Indian Standards.] [Sub-Rule (5) substituted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004). Earlier sub-Rule (5) was inserted by GSR 845(E), dated 27.12.2002 (w.e.f. 27.12.2002).] [98-B. Steering Gears for agricultural tractors. [Inserted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).] (1) The steering gear of agricultural tractor shall be maintained in good and sound condition, free from backlash exceeding 30 degrees on the steering wheels. All ball joints connecting the steering linkage shall be protected by rubber caps and where the connections are secured with bolts, or pins, the bolts or pins shall be effectively locked. (2) The turning circle diameter and turning circle clearance diameter of every agricultural tractor shall conform to IS: 11859-1986, as amended from time to time. (3) The steering effort requirement of agricultural tractor shall conform to Automotive Industry Standard (AIS): 042 as amended from time to time, till such time the corresponding BIS standard is notified.] [98-C. Steering gear for power tillers. [Rule 98-C inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).] - The turning circle diameter and the turning clearance circle diameter of power tillers coupled to trailers, when measured as per IS: 12222:1987, as amended from time to time, shall not exceed 10 metres.] [98-D. Steering gears for combine harvester. - (1) The turning clearance circle diameter of combine harvester, coupled to the trailer for header assembly, if any, when measured as per IS: 11859-2004, as amended from time to time, shall not exceed 20 meters, without brake condition. (2) The steering effort requirement of combine harvester shall conform to AIS : 042-2004, as amended from time to time, till such time the corresponding Bureau of Indian Standard is notified.] [Inserted by

Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]

99. Forward and backward motion.

- Every [motor vehicle including [construction equipment vehicle, agricultural tractor and combine harvester] [Substituted by GSR 116(E), dated 27.2.2002, for 'motor vehicle' (w.e.f. 27.8.2002).] and agriculture tractor] other than a motor cycle and three-wheeled invalid carriages, shall be capable of moving under its own power [in the reverse direction also] [Substituted by GSR 338(E), dated 26.3.1993, for 'either forwards or backwards' (w.e.f. 26.3.1993).]:[Provided that power tillers with a riding attachment and power tillers coupled to trailers shall be capable of moving under its own power in the reverse direction also.] [Proviso inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).]

100. Safety glass.

(1)The glass of windscreens and the windows of every motor vehicle [other than agricultural tractors] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] shall be of safety glass:Provided that in the case of three-wheelers and vehicles with hood and side covers, the windows maybe of [acrylic or plastic transparent sheet.] [Substituted by GSR 338(E), dated 26.3.1993, for 'acrylic transport sheet' (w.e.f. 26.3.1993).]Explanation. - For the purpose of this rule,(i)safety glass means glass [conforming to the specifications of the Bureau of Indian Standards or any International Standards [* * *] [Substituted by GSR 933(E), dated 28.10.1989, for 'approved by' (w.e.f. 28.10.1989).]] and so manufactured or treated that if fractured, it does not fly or break into fragments capable of causing severe cuts;(ii)any windscreen or window at the front of the vehicle, the inner surface of which is at an angle [more than thirty degrees] [Substituted by GSR 214(E), dated 18.3.1999, for 'extending to thirty degrees' (w.e.f. 18.3.1999).] to the longitudinal axis of the vehicle shall be deemed to face to the front.(2)[The glass of the windscreen and rear window of every motor vehicle shall be such and shall be maintained in such a condition that the visual transmission of light is not less than 70%. The glasses used for side windows are such and shall be maintained in such condition that the visual transmission of light is not less than 50%,and shall conform to Indian Standards [IS : 2553 Part 21992] [Sub-Rule(2) Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]];(3)[The glass of the front windscreen of every motor vehicle [other than two-wheelers and agricultural tractors] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] manufactured after three years from the coming into force of the Central Motor Vehicles (Amendment) Rules, 1993 shall be made of laminated safety glass :[Provided that on and from three months after the commencement of the Central Motor Vehicles (Amendment)Rules, 1999, the glass of the front windscreen of every motor vehicle other than two-wheelers and agricultural tractors shall be made of laminated safety glass conforming to the Indian Standards IS: 2553Part 21992.] [Inserted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).]Explanation. - For the purpose of these sub-rules laminated safety glass shall mean two or more pieces of glass held together by an intervening layer or layers of plastic materials. The laminated safety glass will crack and break under sufficient impact, but the pieces of the glass tend to adhere to the plastic material and do not fly, and if a hole is produced, the edges would be less jagged than they would be in the case of an ordinary glass.[(3-A) The glass of the front windscreen of a construction equipment

vehicle manufactured after 3 years from the date of commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000 shall be made of laminated safety glass.] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).](3B)[The glass of the front wind screen of a combine harvester shall be made of laminated safety glass.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](4)Notwithstanding anything contained in this rule if the Central Government is of the opinion that it is necessary and expedient to do so in public interest, it may, by order published in the Official Gazette, exempt [any motor vehicle including construction equipment vehicle] [Substituted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] for use by any person, from the provisions of this rule.]

101. [Wind screen wiper. [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

(1)An efficient power operated [* * *] windscreen wiper shall be fitted to every motor vehicle having a windscreen, other than three-wheeled invalid carriage [and motor cycles] [Substituted by GSR 589(E), dated 16.9.2005, for 'motor cycles and three-wheelers of engine capacity not exceeding 500 cc' (w.e.f. 1.4.2006).].](2)One year from the date of commencement of Central Motor Vehicles (Amendment) Rules, 1993, [all motor vehicles other than three-wheelers, motor cycles and invalid carriages [manufactured on and after 1st January, 2003 in respect of Category M1 vehicles, and in respect of other vehicles, on and after 1st May, 2003] [Substituted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).], having a wind screen shall be fitted with a wind screen wiping system which shall conform to the requirements laid down in the following standards, as amended from time to time, till such time the corresponding Bureau of Indian Standards specifications are notified : (i)[IS: 15804-2008] [Substituted by GSR 291 (E), dated 24.4.2014], in the case of M-1 category of vehicles (ii)[IS: 15802-2008] [Substituted by GSR 291 (E), dated 24.4.2014], in the case of other vehicles.][(2-A) [All construction equipment vehicles and combine harvesters] [Sub-Rule (2-A) substituted by GSR 116(E), dated 27.2.2002 (w.e.f. 27.8.2002). Earlier sub-Rule (2-A) was inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] having windscreen shall be fitted with an efficient power operated windscreen wiping system. The windscreen wiping system shall conform to the requirements of the standards as may be specified from time to time under these rules.](2B)[On and after 1st April, 2015, all agricultural tractors having wind screen shall conform to AIS 011/2001, as amended from time to time till such time the corresponding Bureau of Indian Standards specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [Inserted by GSR 291 (E), dated 24.4.2014][* * *] [Sub-Rule (3) omitted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).]

102. [Signalling devices, direction indicators and stop lights.] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

- [(1) The signal to turn to the right or to the left shall be given by electrically operated direction indicator lamps on all motor vehicles including [construction equipment vehicles and the combined harvester, and such construction equipment vehicles and combined harvester] [Sub-Rule (1) substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 1.4.2006).] be fitted and maintained so that the

following conditions are met, namely : (i) The direction indicator lamps shall be of amber colour which are illuminated to indicate the intention to turn, by a light flashing at the rate of not less than 60 and not more than 120 flashes per minute. (ii) The light emitted by the lamp when in operation shall be clearly visible from both front and rear of the vehicle. (iii) The minimum illuminated area of each direction indicator shall be 60 square centimetres: Provided that nothing contained in this sub-rule shall apply to L1 category of motor cycles.] (2) [On all vehicles other than motor cycles, [the intention to stop the vehicle (other than construction equipment [and the combined harvester] [Sub-Rule (2) substituted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).] vehicle having hydrostatic brakes)] shall be indicated by two electrical stop lamps which shall be red in colour and shall be fitted one on each left and right-hand sides at the rear of the vehicle. The stop lamps shall light up on the actuation of the service brake control. In the case of motor cycle, the intention to stop the vehicle shall be indicated by one stop lamp at the rear which shall light up on the actuation of the control operating the brakes on the rear wheels.] (3) One year from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1993, the stop lamp of every motor cycle shall be so designed and fitted that it will light up on actuation of any of the controls which actuate the brakes on any wheel. (4) [In the case of modular hydraulic trailer, - (i) the intention to stop shall be indicated by two electrical stop lamps which shall be red in color and shall be fitted one each on left and right hand sides at the rear of the vehicle; (ii) the stop lamps shall light up on the actuation of the service brake control of the puller tractor; (iii) at least two direction indicators of amber colour shall be fitted, which are illuminated to indicate intention to turn by a light and the minimum illuminated area of each indicator shall be 60 sq.cm.]

103. Position of the indicator.

(1) A direction indicator shall be fitted and every direction indicator shall be so designed and fitted that [the driver of the vehicle including a construction equipment vehicle] [Substituted by GSR 116(E), dated 27.2.2002, for 'driver of the vehicle' and 'every motor vehicle' respectively (w.e.f. 27.8.2002).] [and combine harvester] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] when in his driving seat is aware that it is operating correctly. (2) [One year from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1993, [every motor vehicle including a construction equipment vehicle] [Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26.3.1993)] [and combine harvester] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] other than [* * *] [The words 'three wheelers of engine capacity not exceeding 500 cc and' omitted by GSR 589(E), dated 16.9.2005 (w.e.f. 1.4.2006).] motor cycles shall be equipped with such a device that when the vehicle is in an immobilised condition all the direction indicators flash together giving hazard warning to other road users.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]

104. [Fitment of reflectors.] [Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993).]

- [(1) Every motor vehicle manufactured on and after the 1st day of April, 2006, including trailers and semi-trailers, other than three-wheelers and motorcycles shall be fitted with two red reflectors, one each on both sides at their rear. Every motor cycle shall be fitted with at least one red reflex

reflector at the rear :] [Sub-Rule (1) and the proviso substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).][Provided that in respect of the vehicles of-(i)Category N-1 and Category N-2, 3.5 tonnes and above but less than 7.5 tonnes Gross Vehicle Weight, manufactured on and after 1st day of April, 2009, shall be affixed at the front with a white-reflective tape and at the rear with a red reflective tape running across the width of the body and the tapes affixed at front and rear shall be not less than 20 mm width and shall conform to the requirement of Annexures 4, 5 and 6 of AIS:090-2005 till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(ii)Category N-3 and Category N-2, 7.5 tonnes and above Gross Vehicle Weight, manufactured on and after 1st day of April, 2009, shall be affixed at the front with a white reflective tape running across the width of the body and the tape affixed at the front shall not be less than 50 mm width and shall conform to the requirement of Annexures 4, 5 and 6 of AIS:090-2005 till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(iii)Category N-3 including trailers or semi-trailers and Category N-2, 7.5 tonnes and above GVW along with trailers or semi-trailers, manufactured on and after 1st day of April, 2009, shall be affixed with reflective contour marking at the rear and side in accordance with AIS:090 -2005 till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(iv)Category M-2 and M-3, manufactured on and after 1st October, 2009, shall be affixed at the front with white reflective tape and at the rear with red reflective tape running across the width of the body and the sides of M3 category vehicles shall be affixed with yellow reflective tape running across the length of the body but tapes so affixed shall not be less than 50 mm width and shall conform to Annexures 4, 5 and 6 of AIS: 090-2005, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).](2)Every goods carriage vehicle including trailers and semi-trailers other than three-wheeler [* * *] [The words 'of engine capacity not exceeding 500 cc' omitted by GSR 589(E), dated 16.9.2005 (w.e.f. 1.4.2006).] shall be fitted with two white reflectors one each at the extreme right and left bottom corners in the front of the vehicle and facing to the front. The reflecting area of each reflector shall not be less than 28.5 sq. centimetres, in the case of vehicles with overall length of more than 6 metres, and not less than 7 sq. centimetres in case of other vehicles.(3)[All trailers including semi-trailers, other than those drawn by three-wheeled tractors [* * *] [Substituted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).] shall be fitted with the following reflex reflectors, namely,(i)two white reflex reflectors in the front, one each at the right and left corners at a height not exceeding 1500 mm above the ground,(ii)two red reflex reflectors in the rear, one each at the right and left corners at a height not exceeding 1500 mm above the ground, and(iii)the area of the reflectors referred to above shall not be less than 28.5 sq. cm. in the case of trailers with overall length exceeding 6 metres and shall not be less than 7 sq.cm. in case of other trailers.](4)[On and after expiry of one year from the date of commencement of the Central Motor Vehicles(Amendment) Rules, 1999, the reflectors referred to in this rule and in rule 110 shall be of reflex type conforming to [AIS:057:2005 till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986(63 of 1986)] [Substituted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999). Earlier sub-Rule(4) was substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).].] [Substituted by GSR 784(E), dated 12.11.2008 (w.e.f. 12.11.2008).](5)[On and from the date of commencement of the Central Motor Vehicles Rules, 1993, every motor vehicle and trailer of length exceeding 6 metres shall be fitted with two amber coloured reflex reflectors on each left hand and right hand of the vehicle, one set as close to the front end as possible and the other set as close to the

rear end as possible. The height of the side reflectors above the ground shall not be more than 1500 mm. The area of each reflector shall not be less than 28.5 sq. cm.:Provided that in case the distance between the two side reflectors is more than 3 metres, additional intermediate side reflectors shall be fitted so that the distance between any adjacent side reflector is not more than 3 metres.] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][104A. Fitment of reflectors on construction equipment vehicles and combine harvester. [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).]- All construction equipment vehicles and combine harvester shall be fitted with](i)two white reflex reflectors in the front of the vehicle on each side and visible to on-coming vehicles from the front at night;[Provided that in case of combine harvester, the height of front white reflex-reflector shall not be more than 2100 mm above the ground in the case of unobstructed vision from the front and the implement or device shall not obstruct the visibility of the front reflex-reflectors to the oncoming vehicles;] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](ii)two red reflectors in the rear of the vehicle,one each at right and left corners, at a height not exceeding 1500 mm above the ground in the case of unobstructed vision from the rear and the implement or device shall not obstruct the visibility of the reflectors to the following vehicle;[Provided that in case of combine harvester, the height shall not exceed 2100 mm above the ground;] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](iii)two sets of amber coloured side reflex reflectors, one each on left hand and right hand sides of the vehicle, one set as close to the front end and the other set as close to the rear end as possible to the basic machine without attachments and if the distance between the two amber side reflex reflectors is more than 3 metres, additional intermediate amber side reflex reflectors shall be fitted so that the distance between any adjacent amber side reflex reflector is not more than 3 metres :[Provided that the fitment of reflex reflectors on the implements such as booms of cranes and arms of shovels, shall not be mandatory. However, wherever possible the fitment of these reflectors may be done considering the working environment/nature of these machines in the fields;] [Substituted by GSR 116(E), dated 27.2.2002, for the proviso (w.e.f. 27.8.2002).](iv)the reflecting area of each reflex reflector shall not be less than 28.5 sq. cms;(v)the construction equipment vehicle [and combine harvester] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall be fitted with a retro-reflective tape or retro-reflective paint of not less than 20 millimetres width, running across the width of the body at the front and rear, and the colour of the reflective tape or reflective paint shall be white at the front and red at the rear;(vi)the reflectors referred to in this sub-rule, shall be of reflex type conforming to Indian Standards IS:8339 specified by the Bureau of Indian Standards;(vii)the retro-reflective tape and paint shall be as per clause 801 and 803 of Ministry of Surface Transport (Roads Wing) specifications for Road and Bridge works (3rd Revision,1995) as amended from time to time.][104-B. Fitment of reflectors for agricultural tractors. [Rule 104-B inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).](1)Every agricultural tractor manufactured on and after the 1st day of April, 2006 shall be fitted with two non-triangular red reflectors of not less than 7 sq. cm reflecting area one each on both sides at the rear.(2)The reflectors referred in sub-rule (1) of this rule shall be of the reflex type conforming to AIS:057:2005 till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).

104.

-C. Fitment of reflectors on power tillers.(1)On and from one year from the date of commencement of the Central Motor Vehicles (Fifth Amendment) Rules, 2005, every power tiller shall be fitted with two white reflex reflectors of not less than 7 sq. cm reflecting area in the front of the vehicle one on each side and visible to oncoming vehicles from the front at night, conforming to AIS : 057 : 2005 till corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(2)In the case of trailers attached to power tillers, two red reflectors of not less than 7 sq.cm reflecting area in the rear side, one each at right and left corners, at a height not exceeding 1500 mm above the ground shall also be fitted.]

104D. [Fitment of retro-reflective tapes or reflectors and rear marking plate on modular hydraulic trailer. [Inserted by Notification No. G.S.R. 212(E), dated 20.3.2015 (w.e.f. 1.4.2015)]

- Every modular hydraulic trailer shall be fitted with two red reflective tapes having width not less than 50 mm at the rear and front and amber reflective tape having width not less than 50 mm on the sides, conforming to AIS: 090:2005, as amended from time to time, till the corresponding Bureau of Indian Standard specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(2)Every modular hydraulic trailer shall be fitted with two red reflective tapes having area not less than 28.5 sq. cm on the sides one set as close to the front end and the other set as close to the rear end as possible, conforming to AIS:057:2005, as amended from time to time till the corresponding Bureau of Indian Standard specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(3)Every modular hydraulic trailer shall be fitted with rear marking plate confirming to AIS-089.]

105. Lamps.

- [(1) Save as hereinafter provided, every motor vehicle, while being driven in a public place, during the period half an hour after sunset and at any time when there is no sufficient light, shall be lit with the following lamps which shall render clearly discernible persons and vehicles on the road at a distance of one hundred and fifty five metres ahead: [Sub-Rule (1) substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 1.4.2006).](a)in the case of motor vehicle other than three-wheelers, three-wheeled invalid carriages and motor cycles, two or four head lamps;(b)in the case of [* * *], three-wheelers and three-wheeled invalid carriages one or two headlamps;(bb)[(bb) every two wheeler manufactured on and after the 1st April, 2017, shall have one or two head lamps, conforming to the applicable standards in force for performance and installation requirements as notified by the Central Government from time to time vide according to sub-rule (1) of rule 124, which shall automatically switch on when the engine is running: [Inserted by Notification No. G.S.R. 188(E), dated 22.2.2016 (w.e.f. 2.6.1989).]Provided that, the above condition of the head lamp being lit when the engine is running is deemed to be satisfied if daytime running lamp is provided, conforming to the applicable standards in force for performance and installation requirements as notified by the Central Government from time to time, which shall be lit automatically if the engine

is running: Provided further that the daytime running lamp shall be lit off automatically if the engine is running and the head lamp is switched on.](c)in the case of a sidecar attached to a motor cycle one lamp showing a white light to the front;(d)in the case of construction equipment vehicle [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)], two or four lamps showing to the front white light visible from a distance of one hundred and fifty five metres ahead.](2)Every such motor vehicle other than a [* * *] [The words 'a motor cycle and' omitted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).] three-wheeler shall also carry -(i)[two lamps (hereinafter referred to as the rear lamp) showing to the rear a red light visible in the rear from a distance of one hundred and fifty-five metres; and in the case of a motor cycle one lamp showing a red light to the rear visible from a distance of seventy-five metres] [Substituted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).]; and(ii)lamp, which may be the rear lamp or some other device, illuminating with a white light the whole of the registration mark exhibited [[on the rear of the vehicle including construction equipment vehicle] [Substituted by GSR 642(E), dated 28.7.2000, for 'on the rear of the vehicle' (w.e.f. 28.7.2000).], [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] and on the side in the case of construction equipment vehicle] [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] so as to render it legible from a distance of fifteen metres to the rear :Provided that when a motor vehicle is drawing another vehicle or vehicles and the distance between such vehicles does not exceed 1.5 metres, it shall be sufficient if the last drawn vehicle carries a rear lamp or a lamp illuminating the rear registration mark :[Provided further that every construction equipment vehicle shall also carry two lamps showing to the rear red lights visible in the rear from a distance of one hundred and fifty-five metres.] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).](3)[On and from the commencement of the Central Motor Vehicles (Amendment) Rules, 1993, all the obligatory front head lamps of a motor vehicle other than motor cycles shall be as nearly as possible of the same power and fixed at a height as specified in Indian Standards [IS: 8415-1977] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] (clause 4.1):Provided that in the case of four-wheel drive cross country vehicles, the maximum height of the said front head lamps may be as per limits specified in Indian Standards [IS:8415-1977] [Substituted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).] (clause 4.1.1):[* * *] [Proviso omitted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).]Provided further that on and from the commencement of the Central Motor Vehicles(Amendment) Rules, 1993, all vehicles other than three-wheelers of engine capacity less than 500 cc, motor cycles and three-wheeled invalid carriages manufactured shall be fitted with two rear lamps showing red light to the rear.]](3-A) On and from the commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, all the obligatory front head lamps of a construction equipment vehicle shall be as nearly as possible of the same power and fixed at a height so that front visibility is maintained and farthestmost point of equipment/attachment is clearly seen by on-coming traffic.] [Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000).](3B)[All the obligatory front head lamps of a combine harvester shall be as nearly as possible of the same power and fixed at a height so that front visibility is maintained and farthestmost point of equipment or attachment is clearly seen by oncoming traffic.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](4)The rear lamp shall be fixed either on the centre line of the vehicle or to the right hand side, and save in the case of a transport vehicle, at a height of not exceeding one metre above the ground:[* * *] [Proviso omitted by G.S.R. 111(E), dated 10-2-2004 (w.e.f. 10-8-2004).](5)In the case of a transport vehicle, the rear

light maybe fixed at such level as may be necessary to illuminate the registration mark.(6)Every heavy goods carriage [including trailers] [Added by G.S.R. 642 (E), dated 28.7.2000 (w.e.f.28.7.2000).] shall be fitted with a red indicator lamp of size of thirty centimetres by ten centimetres on the extreme rear most body cross beam and in the case of a vehicle not constructed with body in the rear, the indicator lamp shall be fitted near the right rear light above the rear number plate:[Provided that every construction equipment vehicle of an unconventional or extraordinary type in travel mode shall be fitted or installed with a red indicator lamp of size of not less than 100 square centimetres on the extreme rearmost point of the body.] [Added by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).](7)[On and from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1999, every motor vehicle manufactured shall be fitted with at least one lamp which shall automatically be operated, throwing a white light to the rear, when the vehicle is being driven in the reverse gear.] [Substituted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999). Earlier sub-Rule (7) was inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](8)[In the case of vehicles, other than three-wheelers of engine capacity not exceeding 500 CC, which are attached with trailers, all the lamps required to be fitted on the rear of the vehicle shall be fitted at the rear of the trailer.] [Inserted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).](8-A) On the commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, every construction equipment vehicle shall be fitted with two lamps at the rear throwing light to the rear when the vehicle is being driven in the reverse gear and there shall also be an audible warning system operating when the vehicle is being driven in the reverse gear, the audible warning system and the light being automatically operated when the vehicle is in reverse gear.] [Added by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000). Previously inserted by GSR 214(E), dated 18.3.1999. [There seems to be some confusion/mistake in the language of Clause 13(f) of GSR 214(E), dated 18.3.1999 and Clause 13(e) of GSR 642(E), dated 28.7.2000-Ed.].](8B)[Every combine harvester shall be fitted with two lamps at the rear throwing light to the rear when the vehicle is being driven in the reverse gear and there shall also be an audible warning system operating when the vehicle is being driven in the reverse gear so that the audible warning system and the light are automatically operated when the vehicle is in reverse gear.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]

106. Deflection of lights.

- [(1) No head lamp showing a light to the front shall be used on any motor vehicle including agricultural tractor and construction equipment vehicle [and combine harvester] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014] (whether fitted with single or dual head lamp) unless such lamp is so constructed, fitted and maintained that the beam of light emitted there from meet the requirements of respective safety standards notified under rule 124 and 124A.][* * *] [Sub-Rule (2) omitted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](2)[[Sub-Rule(3) renumbered as sub-Rule (2) by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] [***] [Omitted by Notification No. G.S.R. 291 (E) dated 24.4.2014]]107. Top lights. [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]- Every goods vehicle including trailer and semi-trailer other than three-wheelers and vehicles with overall width not exceeding 2.1 metres shall be fitted with two white lights at the top right and left corners [showing white light to the front] and two red lights at the top right and [showing red light to the rear] [Substituted by GSR 214(E), dated 18.3.1999 (w.e.f.

18.3.1999).]. The lights shall remain lit when the vehicle is kept stationary on the road during night and at the time of poor visibility:Provided that in the case of goods carriage without a full body in the rear, provision for fitting of the top light at the rear shall not be necessary.][107-A. Implement lights for construction equipment vehicle. [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).]- Construction equipment vehicle having implements with front overhang greater than 60% of wheelbase shall be fixed with additional implement light of amber colour at a location nearest to the extreme edge of the implement without affecting the functions of showing light in all directions and where the implement is more than 3 metres in length, additional amber coloured lamps shall be fixed at a distance of not exceeding 3 metres for the entire length of the implement:Provided that in case of rear overhang the additional implement lights shall be in red colour.]

108. [Use of red,white or blue light. [Substituted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).]

(1)No motor vehicle shall show a red light to the front or light other than red to rear:Provided that the provisions of this rule shall not apply to(i)the internal lighting of the vehicle; or(ii)[the amber light, if displayed by any direction indicator or as top light used on vehicle for operating within the premises such as airports, ports, mines and project sites, without going outside the said premises on to public roads;](iii)[* * *] [Omitted 'a vehicle carrying high dignitaries as specified by the Central Government or the State Government,as the case may be, from time to time;' by Notification No. G.S.R. 423(E), dated 1.5.2017 (w.e.f. 2.6.1989).](iv)[the blinker type of red light with purple glass fitted to an ambulance van used for carrying patients or the warning lamps fitted on Road Ambulance in accordance with Annexure-1 of AIS-125 (Part-1)-2014;] [Substituted by Notification No. G.S.R. 868(E), dated 1.4.2018 (w.e.f. 2.6.1989).](v)[* * *] [Omitted 'to a vehicle having a lamp fitted with an electrical bulb, if the power of the bulb does not exceed seven watts and the lamp is fitted with frosted glass or any other material which has the effect of diffusing the light;' by Notification No. G.S.R. 423(E), dated 1.5.2017 (w.e.f. 2.6.1989).](vi)white light illuminating the rear number plate;(vii)white light used while reversing;(viii)plough light provided in agricultural tractors for illuminating the implements working area on the ground in agricultural field operations.[* * *] [[Omitted '(2) Use of blue light with flasher shall be determined and notified by the State Governments at their discretion.(3)Use of blue light with or without flasher shall be permitted as top light on vehicles escorting high dignitaries entitled to the use of red light.' by Notification No. G.S.R. 423(E), dated 1.5.2017 (w.e.f. 2.6.1989).]](4)Use of multi-coloured red, blue and white light shall be permitted only on vehicles specifically designated for [such emergency and disaster management duties as may be specified by the Central Government] [Substituted 'emergency duties and shall be specifically specified by State Governments' by Notification No. G.S.R. 423(E), dated 1.5.2017 (w.e.f. 2.6.1989).].[* * *] [[Omitted '(5) The State Government shall inform the Central Government regarding publication of notifications issued by the concerned State Government under sub-rule (2) and under clause (e) of the Notification No. S.O. 52(E), dated 11th January, 2002, published in the Gazette of India, Ministry of Road Transport and Highways, regarding use of red light on top of vehicle being used by dignitaries.(6)In case vehicle is not carrying dignitaries, red or blue light, as the case may be, light shall not be used and be covered by black cover.' by Notification No. G.S.R. 423(E), dated 1.5.2017 (w.e.f. 2.6.1989).]]](7)[On and after the 1st April, 2018, the top lights

(warning lamps) fitted on Road Ambulances shall be in accordance with AIS:125 (Part1)- 2014, as amended from time to time, for all types of ambulances specified therein, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [Inserted by Notification No. G.S.R. 868(E), dated 1.4.2018 (w.e.f. 2.6.1989).][108A. Use of red or white light on construction equipment vehicles and combine harvesters.] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).]- No construction equipment vehicle [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall show a red light to the front or light other than red to the rear:Provided that the provision of this rule shall not apply to:(i)the internal lighting of the vehicle;(ii)the amber light, if displayed by any direction indicator or top light;(iii)white light illuminating the rear or side registration number plate;(iv)white light used while reversing;(v)light provided for illuminating the implements working area on the ground in off-highway or construction operations.]

108B. [Use of beacon or blinking lamp on puller tractor. - The puller tractor shall be fitted with two beacon or blinking lamps, which are amber in color, one each on left and right hand side on top of the cabin.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]

109. [Parking light. [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

- [[Every construction equipment vehicle, combine harvester and motor vehicle] other than] [* * *] [The words 'three wheelers of engine capacity not exceeding 500 cc' omitted by GSR 589(E), dated 16.9.2005 (w.e.f. 1.4.2006).] motor cycles and three-wheeled invalid carriages shall be provided with one white or amber parking light on each side in the front. In addition to the front lights, two red parking lights one on each side in the rear shall be provided. The front and rear parking lights shall remain lit even when the vehicle is kept stationary on the road:Provided that these rear lamps can be the same as the rear lamps referred to in rule 105, sub-rule (2):[* * *] [Proviso omitted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).]][Provided also that construction equipment vehicle [and combine harvester] [Substituted by G.S.R. 642(E), dated 28.7.2000 (w.e.f. 2.6.1989).], which are installed with flood light lamps or spot lights at the front, rear or side of the vehicle for their off-highway or construction operations, shall have separate control for such lamps or light and these shall be permanently switched off when the vehicle is travelling on the road.]

110. [[Lamps on three-wheelers] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).].

- Every [three-wheeler] [Substituted by GSR 589(E), dated 16.9.2005, for 'auto-rickshaws and three-wheelers of engine capacity not exceeding 500 cc' (w.e.f. 1.4.2006).] shall be fitted with one front head lamp and [two side white or amber lights] [Substituted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).] or two front lamps on the body. In addition to the front lamp or side lights, it shall be fitted with [two rear lamps showing to the rear red light] [Substituted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).] visible from a distance of 75 metres and a white light illuminating the

registration mark exhibited on the rear of the vehicle so as to render it legible from a distance of 15 metres; and also two red reflex reflectors each having a reflecting area of not less than seven square centimetres :Provided in case where these vehicles are attached with trailers, the rear fitments mentioned in this rule and direction indicator system mentioned in rule 102 shall also be provided at the rear of the trailer:][Provided further that fitment of one head lamp shall be applicable only in case of three-wheelers with overall width not exceeding 1400 mm and in such cases the side lights shall be amber in colour.] [Proviso inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 1.4.2006).]

111. Prohibition of spot lights, etc.

- No spot light or search light shall be carried on the front of any vehicle except in exceptional circumstances with the prior approval of the registering authority. Smoke, vapour, spark, ashes, grit and oil

112. Exhaust gases.

- Every motor vehicle shall be so constructed or equipped that the exhaust gases from the engine are discharged neither downward nor to the left side of the vehicle and shall be so fitted as to allow the gases to escape to the right side or rear of the vehicle:Provided that in the case of tankers carrying explosives and inflammable goods, the fitment of exhaust pipe shall be according to the specification of the Inspector of Explosives:[Provided further that in the vehicles where the exhaust gases are discharged to the right of the vehicle, slight downward angle shall be permitted, provided the exhaust gases do not kick up any dust when the vehicle is stationary and engine running and in any case the angle of the pipe to the horizontal should not be more than 30degrees:Provided also that where the exhaust gases are discharged to the left of the vehicle the inclination of exhaust pipe should not cross 30 degrees in downward and 30 degrees in left direction against the vertical plane which includes the vehicle centre line,provided the exhaust gases do not take up any dust when the vehicle is stationary and engine running:[Provided further that in the case of agricultural tractors, vertical or horizontal] [Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993).] exhaust pipe may be provided and outlet of this pipe should be so directed that the driver of the tractor is not exposed to exhaust gases by locating the outlet over or to the side of head-level of the driver as per Indian Standards IS: 12239 (Part1)1988:][Provided also that in the case of construction equipment vehicle [and combine harvester] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] vertical exhaust pipe may be fitted and outlet of this pipe shall be so directed that the driver of the vehicle is not exposed to exhaust gases.]

113. Location of exhaust pipes.

- On and from the date of commencement of this sub-rule, [no exhaust pipe of a motor vehicle including construction equipment vehicle] [Substituted by GSR 116(E), dated 27.2.2002, for 'no exhaust pipe' (w.e.f. 27.8.2002).] [and combine harvester] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall be located within a distance of 35 millimetres from the fuel line connecting to the fuel tank and engine.

114. Exhaust pipes of public service vehicles.

- The exhaust pipe of every public service vehicle shall be so fitted or shielded that no inflammable material is thrown upon it from any other part of the vehicle and that it is not likely to cause a fire through proximity to any inflammable material on the vehicle. Emission of smoke, vapour, etc., from motor vehicles

115. Emission of smoke, vapour, etc. from motor vehicles.

- [(1) Every motor vehicle other than motor cycles of engine capacity not exceeding 70 cc, manufactured prior to the first day of March 1990, shall be maintained in such condition and shall be so driven so as to comply with the standards prescribed in these rules.] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] (2) [On and after 1st October, 2004, every motor vehicle operating on (i) Petrol/CNG/LPG shall comply with the idling emission standards for Carbon monoxide (CO) and Hydrocarbon (HC) given in the Table below] :- [Table] [Substituted by Notification No. 277 (E) dated 11.4.2014 (w.e.f. 1.10.2014)] Petrol/CNG/LPG Driven Vehicles

| S.No. | Vehicle Type and Applicability | CO% | *HC(n-hexane equivalent) ppm |
|-------|---|-----|---------------------------------|
| 1. | Two Wheelers(2/4 – Stroke) (Vehicles manufactured on and before 31st March, 2000) | 4.5 | 9,000 |
| 2. | Two Wheelers(2 – Stroke) (Vehicles manufactured between 31st March, 2000 and 31st March 2010) | 3.5 | 6,000 |
| 3. | Two Wheelers(4 – Stroke) (Vehicles manufactured between 31st March, 2000 and 31st March 2010) | 3.5 | 4,500 |
| 4. | Two Wheelers(2 – Stroke) (Vehicles manufactured after 31st March, 2010) | 3.0 | 4,000 |
| 5. | Two wheelers (4-Stroke) (Vehicles manufactured after 31st March, 2010) | 3.0 | 3,000 |
| 6. | Three Wheelers (2/4 – Stroke) (Vehicles manufactured on and before 31st March, 2000) | 4.5 | 9,000 |
| 7. | Three Wheelers (2 – Stroke) (Vehicles manufactured after 31st March, 2000) | 3.5 | 6,000 |
| 8. | Three Wheelers (4 – Stroke) (Vehicles manufactured after 31st March, 2000) | 3.5 | 4,500 |
| 9. | Four Wheelers manufactured as per pre-Bharat Stage II emission norms | 3.0 | 1,500 |
| 10. | Four Wheelers manufactured as per Bharat Stage-II or Bharat Stage-III Emission norms | 0.5 | 750" |

Note.- The test shall be carried out using the instrument type approved as per rule 116(3) of the Central Motor Vehicles Rules, 1989 (CMVR) with the vehicle engine warmed up after 4 run of minimum 15 minutes on a variable course under normal traffic condition. During the test the vehicle

engine shall be running at idling speed and the sampling probe shall be inserted into the vehicle exhaust system to a depth not less than 300mm. In case CO and/or HC emission values recorded during the test are not within the limits, the testing shall be discontinued and the vehicle owner shall be advised to resubmit the vehicle after repair/service.*The idling emission standards for vehicles when operating on Compressed Natural Gas (CNG), shall contain Non-Methane Hydrocarbon (NMHC) in place of Hydrocarbon (HC) and shall be estimated by the following formula: $NMHC = 0.3 \times HC$ Where HC = Total Hydrocarbon measured as n-hexane equivalent. Similarly idling emission standards for vehicles when operating on Liquefied Petroleum Gas (LPG) shall contain Reactive Hydrocarbon (RHC) in place of Hydrocarbon (HC) and shall be estimated by the following formula: $RHC = 0.5 \times HC$ Where HC = Total Hydrocarbon measured as n-hexane equivalent. Provided that in case of Petrol vehicles fitted with three-way closed loop catalytic converters operating in a specific city or area, the Government of the respective State or Union Territory Administration, as the case may be, may, by notification in the Official Gazette, specify the introduction of measurement of LAMBDA" (dimensionless value representing burning efficiency of an engine in terms of the air/fuel ratio in the exhaust gases) and tighter emission norms for in-use vehicles with such periodicity as may be warranted, after ensuring that gas analysers capable of measuring the values, duly approved by the testing agencies, are available in such city or area, as the case may be. Provided further that testing procedures are prescribed in TAP documents Nos. 115 and 116 as amended from time to time. Provided also that the compliance to the limits prescribed in the above proviso shall be included in the certificate issued by the vehicle manufacturer in Form 22 or Form 22-A, as applicable for the vehicle manufactured on or after 1st October, 2004: "[Provided that in the case of CNG/LPG motor vehicles operating on bi-fuel mode, the test shall be conducted only on CNG/LPG mode.] [Inserted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] [Provided that every motor vehicle operating on Petrol/Compressed Natural Gas/Liquefied Petroleum Gas, manufactured as per [Bharat Stage-IV or Bharat Stage-VI] [Inserted by Notification No. G.S.R. 103 (E) dated 23.2.2012 (w.e.f. 2.6.1989)] norms shall comply with the idling and high idling applicable emission standards for carbon Monoxide (CO), Hydro Carbon (HC) and Lambda given in the following Table, namely:-Table(Petrol/Compressed Natural Gas/Liquefied Petroleum Gas driven vehicles, manufactured as per Bharat Stage-IV norms)

| Sr.No. | Type of vehicle | Idle emission limits | High idle emission limits | HC (n hexane equivalent) ppm | CO % | Lambda (RPM-2500-200) + _ |
|--------|---|----------------------|---------------------------|------------------------------|----------------------------------|---------------------------|
| (1) | (2) | (3) | (4) | | | |
| 1. | Compressed Natural Gas/Liquefied Petroleum Gas driven 4-wheelers manufactured as per Bharat Stage-IV norms. | 0.3% | 200 ppm. | - | - | - |
| 2. | Petrol driven 4-wheelers manufactured as per Bharat | 0.3% | 200 ppm | 0.2 | 1 + _ 0.03 or as declared by the | |

| Stage-IV norms. | | vehicle manufacturer;] | |
|---|--|-----------------------------|-------------------------|
| (ii)Smoke density for all diesel-driven vehicles shall be as follows:-[Table(Diesel vehicles) | | | |
| Sr.No. | Method of test | Maximum smoke density | |
| (1) | (2) | (3) | |
| | | Lightabsorption coefficient | Hartidgeunits (1/metre) |
| 1. | Freeacceleration test for turbo charged engine and naturallyaspirated engine for vehicles manufactured as per pre-[Bharat Stage-IV or Bharat Stage-VI] [Substituted by Notification No. G.S.R. 889(E), dated 16.9.2016 (w.e.f. 2.6.1989).]norms. | 2.45 | 65 |
| 2. | Freeacceleration test for turbo charged engine and naturallyaspirated engine for vehicles manufactured as per[Bharat Stage-IV or Bharat Stage-VI] [Substituted by Notification No. G.S.R. 889(E), dated 16.9.2016 (w.e.f. 2.6.1989).]norms. | 1.62 | 50] |
| [Substituted by Notification No. G.S.R. 103 (E) dated 23.2.2012 (w.e.f. 2.6.1989)][The free acceleration test shall be carried out using the instrument type-approved under sub-rule (3) of rule 116 as given under:-(a)three times flushing by free acceleration to be undertaken with or without the sampling probe in the vehicle exhaust, and average maximum rpm of the three flashing's to be recorded;(b)thereafter, with sample probe inserted in vehicle exhaust during each free acceleration, maximum no load rpm reached shall be within bandwidth of ±500 rpm of the average value in respect of 3-wheeler vehicles and ±300 rpm of the average value for all other categories of vehicles;(c)the free acceleration test, mentioned in (b) above, shall be repeated minimum three times(d)the smoke density to be recorded shall be arithmetic mean of these three readings;(e)In case the smoke density recorded is not within the limits, then, the test may be repeated with engine oil temperature measured by a probe in the oil level dipstick tube to be at least 600 C:Provided that the above test shall not be carried out if the On Board Diagnostic (OBD) Malfunction Indicator Lamp (MIL) of BS-IV vehicles is switched on; in such cases, the vehicle shall be re-submitted for the above test after repair or servicing:Provided further that only for Type Approval purposes, all new models type approved on or before the commencement of the Central Motor Vehicles (Tenth Amendment) Rules, 2015 and complying with the requirements of free acceleration smoke as provided in the Central Motor Vehicles (Amendment) Rules, 2012, published vide notification number GSR 103(E) dated 23rd February 2012, need not be re type-approved for compliance to this sub-rule.] [Substituted by Notification No. G.S.R. 498 (E), dated 16.6.2015 (w.e.f. 2.6.1989)](3)On and from the [date] [Brought into force on 1st day of April, 1991 vide S.O. 869(E), dated 27.10.1989.] of commencement of this sub-rule, all petrol-driven vehicles shall be so manufactured that they comply with the mass emission standards as specified at Annexure I. The breakdown of the operating cycle used for the test shall be as specified at Annexure II, and the reference fuel for all such tests shall be specified in Annexure III to these rules.(4)On and from the [date] [Brought into | | | |

force on 1st day of April, 1991 vide S.O. 869(E), dated 27.10.1989.] of commencement of this sub-rule, all diesel-driven vehicles shall be so manufactured that they comply with the standards based on exhaust gas opacity as specified at Annexure IV to these rules.(5)On and from the [date] [Brought into force on 1st day of April, 1992 vide S.O. 869(E), dated 27.10.1989.] of commencement of this sub-rule, all petrol-driven vehicles shall be so manufactured that they comply with the following levels of emissions [when tested as per test cycle specified in Annexure V] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]:-

| Mass of Carbon Monoxide(CO) | Mass of Hydrocarbons(HC) | Mass of Nitrogen Oxides(NO) |
|-----------------------------|--------------------------|-----------------------------|
| Maximum grams per KWH | Maximum grams per KWH | Maximum grams per KWH |
| 14 | 3.5 | 18 |

[Provided the standards for exhaust gas emissions applicable to agricultural tractors shall be notified separately.] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](6)Each motor vehicle manufactured on and after the dates specified in sub-rule (2), (3), (4) or (5), shall be certified by the manufacturers to be conforming to the standards specified in the said sub-sections, and further certify that the components liable to effect the emission of gaseous pollutants are so designed, constructed and assembled as to enable the vehicle, in normal use, despite the vibration to which it may be subjected, to comply with the provisions of the said sub-rule.(7)[After the expiry of a period of one year from the date on which the motor vehicle was first registered, every such vehicle shall carry a valid "Pollution under control" certificate issued by an agency authorized for this Purpose by the State Government. The validity of the certificate shall be for [six months] [Added by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] and the certificate shall always be carried in the vehicle and produced on demand by the officers referred to in sub-rule (1) of rule 116.[Provided that the validity of the certificate shall be twelve months for the vehicles manufactured as per [Bharat Stage-IV or Bharat Stage-VI] [Inserted by Notification No. G.S.R. 103 (E) dated 23.2.2012 (w.e.f. 2.6.1989)] norms.](8)The certificate issued under sub-rule (7) shall, while it remains effective, be valid throughout India.](9)[Mass emission standard for diesel vehicles] [Substituted by GSR 163(E), dated 29.3.1996 (w.e.f. 1.4.1996). Earlier sub-Rule (9) was added by GSR 609(E), dated 15.9.1993 (w.e.f. 15.9.1993).]Type approval tests

| Vehicle Category | HC*(g/KWH) | CO*(g/KWH) | NOx g/KWH | Smoke |
|---|------------|--------------|--------------|-------|
| Medium and Heavy over 3.5 Ton/GVW Light diesel up to 3.5 Ton/GVW | 2.42.4 | 11.211.2 | 14.414.4 | ***** |
| Reference mass R(kg) | CO**g/KM | HC+NOx**g/KM | | |
| R<1020 | 5.0 | 2.0 | | |
| 1020<R<1250 | 5.7 | 2.2 | | |
| 1250<R<1470 | 6.4 | 2.5 | | |
| 1470<R<1700 | 7.0 | 2.7 | | |
| 1700<R<1930 | 7.7 | 2.9 | | |
| 1930<R<2150 | 8.2 | 3.5 | | |
| R<2150 | 9.0 | 4.0 | | |

Note: *The test cycle is as per 13 mode cycle on dynamometer. ** The test should be as per Indian driving cycle with cold start. ***The emissions of visible pollutants (smoke) shall not exceed the limit

value to smoke density. When expressed as light absorption coefficient given below for various nominal flows when tested as constant speeds over full load. (As indicated at Annexure I).Cop Standards*10% relaxation in the standards for HC, CO and NOx would be given.**10% relaxation in the standards for CO and combined HC+NOx would be given.[Mass emission standard for petrol-driven vehicles-Effective from 1st April, 1998(i)Passenger CarsType approval tests

| Cubic Capacity (cm ³) | Carbon Monoxide (gm/km) | HC+NOx (gm/km) | | |
|--------------------------------------|----------------------------|---|--|--|
| | | Passengers cars fitted with catalytic converter | Passenger cars not fitted with catalytic converter | Passenger cars fitted with catalytic converter |
| <1400 | 4.34 | 8.68 | 1.50 | 3.00 |
| >1400<2000 | 5.60 | 11.20 | 1.92 | 3.84 |
| >2000 | 6.20 | 12.40 | 2.18 | 4.36 |

Notes.- 1. The tests will be as per Indian driving cycle with warm start. However, with effect from 1st April, 1998, the test will be as per Indian driving cycle with cold start for catalytic converter fitted vehicles as:-

| | |
|-------------------------------------|--|
| Soak Temperature | 20°-30°C |
| Soak Period | 6.30 hrs |
| Preparatory running before sampling | 4 cycles |
| Number of test cycles | 6 |
| Break down of cycles | Indian driving cycle as perAnnexure II |

2. For passenger cars not fitted with catalytic converters, the test will continue to be with warm start as per existing procedure, till 1-4-2000.

3. There should be no crankcase emission.

4. Evaporative emission should not be more than 2.0g/test.

5. COP standards: 20% relaxation in the standards for Carbon Monoxide and combined HC + NOx would be given.

6. For vehicles fitted with catalytic converter a deterioration factor of 1.2 on Type Approval Limits will be applicable for durability.]

(ii)Three-Wheelers (for all categories)-

| | | |
|---------|--------|------|
| CO | gms/km | 6.75 |
| HC +NOx | gms/km | 5.40 |

Note:

1. The test will be as per Indian driving cycle with warm start. However, with effect from 1st April, 1998, the test will be as per Indian driving cycle with cold start.

2. COP standards: 20% relaxation in the standards for Carbon Monoxide and combined HC + NOx would be given.

(iii) Two-Wheelers (for all categories)

CO gms/Km 4.50

HC +NOx gms/Km 3.60

Note:

1. The test will be as per Indian driving cycle with warm start. However, with effect from 1st April, 1998, the test will be as per Indian driving cycle with cold start.

2. COP standards: 20% relaxation in the standards for Carbon Monoxide and combined HC+NOx would be given.

Annexure I

| Nominal FlowG(1/2) | Light Absorption(K(1/m)) | Nominal FlowG(1/2) | Light Absorption (K(1/m)) |
|--------------------|--------------------------|--------------------|------------------------------|
| 42 | 2.26 | 120 | 1.37 |
| 45 | 2.19 | 125 | 1.345 |
| 50 | 2.08 | 130 | 1.32 |
| 55 | 1.985 | 135 | 1.30 |
| 60 | 1.90 | 140 | 1.27 |
| 65 | 1.84 | 145 | 1.25 |
| 70 | 1.775 | 150 | 1.205 |
| 75 | 1.72 | 160 | 1.19 |
| 80 | 1.665 | 165 | 1.17 |
| 85 | 1.62 | 170 | 1.155 |
| 90 | 1.575 | 175 | 1.14 |
| 95 | 1.535 | 180 | 1.125 |
| 100 | 1.495 | 185 | 1.11 |
| 105 | 1.465 | 190 | 1.095 |
| 110 | 1.425 | 195 | 1.08 |

| (1) Passenger Cars | CO(g/kin) |
|--------------------|-----------|
| 1975-1976 | 1.0 |
| 1977-1978 | 1.0 |
| 1979-1980 | 1.0 |
| 1981-1982 | 1.0 |
| 1983-1984 | 1.0 |
| 1985-1986 | 1.0 |
| 1987-1988 | 1.0 |
| 1989-1990 | 1.0 |
| 1991-1992 | 1.0 |
| 1993-1994 | 1.0 |
| 1995-1996 | 1.0 |
| 1997-1998 | 1.0 |
| 1999-2000 | 1.0 |
| 2001-2002 | 1.0 |
| 2003-2004 | 1.0 |
| 2005-2006 | 1.0 |
| 2007-2008 | 1.0 |
| 2009-2010 | 1.0 |
| 2011-2012 | 1.0 |
| 2013-2014 | 1.0 |
| 2015-2016 | 1.0 |
| 2017-2018 | 1.0 |
| 2019-2020 | 1.0 |
| 2021-2022 | 1.0 |
| 2023-2024 | 1.0 |
| 2025-2026 | 1.0 |
| 2027-2028 | 1.0 |
| 2029-2030 | 1.0 |
| 2031-2032 | 1.0 |
| 2033-2034 | 1.0 |
| 2035-2036 | 1.0 |
| 2037-2038 | 1.0 |
| 2039-2040 | 1.0 |
| 2041-2042 | 1.0 |
| 2043-2044 | 1.0 |
| 2045-2046 | 1.0 |
| 2047-2048 | 1.0 |
| 2049-2050 | 1.0 |
| 2051-2052 | 1.0 |
| 2053-2054 | 1.0 |
| 2055-2056 | 1.0 |
| 2057-2058 | 1.0 |
| 2059-2060 | 1.0 |
| 2061-2062 | 1.0 |
| 2063-2064 | 1.0 |
| 2065-2066 | 1.0 |
| 2067-2068 | 1.0 |
| 2069-2070 | 1.0 |
| 2071-2072 | 1.0 |
| 2073-2074 | 1.0 |
| 2075-2076 | 1.0 |
| 2077-2078 | 1.0 |
| 2079-2080 | 1.0 |
| 2081-2082 | 1.0 |
| 2083-2084 | 1.0 |
| 2085-2086 | 1.0 |
| 2087-2088 | 1.0 |
| 2089-2090 | 1.0 |
| 2091-2092 | 1.0 |
| 2093-2094 | 1.0 |
| 2095-2096 | 1.0 |
| 2097-2098 | 1.0 |
| 2099-2100 | 1.0 |

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Notes.-The test shall be as per the modified Indian driving cycle, with cold start, as specified in Annexure N-B, on Chassis Dynamometer. There should be no crankcase emission. Evaporative emission should not be more than 2.0g/test. For vehicles fitted with catalytic converter, a deterioration factor of 1.2 on Type Approval Limits will be applicable for durability. Commercial fuel shall be as notified by the Ministry of Environment and Forests vide Notification No. G.S.R. 176(E), dated the 2nd April, 1996. Reference test fuel shall be as specified in Annexure IV-C.

| | 2-Wheeler | 3-Wheeler | 2-Wheeler | 3-Wheeler |
|--------------------------|-----------|-----------|-----------|-----------|
| Type Approval | 2.0 | 4.0 | 2.0 | 2.0 |
| Conformity of Production | 2.4 | 4.8 | 2.4 | 2.4 |

| Pollutants | Limits for | |
|--|---------------|--------------------------|
| | Type Approval | Conformity of Production |
| CO(g/kWh | 4.5 | 4.9 |
| HC(g/kWh) | 1.1 | 1.23 |
| NOx g/kWh | 8.0 | 9.0 |
| PM(g/k Wh) for engines with power exceeding 85kW | 0.36 | 0.4 |
| PM(g/k Wh) for engines with power exceeding 85kW | 0.36 | 0.4 |

| Pollutants | Limits for | |
|-----------------------|---------------|--------------------------|
| | Type Approval | Conformity of Production |
| CO(g/kWh | 4.5 | 4.9 |
| HC(g/kWh) | 1.1 | 1.23 |
| NO _x g/kWh | 8.0 | 9.0 |

| | | |
|--|------|------|
| PM(g/k Wh) for engines with power exceeding 85kW | 0.36 | 0.4 |
| PM(g/k Wh) for engines with power exceeding 85kW | 0.61 | 0.68 |

Or Chasis Dynamometer Test

| Reference Mass (kg) | Limits for Type Approval gm/km | Limits for conformity of Production gm/km | | | | | |
|---------------------|--------------------------------|---|------|------|--------|------|--|
| | CO | HC+NOx | PM | CO | HC+NOx | PM | |
| R \leq 250 | 2.72 | 0.97 | 0.14 | 3.16 | 1.13 | 0.18 | |
| 1250<R \leq 700 | 5.17 | 1.40 | 0.19 | 6.0 | 1.60 | 0.22 | |
| 1700<R | 6.90 | 1.70 | 0.25 | 8.0 | 2.0 | 0.29 | |

Notes.-The test for vehicles with GVW equal to or less than 3.5 ton shall be as per the 13 mode cycle on engine dynamometer specified in Annexure N-A to the principal rules. The test shall be as per the Indian driving cycle, for 2-Wheelers and 3-Wheelers and modified Indian driving cycle for 4-Wheelers with cold start, as specified in Annexure IV-B on Chassis Dynamometer. For vehicles fitted with catalytic converters a deterioration factor 1.1 of CO; 1.0 for HC+NOx and 1.2 for PM on type approval limits will be applicable for durability. The emission of visible pollutants (smoke) shall not exceed the limit value to smoke density, when expressed as light absorption co-efficient for various nominal flows as in Annexure I to rule 115(9), (Notification No. G.S.R. 163(E), dated 29th March, 1996), when tested at constant speeds over full load. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02. Commercial fuel shall be as notified by the Ministry of Environment and Forests vide Notification No. G.S.R. 176(E), dated the 2nd April, 1996. Reference test fuel shall be as specified in Annexure IV-D. [For 2-wheelers and 3-wheelers fitted with catalytic converter, the deterioration factor shall be as follows: [Inserted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).]

CO=1.1 HC+ NOx =1.0 PM=1.2:

Provided that the vehicle manufacturers may opt for an ageing test of 30,000 kms for evaluating deterioration factor, as per procedure that may be laid down by the Central Government: Provided further that the above provisions shall come into force after six months from the publication of the notification.](11)[Mass Emission Standards (Bharat Stage II):(A)Motor Cars with seating capacity of and up to 6 persons (including driver) and Gross Vehicle Mass (GVM) not exceeding 2500 kg.

Vehicles with Standards (Type Approval=(COP)(g/kin)

| | | |
|-----------------|----------|----------|
| CO | (HC+NOx) | PM |
| Gasoline engine | 2.2 | 0.5 - |
| Diesel engine | 1.0 | 0.7 0.08 |

(B)Four-Wheeler Passenger Vehicles with GVW equal to or less than 3500kg and designed to carry more than 6 persons (including driver) or maximum mass of which exceeds 2500 kg.

| Limit Values for Type Approval
(TA) as well as COP

| Class | Ref. Mass(rw) kg | Mass of CO(g/km) | Mass of HC+NOx (g/km) | Mass of PM(g/km) | | | |
|-------|------------------|------------------|-----------------------|------------------|--------|--------|--|
| | | Gasoline | Diesel | Gasoline | Diesel | Diesel | |

| | | | | | | |
|-----|--------------|-----|------|-----|-----|------|
| I | rw<1250 | 2.2 | 1.0 | 0.5 | 0.7 | 0.08 |
| II | 1250<rw<1700 | 4.0 | 1.25 | 0.6 | 1.0 | 0.12 |
| III | 1700<rw | 5.0 | 1.5 | 0.7 | 1.2 | 0.17 |

Notes:-

1. The test including driving cycle shall be as per sub-rule (10), with the modifications that:

(i)there shall be no relaxation of norms for COP purposes,(ii)the tests shall be on Chassis dynamometer,(iii)the driving cycle shall be at a maximum speed of 90 kmph, and(iv)the reference fuel shall be of a maximum of 0.05% sulphur content.

2. Commercial fuel for meeting above norms shall be up to 0.05% mass maximum sulphur content.

3. There shall be no crankcase emissions for petrol-driven vehicles.

4. Evaporative emission shall not be more than 2.0g/test from petrol-driven vehicles.

5. For the above vehicles when fitted with catalytic converter deterioration factor shall be as follows:

Gasoline engines: CO=1.2; (HC+NO_x)=1.2; Diesel engines: CO=1.1; (HC+NO_x)=1.0; PM=1.2: Provided that the vehicle manufacturers may opt for an ageing test of 80,000 laps for evaluating deterioration factor, as per procedure that may be laid down by the Central Government.

6. For diesel engine vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value to smoke density, when expressed as light absorption coefficient for various nominal flows as in Annexure I to rule 115(9) when tested at constant speeds over full load.]

(C)Four-Wheeled Vehicles (other than passenger vehicles) with GVW equal to or less than 3500 kg shall conform the following norms:Engine Dynamometer Test

Limit Values for Type Approval (TA) as well as (COP)

| CO (g/kWh) | HC (g/kwh) | NO _x (g/kWh) | PM (g/kWh) |
|------------|------------|-------------------------|------------|
| 4.0 | 1.1 | 7.0 | 0.15 |

Or Chassis Dynamometer Test

| Class | Ref. Mass (RM) Kg | Mass of CO | Mass of HC+NO _x | Mass of PM |
|-------|-------------------|------------|----------------------------|------------|
|-------|-------------------|------------|----------------------------|------------|

| | | (g/km) | (g/km) | (g/km) | | |
|-----|----------------|----------|--------|----------|--------|------|
| | RM | Gasoline | Diesel | Gasoline | Diesel | |
| I | RM ≤ 250 | 2.2 | 1.0 | 0.5 | 0.7 | 0.08 |
| II | 250 < RM ≤ 700 | 4.0 | 1.25 | 0.6 | 1.0 | 0.12 |
| III | 1700 < RM | 5.0 | 1.5 | 0.7 | 1.2 | 0.17 |

Notes:

1. (a) There shall be no relaxation for COP purposes.

(b) The tests shall be carried out on the engine dynamometer operation as specified in Annexure IV-A of the rules. The tests on Chassis dynamometer shall be as per the driving cycle given in Note of clause (B) of sub-rule (11) of rule 115. (c) The reference fuel shall be of a maximum of 0.05% mass sulphur content.

2. Commercial fuel for meeting above norms shall be up to 0.05% maximum mass sulphur content.

3. For diesel engined vehicles the emission of visible pollutants (smoke) shall not exceed the limit value to smoke density, when expressed as light absorption coefficient for various nominal flows as in Annexure I to sub-rule (9) of rule 115 when tested at constant speeds over full load. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02.

4. For diesel engined vehicles, the free acceleration smoke for naturally aspirated and turbo-charged engines shall not exceed the smoke density limit value as in clause (c) of sub-rule (2) of rule 115.]

5. There shall be no crankcase emissions for petrol engined vehicles.

6. Evaporative emission shall not be more than 2.0g/test from petrol engined vehicles.

(D) Vehicles with GVW exceeding 3500kg shall conform the following norms:

Limit Values for Type Approval (TA) as well as (COP)

| CO (g/kWh) | HC (g/kWh) | NO _x (g/kWh) | PM (g/kWh) |
|------------|------------|-------------------------|------------|
|------------|------------|-------------------------|------------|

4.0

1.1

7.0

0.15

Notes:

1. (a) There shall be no relaxation for COP purposes.

(b) The tests shall be carried out on the engine dynamometer operation as specified in Annexure IV-A of the rules. (c) The reference fuel shall be of a maximum of 0.05% mass sulphur content.

2. Commercial fuel for meeting above norms shall be up to 0.05% mass maximum sulphur content.

3. For diesel engined vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value to smoke density, when expressed as light absorption coefficient for various nominal flow as in Annexure I to sub-rule (9) of rule 115 when tested at constant speeds over full load. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02.

4. For diesel engined vehicles, the free acceleration smoke for naturally aspirated and turbo-charged engines shall not exceed the smoke density limit value as in clause (c) of sub-rule (2) of rule 115.

[Inserted by GSR 77(E), dated 31.1.2000. Brought into force in the National Capital Region w.e.f. 1.4.2000 vide GSR 77(E), dated 31.1.2000, in Mumbai (including Greater Mumbai) w.e.f. 1.1.2001) and in Calcutta and Chennai w.e.f. 1.7.2001 vide GSR 779(E), dated 29.8.2000.]

Inserted by GSR 286(E), dated 24.4.2001 published in the Gazette of India, dated 24.4.2001, Extraordinary, Part II, Section 3(i), Serial No. 198. In the National Capital Territory of Delhi in respect of Vehicles manufactured on or after six months from the date of publication in the Official Gazette, i.e., 24.4.2001 and in respect of the 'Four-Wheeled Transport Vehicles' which are playing on Inter-State Permits or on National Permits or on All India Tourist Permits within the jurisdiction of National Capital Territory of Delhi, and in respect of any Vehicles in other areas of country, from such date as the Central Government may, by notification appoint in the Official Gazette, and different dates may be appointed for different areas.

(12) [Mass emission standards (Bharat Stage II) for two-wheeler and three-wheeler manufactured on and from 1st April, 2005 shall be as follows, namely: Table

| Vehicle Category | Pollutants | TA = COP Norms g/km | TA = COPD.F.(*) |
|---------------------|------------|---------------------|-----------------|
| (1) | (2) | (3) | (4) |
| Two-wheeler(Petrol) | CO | 1.50 | 1.2 |

| | | | |
|--|------|------|-----|
| HC+NOx | 1.50 | 1.2 | |
| Three-wheeler (Petrol) | CO | 2.25 | 1.2 |
| HC+NOx | 2.00 | 1.2 | |
| Two-wheeler and three-wheeler (Diesel) | CO | 1.00 | 1.1 |
| HC+NOx | 0.85 | 1.0 | |
| PM | 0.10 | 1.2 | |

Deterioration Factor, see para (c) below.(a)The test shall be as per the Indian Driving Cycle with cold start on chassis dynamometer as specified in the Table given below by testing agencies, namely:Table

| Test Cell Conditions | Petrol two-wheeler and three-wheeler | Diesel two-wheeler and three-wheeler |
|-------------------------------------|---|---|
| (1) | (2) | (3) |
| Soak Temperature | 20-30° C | 20-30° C |
| Soak period | 6-30 hours | 6-30 hours |
| Preparatory running before sampling | Idling of 40 seconds and 4 cycles | Idling of 40 seconds |
| No. of test cycles | 6 | 6 |
| Breakdown of cycles | Indian Driving Cycle as per Annexure II to principal rule | Indian Driving Cycle as per Annexure II to principal rule |

(b)Reference fuel for testing shall be in line with that in the ECE;(c)(i)For all types of two-wheeler and three-wheeler petrol vehicles, a deterioration factor as specified in column (4) in the Table in this sub-rule shall be applicable for durability:Provided that the vehicle manufacturer may opt for an ageing test of 30,000 kins for evaluating deterioration factor, as per procedure that may be laid down by the Central Government from time to time;(ii)For all types of two-wheeler and three-wheeler diesel vehicles, a deterioration factor as specified in column (4) in the Table in this sub-rule shall be applicable for durability:Provided that the vehicle manufacturer may opt for an ageing test of 30,000kins for evaluating deterioration factor, as per procedure that may be laid down by the Central Government from time to time;(d)For diesel engine vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value to smoke density, when expressed as light absorption co-efficient for various nominal flow as indicated in Annexure I to sub-rule (9) of rule 115 when tested at constant speed over full load;(e)COP frequency and samples:

| Sl.No | Type of Vehicle | . Annual Production | COP Frequency | |
|-------|-------------------------------|---------------------|---------------------|---------------------|
| No. | | Exceeding | Up to | |
| (1) | (2) | (3) | (4) | (5) |
| 1. | Two-wheeler and three-wheeler | 250 per 6 months | 10000 per year | Once every year |
| 2. | Two-wheeler | 10000 per year | 150000 per 6 months | Once every 6 months |
| 3. | Two-wheeler | 150000 per 6 months | - | Once every 3 months |

| | | | | |
|----|---------------|----------------------|--------------------|---------------------|
| 4. | Three-wheeler | 1000 per year | 75000 per 6 months | Once every 6 months |
| 5. | Three-wheeler | 75000 per 6 months - | | Once every 3 months |

For production volumes of less than 250 per 6 months the method as prescribed in the proviso to rule 126-A shall apply; (f) Testing procedures shall be in accordance with the reference document MOST/CMVR/TAP-115/116 as amended from time to time by the Government of India in the Ministry of Road Transport and Highways:][Provided that Mass Emission Standards (Bharat Stage II) for diesel driven two-wheeler and three-wheeler shall come into force on the dates specified against each of the States in Table below:Table

| SI.No | State | Date |
|-------|---|---------------------|
| (1) | (2) | (3) |
| 1. | Rajasthan | 1st June, 2005 |
| 2. | Uttar Pradesh, Mathura, Kannauj, Muzaffarnagar, Aligarh, Farukhabad, Saharanpur, Badaun, Barreilly, Moradabad, Hathras, Rampur, Bijnor, Agra, Pilibhit, J.P. Nagar, Mainpuri, Lalitpur, Hardoi, Firozabad, Jhansi, Shahjahanpur, Etawah, Jalon, Lakhimpur Kheri, Etah, Mahoba and Sitapur | 1st June, 2005 |
| 3. | Uttaranchal | 1st July, 2005 |
| 4. | Madhya Pradesh | 1st September, 2005 |
| 5. | Himachal Pradesh | 1st October, 2005 |
| 6. | Jammu and Kashmir | 1st October, 2005 |
| 7. | Punjab | 1st October, 2005] |

[Inserted by GSR 200(E), dated 1.4.2005 (w.e.f. 1.4.2005).](13) [Without prejudice to the provisions contained in clause (a) of sub-rule (2) of rule 1 of the Central Motor Vehicles (3rd Amendment) Rules, 2000 and clause (a) of sub-rule (ii) of rule I of the Central Motor Vehicles (2nd Amendment) Rules, 2001, notifications number S.O. 779(E), dated 29th August, 2000 and number S.O. 90(E), dated 27th January, 2003, issued under clause (b) of sub-rule (2) of rule 1 of the Central Motor Vehicles (3rd Amendment) Rules, 2000, notifications number S.O. 731(E), dated 21st July, 2001, number S.O. 801(E), dated 26th July, 2002 and number S.O. 940(E), dated 4th September, 2002, issued under clause (b) of sub-rule (ii) of rule 1 of the Central Motor Vehicles (2nd Amendment) Rules, 2001 and notification number S.O. 91(E), dated 27th January, 2003, issued under clause (b) of sub-rule (2) of rule 1 of the Central Motor Vehicles (3rd Amendment) Rules, 2000 and clause (b) of sub-rule (ii) of rule 1 of the Central Motor Vehicles (2nd Amendment) Rules, 2001, the provisions of sub-rule (11-) shall, in respect of four-wheeled vehicles manufactured on and from the 1st April, 2005, come into force in all States and Union Territories on the 1st day of April, 2005:] [Inserted by GSR 927(E), dated 5.12.2003.][Provided that provisions of sub-rule (11) shall, in respect of four-wheeled vehicles to be registered in Sholapur and Lucknow, come into force in Sholapur and Lucknow from the 1st June, 2004:Provided further that the above said provision

shall not apply in respect of four-wheeled transport vehicles plying from Sholapur to other parts of the State of Maharashtra or from Lucknow to the other parts of the State of Uttar Pradesh; or on inter-State or National Permit or on the All India Tourist Permit, within the territorial jurisdiction of the said cities:] [Inserted by GSR 200(E), dated 18.3.2004 (w.e.f. 1.6.2004).][Provided that Mass Emission Standards (Bharat Stage II) for diesel driven four wheeled vehicles shall come into force on the dates specified against each of the States in Table below :Table

| SI.No | State | Date |
|-------|---|--------------------|
| (1) | (2) | (3) |
| 1. | Rajasthan | 1stJune, 2005 |
| 2. | Uttar Pradesh, Mathura, Kannauj, Muzaffamagar, Aligarh, Farukkabad, Saharanpur, Badaun, Barreily, Moradabad, Hathras, Rampur, Bijnor, Agra, Pilibhi.t, J.P.Nagar, Mainpuri, Lalitpur, Hardoi, Firozabad, Jhansi, Shahjahanpur, Etawah, Jalon, Lakhimpur Kheri, Etah, Mahoba and Sitapur | 1stJune, 2005 |
| 3. | Uttaranchal | 1stJuly, 2005 |
| 4. | Madhya Pradesh | 1stSeptember, 2005 |
| 5. | Himachal Pradesh | 1stOctober, 2005 |
| 6. | Jammu and Kashmir | 1stOctober, 2005 |
| 7. | Punjab | 1stOctober, 2005] |

[Inserted by GSR 200(E), dated 1.4.2005 (w.e.f. 1.4.2005).](14)Mass Emission Standards (Bharat Stage III).-The Mass Emission Standards for Bharat Stage III shall be as under:(A)Motor cars with seating capacity of and up to six persons (including driver) and Gross Vehicle Weight not exceeding 2500 kg.

Vehicles with Limit Values for Type Approval (TA) as well as COP (g/km)

| CO | HC | NOx | HC+NOx | PM |
|---------------|------|------|--------|-----------|
| Gasoline | 2.30 | 0.20 | 0.15 | -- -- |
| Diesel engine | 0.64 | -- | 0.50 | 0.56 0.05 |

(B)Four-Wheeler Passenger Vehicles with Gross Vehicle Weight equal to or less than 3500 kg and designed to carry more than six persons (including driver) or 3000 kg.and(C)Four-wheeled Vehicle (other than passenger vehicles) with Gross Vehicle Weight equal to or less than 3500 kg. shall conform.to the following norms:

| Limit
Values
for Type
Approval
(TA) as
well as
COP
(g/km)

| CO | HC | NOx | HC+NOx | PM | | | | | | |
|-------|-----------------------|----------|--------|----------|--------|----------|--------|----------|--------|--------|
| Class | Ref.Mass(rw)kg | Gasoline | Diesel | Gasoline | Diesel | Gasoline | Diesel | Gasoline | Diesel | Diesel |
| I | $rw \leq 1305$ | 2.30 | 0.64 | 0.20 | -- | 0.15 | 0.50 | -- | 0.56 | 0.05 |
| II | $1305 < rw \leq 1760$ | 4.17 | 0.80 | 0.25 | -- | 0.18 | 0.65 | -- | 0.72 | 0.07 |
| III | $1760 < rw$ | 5.22 | 0.95 | 0.29 | -- | 0.21 | 0.78 | -- | 0.86 | 0.10 |

Notes.-

1. The test shall be on Chassis Dynamometer.

2. The test including driving cycle shall be as per sub-rule (10), with the modifications that

(i)the exhaust gas sampling should start at the initiation of the engine start up procedure (refer Annexure IV-E);(ii)the driving cycle shall be at a maximum speed of 90 kmph (refer Annexure IV-E for the detailed cycle).

3. There shall be no relaxation of norms for COP purposes.

4. In case of vehicles operating on CNG or LPG all the provisions prescribed in rules 115-B and 115-C shall be applicable except that the norms to be complied with shall be as per these rules.

5. The reference fuel shall be as specified in Annexure IV-F, Annexure IV-G, Annexure IV H and Annexure IVI for diesel, petrol, LPG and CNG, respectively.

6. There shall be no crankcase emissions for petrol driven vehicles.

7. Evaporative emission shall not be more than 2.0 g/test from petrol-driven vehicles. The Evaporative Emission test procedure for vehicles with positive-ignition engines shall be as described in Annexure VI of European Economic Community (EEC) Directive 70/220/EEC last amended by 98/69/EC.

8. The Conformity of Production (COP) testing procedure shall be as described in section 7 of Annexure I of EEC Directive 70/220/EEC (Refer Appendix I or Appendix 2 as applicable) last amended by 98/69/EC.

9. The COP frequency and samples:

(i)The COP period for each vehicle model including its variants shall be once in a year.(ii)For production volume of less than 250 for six months, the method as prescribed in the provisos to rule 126-A shall apply.

10. The vehicles meeting the above norms shall use commercial fuel as per BIS specification IS:1460-2000 (Amendment No. I-January, 2003) (Fourth Revision) for Diesel and IS:2796-2000 (Amendment No. II-February, 2003) (Third Revision) for Gasoline.

11. For the vehicles described in clauses (A), (B) and (C) of this sub-rule, deterioration factor shall be as given below:

| Engine category | Deterioration factors | | | | |
|---------------------|-----------------------|----|-----|--------|---------|
| | CO | HC | NOx | HC+NOx | PM |
| Gasoline/Gas Engine | 1.2 | | 1.2 | 1.2 | -- -- |
| Diesel Engine | 1.1 | | | 1.0 | 1.0 1.2 |

(i)Alternatively, the vehicle manufacturers may opt for an ageing test of 80,000 kms for evaluating deterioration factor, as described in Annexure VII of European Economic Community Directive 70/220/EEC last amended by 98/69/EC with the following exceptions:(a)The maximum lap speed at 10th lap will be 72 km/h(b)The maximum lap speed at 11th lap will be 90 km/h(ii)The above ageing test should be carried out by the approved test agency.

12. For diesel vehicles, the emission of visible pollutants (smoke) shall not exceed the limit-value to smoke density, when expressed as light absorption co-efficient for various nominal flows as given in Annexure I of sub-rule (9) when tested at constant speeds over full load. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02.

13. In case of diesel vehicles, the engine power shall be measured on engine dynamometer and the measured power shall not differ from the specified power as given below:

(i)For Type approval: $\pm 5\%$ at maximum power point and $\pm 10\%$ at other measurement points for single cylinder engines. $\pm 2\%$ at maximum power point and $\pm 6\%$, and $\pm 2\%$ at other measurement points for all other engines.(ii)Testing procedures shall be in accordance with Chapter 6 of Part IV of the reference document MOST/CMVR/TAP-115/116 as amended from time to time by the Government of India in the Ministry of Shipping, Road Transport and Highways.

14. The vehicles described in clauses (A), (B) and (C) of this sub-rule should comply with rule 115(2).

(D) Diesel vehicles with GVW exceeding 3500 kg. shall conform to the following norms:

Limit Values for Type
Approval (TA) as well as
(COP)

| Engine Steady State Cycle (ESC) test | Engine Load Response (ELR) test | | | |
|---|------------------------------------|------------|--------------|---------------|
| CO(g/kWh) | HC(g/kWh) | NOx(g/kWh) | PM(g/kWh)(2) | Smoke(m-1)(2) |
| 2.1 | 0.66 | 5.0 | 0.10/0.13(1) | 0.8 |

(1) For engines having swept volume of less than 0.75 litre per cylinder and a rated power speed of more than 3000 rpm. (2) For diesel engines only. Notes.

1. The test shall be on engine dynamometer.

2. There shall be no relaxation of norms for COP purposes.

3. The gaseous and particulate emissions are to be determined on the ESC test as described in EEC document 1999/96/EC.

4. The smoke opacity is to be determined on the ELR test as described in EEC document 1999/96/EC.

5. In case of vehicles operating on CNG or LPG mode all the provisions prescribed in rules 115-B and 115-C shall be respectively applicable, except that limiting value shall be as per clause (D) above.

6. The reference fuel shall be as specified in Annexure IV-F, Annexure IV-H and Annexure N-I for diesel, LPG and CNG, respectively.

7. The Conformity of Production (COP) testing procedure shall be as described in section 9 of Annexure I of EEC Directive 88/77/EEC last amended by 1999/96/EC.

8. The COP frequency and samples:

(i) The COP period for each engine model including its variants shall be once in a year. (ii) For production volume of less than 250 for six months, the method as prescribed in the provisions to rule

126-A shall apply.

9. For diesel engine vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value of smoke density, as per Annexure I to rule 115(9). These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02.

10. The vehicles meeting the above norms shall use commercial fuel as per BIS specification IS:1460-2000 (Amendment No. I-January, 2003) (Fourth Revision) for Diesel and IS:2796-2000 (Amendment No. II-February, 2003) (Third Revision) for Gasoline.,

11. In case of diesel vehicles, the engine power shall be measured on engine dynamometer and the measured power shall not differ from the specified power as given below:

(i) For Type approval: +2% at maximum power point and +6% and $\pm 2\%$ at other measurement points. (ii) For conformity of production: $\pm 5\%$ / +8% at maximum power point. (iii) Testing procedures shall be in accordance with Chapter 6 of Part IV of the reference document MOST/CMVR/TAP-115/116 as amended from time to time by the Government of India in the Ministry of Shipping, Road Transport and Highways.

12. The vehicles mentioned in clause (D) shall also comply with rule 115(2).]

(E) Diesel vehicles with GVW exceeding 3500 kg. and fitted with advanced exhaust after treatment system including De-NOx catalyst and/or particulate trap shall additionally conform to the following norms:

Limit Values for Type Approval (TA) as well as (COP)

Engine Transient Cycle (ETC)

| CO (g/kWh) | HC (g/kWh) | NOx (g/kWh) | PM (g/kWh) |
|------------|------------|-------------|--------------|
| 5.45 | 0.78 | 5.0 | 0.16/0.21(3) |

(3) For engines having swept volume of less than 0.75 litre per cylinder and rated power speed of more than 3000 rpm. Notes.-

1. The test shall be on engine dynamometer.

2. There shall be no relaxation for COP purposes.

3. The gaseous and particulate emissions are to be determined on the ETC test as described in EEC document 1999/96/EC and comply with the norms given above.

4. In addition, the gaseous and particulate emissions are to be determined on the ESC test as described in EEC document 1999/96/EC and meet the prescribed gaseous and particulate emissions norms as given in clause (D).

5. In addition, the smoke opacity is to be determined on the ELR test as described in EEC document 1999/96/EC and meet the prescribed smoke density norms as given in clause (D).

6. The reference fuel shall be as specified in Annexure N-F.

7. The Conformity of Production (COP) testing procedure shall be as described in section 9 of Annexure I of EEC Directive 88/77/EEC last amended by 1999/96/EC.

(8)The COP frequency and samples:(i)The COP period for each engine model including its variants shall be once in a year.,(ii)For production volume of less than 250 for six months, the method as prescribed in the provisos to rule 126-A shall apply.(9)For diesel engine vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value of smoke density, as per Annexure I to rule 115(9). These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02.

10. The vehicles meeting the above norms shall use commercial fuel as per BIS specification IS:1460-2000 (Amendment No. I-January, 2003) (Fourth Revision) for Diesel.

11. In case of diesel vehicles, the engine power shall be measured on engine dynamometer and the measured power shall meet the requirements as given below:

(i)For Type approval:±2% at maximum power point and +6% and -2% at other measurement points.(ii)For conformity of production: ±5%/+8% at maximum power point.(iii)Testing procedures shall be in accordance with Chapter 6 of Part IV of the reference document MOST/CMVR/TAP-115/116 as amended from time to time by the Government of India in the Ministry of Shipping, Road Transport and Highways.

12. The vehicles mentioned in clause (E) shall also comply with rule 115(2).

[Inserted by GSR 720(E), dated 10.9.2003.]

Inserted by GSR 686(E), dated 20.10.2004. Brought into force- (a) in the National Capital Region and the cities of Mumbai, Kolkata, Chennai, Bangalore, Hyderabad including Secunderabad, Ahmedabad, Pune, Surat, Kanpur and Agra in respect of four-wheeled vehicles manufactured on and from 1st April 2005, except in respect of four-wheeled transport vehicles playing on Inter-State Permits or National Permits or All India Tourist Permits within the jurisdiction of these cities; and (b) in other areas of the country, from such date as may be notified by the Central Government. Here 'National Capital Region' shall have the same meaning as assigned to it in clause (f) of section 2 of the National Capital Region Planning Board Act, 1985 (2 of 1985).

(F)[Mass Emission Standards (Bharat Stage III) as specified in sub-clause (iii) shall be applicable in the National Capital Region and the cities of Mumbai, Kolkata, Chennai, Bangalore, Hyderabad including Secunderabad, Ahmedabad, Pune, Surat, Kanpur, Agra, Sholapur and Lucknow in respect of two and three wheeler vehicles manufactured on or after 1st April, 2010.: [Substituted by G.S.R. 443 (E), dated 21.5.2010.](ii)the Mass Emission Standards (Bharat Stage-III) as specified in sub clause (iii) shall be applicable in all the States and the Union Territories except* National Capital Region and the cities of Mumbai, Kolkata, Chennai, Bangalore, Hyderabad including Secunderabad, Ahmedabad, Pune, Surat, Kanpur, Agra, Solahpur and Lucknow in respect of two and three wheeler vehicles manufactured on or after 1st October, 2010.(iii)the Mass Emission Standards (Bharat Stage-III) for two and three wheeler vehicles shall be as under :-]

| Vehicle Category | Pollutants | T A=COP norms(g/km) | (Deterioration Factor) |
|--|-------------------------|---------------------|------------------------|
| (1) | (2) | (3) | (4) |
| Two-wheelers(Gasoline) | COHC+NO _x | 1.01.0 | 1.21.2 |
| Three-wheelers(Gasoline) | COHC+NO _x | 1.251.25 | 1.21.2 |
| Two-wheelers and Three-wheelers (Diesel) | COHC+NO _x PM | 0.500.500.50 | 1.11.01.2 |

Notes.-

1. (a) For vehicles operating on CNG mode, the provisions of rule 115-B shall be applicable.

(b)For vehicles operating on LPG mode, the provisions of rule 115-C shall be applicable.

2. The reference fuel for Diesel and Gasoline vehicle shall be as specified in Annexure IV-F and Annexure IV-G respectively and reference fuel for CNG and LPG shall be as available commercially.

3. The commercial fuel for Gasoline and Diesel vehicle shall be as per BIS Specification IS: 1460-2005 (Fifth revision) for Diesel and IS: 2796-2008 (Amendment No. I-January, 2008) (Forth Revision) for Gasoline, Specification for Commercial CNG and LPG shall be as notified from time to time.

4. The provisions of clauses (a), (c), (d), (e) and (f) of sub-rule (12) of rule 115, except the proviso therein, shall be applicable to the said vehicles.

5. In case of diesel vehicles, the engine power shall be measured on engine dynamometer and the measured power shall conform to the power specified in Chapter 1 of Part IV of MoSRTTH/CMVR/TAP-115/116 as amended from time to time, when tested as per the procedures laid down in Chapter 6 of Part IV of MoSRTTH/CMVRIT AP - 115/116 as amended from time to time

6.

(i) Gasoline/CNG/LPG vehicles specified herein shall comply with the provisions of clause (i) of sub-rule (2) of rule 115.(FA)[Alternate Mass Emission Standards (Bharat Stage III) for two wheeler gasoline vehicles, with engine capacity exceeding 50cc or a maximum design speed exceeding 50 km/hour, based on Worldwide Harmonised Motorcycle Emissions Certification (WMTC) Procedure shall be as under:-

| Class | Pollutants TA= COP norms Including Deterioration Factor (g/km) | |
|------------------------|--|------|
| (1) | (2) | (3) |
| Class1 andSubClass 2.1 | Co | 1.87 |
| HC+NOx | | 1.08 |
| SubClass 2.2 | CO | 2.62 |
| HC+NOx | | 0.92 |
| SubClass 3.1 | CO | 2.62 |
| HC+NOx | | 0.55 |
| SubClass 3.2 | CO | 2.62 |
| HC+Nox | | 0.55 |

Explanatory Notes:-For the purpose of this clause,-

1. Classification of vehicles and weighting factor for final emission result shall be as given below:-

Definition ofClass

Cycles

Weightingfactors
for final

| | | | emission results |
|--------------|---|---|--|
| Class1 | Engine capacity above 50 CC but less than 150 cc and vehicle maximum speed equal or less than 50 km/h or engine capacity less than 150 CC and vehicle maximum speed more than 50 km/h but less than 100 km/h. | Part 1 Reduced Speed cold followed by Part 1 Reduced Speed Hot | Part 1 Reduced Speed cold shall be 50% and Part 1 reduced Speed Hot shall be 50% |
| SubClass 2.1 | Engine capacity less than 150 cc and vehicle maximum speed equal to or more than 100 km/h but less than 115 km/h or engine capacity 150 cc and above and vehicle maximum speed less than 115 km/h | Part 1 Reduced Speed cold followed by Part 1 reduced Speed Hot | Part Reduced Speed cold shall be 50% and part 1 reduced Speed Hot shall be 50% |
| SubClass 2.2 | Any engine capacity and vehicle maximum speed equal to or more than 115 km/h but less than 130 km/h | Part 1 cold followed by Part 2 Hot | Part 1 cold shall be 30% and Part 2 Hot shall be 70% |
| SubClass 3.1 | Any engine capacity, vehicle maximum speed equal to or more than 130 km/h but less than 140 km/h | Part 1 cold followed by Part 2 Hot followed by Part 3 Reduced Speed | Part 1 cold shall be 25% Part 2 Hot Shall be 50% and Part 3 Reduced shall be 25% |
| SubClass 3.2 | Any engine capacity and vehicle maximum speed equal to or more than 140 km/h | Part 1 cold followed by Part 2 Hot followed by Part 3 | Part 1 Cold shall be 25% Part 2 Hot shall be 50% and Part 3 shall be 25% |

2. The test procedure and driving cycles shall be as per United Nations Economic Commission for Europe (UNECE) Global Technical Regulation (GTR)- 2 incorporating Amendment 2, with preconditioning, soaking and cold start on chassis dynamometer as specified above.

3. Vehicle preconditioning: Operated through the cycles prescribed as above.

- 4. Vehicle soaking: The vehicle shall be stored for not less than six hours and not more than thirty-six hours prior to the cold start Type I test or until the engine oil temperature (T_o) or the coolant temperature (T_e) or the spark plug seat/ gasket temperature (T_p), only for air cooled engine, equals the air temperature of the soak area.**
- 5. Preparatory running before sampling is not required, sampling starts at $T=0$ second.**
- 6. Break down of different parts of Worldwide Harmonised Motorcycle Emissions Certification (WMfC) shall be as per the details given in Annexure 5 of Chapter XIII A of Ministry of Road Transport and Highways/Central Motor Vehicles Rules/Type Approval Procedure-115/116 (MoRTH/CMVR/TAP-115/116).**
- 7. Reference fuel shall be as specified in Annexure IV-G of the said rules.**
- 8. Requirements of durability have been built in the mass emission standards specified above.**
- 9. Conformity of Production (COP) frequency and sampling shall be as per clause (e) of sub-rule 12 of rule 115 of the said rules.**
- 10. Test procedure shall be in accordance with Ministry of Road Transport and Highways/Central Motor Vehicles Rules/Type Approval Procedure-115/116 (MoRTH/CMVR/TAP-115/116).**
- 11. The vehicles shall comply with the provisions of clause (i) of sub-rule (2) of rule 115 of the said rules.**
- 12. The commercial fuel for gasoline vehicle shall be as per Bureau of Indian Standards specification IS: 2796-2008 for gasoline.]**

(ii) Diesel vehicles specified herein shall comply with clause (ii) of sub-rule (2) of rule 115.(G)[The provisions of this sub-rule in respect of four wheeler vehicles manufactured on and from the 1st October, 2010 shall apply to all the State and the Union Territories except* National Capital Region and the cities of Mumbai, Kolkata, Chennai, Bangalore, Hyderabad including Secunderabad, Ahmedabad, Pune, Surat, Kanpur, Agra, Sholapur and Lucknow.] [Substituted by G.S.R. 443 (E), dated 21.5.2010](15)Mass Emission Standards (Bharat Stage IV) for M and N Category

vehicles:- (a) the Mass Emission Standards for Bharat Stage IV shall come into force in the National Capital Region and the cities of Mumbai, Kolkata, Chennai, Bangalore, Hyderabad including Secunderabad, Ahmedabad, Pune, Surat, Kanpur and Agra in respect of four-wheeled vehicle manufactured on or after the 1st April, 2010, except the four-wheeled transport vehicles plying on Inter-State permits or National permits or All India Tourist permits, within the jurisdiction of these cities. [Provided that the Mass Emission Standards (Bharat Stage-IV) shall be applicable in the cities of Sholapur and Lucknow in respect of four wheeler vehicles manufactured on or after 1st June, 2010 except the four wheeler transport vehicles plying on Inter-State Permits or National Permits or All India Tourist Permits, within the jurisdiction of the said cities] [Inserted by G.S.R. 443(E), dated 21.5.2010.] Explanation. - For the purposes of sub-rules (14) and (15), the "National Capital Region" shall have the same meaning as assigned to it in clause (J) of section 2 of the National Capital Region Planning Board Act, 1985 (2 of 1985); (aa) [without prejudice to the provisions contained in the provisos to clause (a), the Mass Emission Standards for Bharat Stage IV shall come into force all over the country in respect of four wheeled vehicles manufactured on or after the 1st April, 2017.] [Inserted by Notification No. G.S.R. 643(E), dated 19.8.2015 (w.e.f. 2.6.1989).] (b) the Mass Emission Standards for Bharat Stage IV shall be as under:- (i) the mass emission standards for Bharat Stage-IV, Category M and Category N vehicles manufactured on or after the 1st April, 2010, with Gross Vehicle Weight not exceeding 3,500 kg, shall be as under; Limit Values for TA and COP

| Category | Class | Reference Mass (RW) (kg) | Mass of Carbon Monoxide (CO) (g/km) | Mass of Hydro Carbon (HC) (g/km) | Mass of Oxides of Nitrogen (NOx) (g/km) | Combined mass of Hydro-carbons and Oxides of Nitrogen (HC+NOx) (g/km) | Mass of Particulates (PM) (g/km) | |
|------------|-------|--------------------------|-------------------------------------|----------------------------------|---|---|----------------------------------|------|
| | | | Gasoline | Diesel | Gasoline | Gasoline | Diesel | |
| M* | - | All | 1.00 | 0.50 | 0.10 | 0.08 | 0.25 | 0.30 |
| N1 and M** | I | $RW \leq 305$ | 1.00 | 0.50 | 0.10 | 0.08 | 0.25 | 0.30 |
| II | | $1305 < RW \leq 760$ | 1.81 | 0.63 | 0.13 | 0.10 | 0.33 | 0.04 |
| III | | $1760 < RW$ | 2.27 | 0.74 | 0.16 | 0.11 | 0.39 | 0.06 |

*These limits are not applicable for vehicles designed to carry more than six persons including driver or vehicles whose gross vehicle weight exceeds 2,500 kg. **These limits are applicable for vehicles designed to carry more than six persons including driver or vehicles whose gross vehicle weight exceeds 2,500 kg. Notes.-

1. The test shall be on Chassis Dynamometer.

2. The test including driving cycle shall be as provided in sub-rule (10) with the modifications that

(i)The exhaust gas sampling should start at the initiation of the engine start up procedure referred to in Annexure IV-E.(ii)The driving cycle shall be at a maximum speed of 90 km/hour referred to in Annexure IV-E.

3. There shall be no relaxation of norms for Conformity of Production (COP) purposes.

4.

(i)In case of vehicles operating on CNG, the provisions in rule 115-B shall be applicable.(ii)In case of vehicles operating on LPG, the provisions in rule 115-C shall be applicable.

5. The reference fuel shall be as specified in Annexure IV-J for Gasoline vehicles, Annexure IV-K for Diesel vehicles, Annexure IV-L for CNG (G20 and G25) vehicles and Annexure IV-M for LPG (Fuel A and Fuel B) vehicles respectively. Reference Fuel as per Annexure IV-L and IV-M shall be used for Type Approval and Conformity of Production one year after the same is available to the test agencies. Till then, Commercial CNG/LPG fuel shall be used.

6. There shall be no crankcase emissions for Gasoline driven vehicles.

7. Evaporative emission shall not be more than 2.0 g/test from Gasoline driven vehicles. The evaporative emission test procedure for gasoline driven vehicles shall be as per the procedure specified in MoSRTTH/CMVR/TAP-115/116 and as amended from time to time.

8. The Conformity of Production (COP) testing procedure shall be as described in MoSRTTH/CMVR/TAP-115/116 as amended from time to time.

9. The COP frequency and samples:

(i)The Conformity of Production period for each vehicle model including its variant(s) shall be once in a year;(ii)Where production volume in six months is less than 250 per model including its variants, the provisions contained in the provisos to rule 126-A shall apply.

10. The commercial Gasoline and Diesel fuel shall be as per Annexure IV-N and IV-O in respect of the places mentioned in clause (a) of this sub-rule and in respect of all other places, the commercial fuel shall be Bharat Stage-III as per BIS specification IS : 1460-2005 (fifth revision) for Diesel and IS : 2796-2008 (Amendment No. 1, January 2008) (forth revision) for Gasoline Specification for commercial CNG and LPG shall be as notified from time to time.

11. For the vehicles of the Category M and Category N with Gross Vehicle Weight not. exceeding 3,500 kg.

(i)Deterioration factor shall be as given below :

| Engine Category | Deterioration Factor | | | | |
|---------------------------------|----------------------|-----------------|--------------------|----------------|-----|
| CO | HC | NO _x | HC+NO _x | PM | |
| Gasoline/Gaseous Fueled engines | 1.2 | 1.2 | 1.2 | Not applicable | |
| Diesel Engines | 1.1 | Not applicable | 1.0 | 1.0 | 1.2 |

(ii)Alternatively, the vehicle manufacturers may opt for an ageing test of 80,000 km for evaluating deterioration factor as per MoSRTTH/CMVR/TAP-115/116 and as amended from time to time.(iii)The maximum lap speed at 10th lap and at 11th lap shall be 72 km/hour and 90 km/hour respectively.(iv)The above ageing test should be carried out by the approved test agency specified in rule 126.

12. For Diesel Vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value of smoke density, when expressed as light absorption co-efficient for various nominal flows as given in Annexure I to sub-rule (9) of rule 115 when tested at constant speeds over the full load. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor at 0.98 to 1.02.

13. In the case of Diesel vehicles, the engine power shall be measured on engine dynamometer and the measured power shall conform to the power specified in Chapter 1 of Part IV of MoSRTTH/CMVR/TAP-115/116 as amended from time to time, when tested as per the procedures laid down in Chapter 6 of Part IV of MoSRTTH/CMVR/TAP -115/116 as amended from time to time.

14.

(i) All Gasoline/CNG/LPG vehicles specified in this sub-clause shall comply with the provisions of clause (i) of sub-rule (2) of rule 115. (ii) All Diesel Fueled Vehicles specified in this sub-clause shall comply with the provisions of clause (ii) of sub-rule (2) of rule 115.

15. The vehicles of the Category M and Category N with Gross Vehicle Weight not exceeding 3,500 kg: shall be equipped with On-Board Diagnostic (OBD) systems for emission control which shall have the capability of identifying the likely area of malfunction by means of fault codes stored in computer memory for vehicles manufactured on and from 1st April 2010 as per the procedure laid down in MoSRTTH/CMVR/TAP-115/116 and as amended from time to time. The On-Board Diagnostic (OBD) systems for emission control shall be as specified in the Tables below:

TABLE I On-Board Diagnostic(OBD) systems for emission control:

| Sl.No. | Engine Type | Category of Vehicles | Year | |
|--|---|------------------------------------|----------------|----------------|
| OBD I Vehicles manufactured on and from | OBD II vehicles manufactured on and from | | | |
| 1. | Gasoline Fueled Engines | M1 and M2 (less than 3,500 kg GVW) | 1st April 2010 | 1st April 2013 |
| 2. | Gasoline Fueled Engines | N1 | 1st April 2010 | 1st April 2013 |
| 3. | LPG or CNG fueled Engines | M1 and M2 (less than 3,500 kg GVW) | - | 1st April 2013 |
| 4. | LPG or CNG fueled Engines | N1 | - | 1st April 2013 |
| 5. | Compression Ignition Engines | M1 and M2 (less than 3,500 kg GVW) | 1st April 2010 | 1st April 2013 |
| 6. | Compression Ignition Engines | N1 | 1st April 2010 | 1st April 2013 |
| 7. | All | Vehicles above 3,500 kg GVW | - | 1st April 2013 |

TABLE II All Positive Ignition Vehicles OBD Monitoring Items

| Monitoring Items | OBD I Vehicles manufactured on and from | OBD II vehicles manufactured on and from |
|------------------|---|--|
| Catalyst | - | 1st April 2013 |
| Misfire | - | 1st April 2013 |

| | | |
|--|---------------|---------------|
| O(Oxygen) sensor | 1stApril 2010 | 1stApril 2013 |
| Secondary Air system (if provided) | 1stApril 2010 | 1stApril 2013 |
| Coolant temperature | 1stApril 2010 | 1stApril 2013 |
| EGR, (Exhaust Gas Recirculation) (if provided) | 1stApril 2010 | 1stApril 2013 |
| Fuel tank leakage and evaporation | - | 1stApril 2013 |
| Fuel system | - | 1stApril 2013 |
| Emission Control systems/components(Comprehensive Components) | 1stApril 2010 | 1stApril 2013 |
| Circuit continuity for all emission related power train components | 1stApril 2010 | 1stApril 2013 |
| Distance traveled since MIL (Malfunction Indicator Lamp) ON | 1stApril 2010 | 1stApril 2013 |

TABLE IIIAll Compression Ignition VehiclesOBD Monitoring Items

| Monitoring Items | OBD I Vehicles manufactured on and from | OBD II vehicles manufactured on and from |
|--|---|--|
| Catalyst | - | 1stApril 2013 |
| Electronic fuel Injection system | 1stApril 2010 | 1stApril 2013 |
| Particulate Trap (if provided) | - | 1stApril 2013 |
| Coolant temperature | 1stApril 2010 | 1stApril 2013 |
| EGR, (Exhaust Gas Recirculation) (if provided) | 1stApril 2010 | 1stApril 2013 |
| Fuel system | - | 1stApril 2013 |
| Emission Control systems/components(Comprehensive Components) | 1stApril 2010 | 1stApril 2013 |
| Circuit continuity for all emission related power train components | 1stApril 2010 | 1stApril 2013 |
| Distance travelled since MIL (Malfunction Indicator Lamp) ON | 1stApril 2010 | 1stApril 2013 |

16. For vehicles manufactured on and from 1st April 2013, the On-Board Diagnostic-II (OBD-II) systems for emission control must indicate the failure of an emission-related component or system, as per the procedure laid down in MoSRT/CMVR/TAP-115/116 and as amended from time to time, when that failure results in an increase in emissions above the limits given in the Table below:

| | | | | |
|-----------|-------------------------|----------------------|-------------------|----------------------|
| Reference | Mass of Carbon Monoxide | Mass of Hydrocarbons | Mass of oxides of | Mass of Particulates |
|-----------|-------------------------|----------------------|-------------------|----------------------|

| Mass | | | Nitrogen (g/km) | | | | | | |
|---------------|-----------------|----------|--------------------|--------|--------|--------|--------|--------|--------|
| (RW) | (CO) | (HC) | (NOx) | (PM) | | | | | |
| (kg) | (g/km) | (g/km) | (g/km) | (g/km) | | | | | |
| Category | Class | \| Petrol | Diesel | Petrol | Diesel | Petrol | Diesel | Diesel | Diesel |
| M* | - | All | 3.2 | 3.2 | 0.4 | 0.4 | 0.6 | 1.2 | 0.18 |
| N1 and M** | I | RW ≤ 305 | 3.2 | 3.2 | 0.4 | 0.4 | 0.6 | 1.2 | 0.18 |
| \| II | 1305 < RW ≤ 760 | 5.8 | 4.0 | 0.5 | 0.5 | 0.7 | 1.6 | 0.23 | |
| \| III | 176 < RW | 7.3 | 4.8 | 0.6 | 0.6 | 0.8 | 1.9 | 0.28 | |

*These limits are not applicable for vehicles designed to carry more than six persons including driver or vehicles whose gross vehicle weight exceeds 2,500 kg. **These limits are applicable for vehicles designed to carry more than six persons including driver or vehicles whose gross vehicle weight exceeds 2,500 kg. (ii) Vehicles with Gross Vehicle Weight exceeding 3,500 kg manufactured on or after the 1st April, 2010 and equipped with either the diesel engines or the CNG Engines or the LPG Engines shall conform to the following norms: ^ (A) For Diesel engines

Limit values for Type Approval
(TA) as well as (COP)

| Engine Steady State Cycle (ESC) test | | Engine Load Response (ELR) test | | |
|---|------------|------------------------------------|---------------|------------|
| CO (g/kWh) | HC (g/kWh) | NOx(g/kWh) | PM (g/kWh) | Smoke(m-1) |
| 1.5 | 0.46 | 3.5 | 0.02 | 0.5 |

(B) For diesel engines, CNG Engines or LPG Engines

Engine Transient Cycle (ETC) test

| CO(g/kWh) | NMHC(1)(g/kWh) | CH ₄ (2) | NOx(g/kWh) | PM(3) |
|-----------|----------------|---------------------|------------|-------|
| 4.0 | 0.55 | 1.1 | 3.5 | 0.03 |

(1) A manufacturer may choose to measure the mass of total hydrocarbons (THC) instead of measuring the mass of non-methane hydrocarbon (NMHC). In this case, the limit for mass of THC should be same as for the NMHC. (2) For CNG engines only. (3) For Diesel engines only. Notes.

1. The test shall be done on engine dynamometer.

2. There shall be no relaxation of norms for Conformity of Production (COP) purposes.

3. In case of vehicles operating on diesel fueled engines, the gaseous and particulate emissions shall be as per Engine Steady State Cycle (ESC) and Engine Transient Cycle (ETC) and smoke test shall be as per Engine Load Response (ELR) as specified in MoSRT/CMVR/TAP-115/116 and as

amended from time to time.

4. In case of vehicles operating on CNG or LPG fueled engines, the gaseous emissions are to be determined only on the Engine Transient Cycle (ETC) test as specified in MoSRTTH/CMVR/TAP-115/116 as amended from time to time.

5. The smoke opacity is to be determined on the Engine Load Response (ELR) test as specified in Part XII of MoSRTTH/CMVR/TAP-115/116 as amended from time to time.

6. In case of vehicles operating on CNG or LPG mode, the provisions of rules 115-B and 115-C shall be applicable respectively.

7. The reference fuel shall be as specified in Annexure IV-K for Diesel vehicles, Annexure IV-L for CNG (G20, G23 and G25) vehicles and Annexure IV-M for LPG (Fuel A and Fuel B) vehicles respectively. Reference Fuel as per Annexure IV-L and IV-M shall be used for Type Approval and Conformity of Production, one year after the same is available to the test agencies. Till then, Commercial CNG/LPG fuel shall be used.

8. The Conformity of Production (COP) testing procedure shall be as specified in MoSRTTH/CMVR/TAP-115/116 as amended from time to time.

9. The Conformity of Production (COP) frequency and samples:

(i)The Conformity of Production period for each engine model including its variant(s) shall be once a year;(ii)Where production volume in six months is less than 250 per model including its variants, the provisions contained in the provisos to rule 126-A shall apply.

10. For diesel engine vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value of smoke density, as per Annexure I to sub-rule (9) of rule 115. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02.

11. The commercial Diesel fuel shall be as per Annexure IV-O in respect of the places mentioned in sub-clause (i) of clause (a) of this sub-rule and in respect of all other places, the commercial fuel shall be as per BIS specification IS : 1460-2005 (fifth revision) for Diesel. Specification for Commercial CNG and LPG shall be as notified from time to time.

12. For vehicles with Gross Vehicle Weight exceeding 3,500 kg manufactured on or after the 1st April, 2010,-

(i)deterioration factor shall be as given in the Table below:

| Engine type | Test cycle | CO | HC | NMHC | CH ₄ | NO | PM |
|----------------------------------|------------|------|------|------|-----------------|------|-----|
| Diesel engine | ESC | 1.1 | 1.05 | - | - | 1.05 | 1.1 |
| ETC | 1.1 | 1.05 | - | - | 1.05 | 1.1 | |
| CNG,LPG or Gaseous Fueled engine | ETC | 1.1 | 1.05 | 1.05 | 1.2 | 1.05 | - |

(ii)alternatively, the vehicle manufacturers may opt for evaluation of deterioration factor as specified in MoSRTTH/CMVR/TAP-115/116 as amended from time to time.

| Category of Vehicle in which engine will be installed | Minimum Service accumulation period |
|---|-------------------------------------|
| Category N1 vehicles | 100,000km |
| Category N2 Vehicles | 125,000 km |
| Category N3 Vehicles with GVW equal to or less than 16,000 kg | 125,000 km |
| Category N3 Vehicles with GVW above 16,000 kg | 167,000 km |
| Category M2 Vehicles | 100,000 km |
| Category M3 Vehicles with GVW equal to or less than 7,500 kg | 125,000 km |
| Category M3 Vehicles with GVW above 7,500 kg | 167,000 km |

The above ageing test should be carried out by the approval test agency.

13. In the case of Diesel vehicles, the engine power shall be measured on engine dynamometer and the measured power shall not differ from the specified power as given in Chapter 1 of Part IV of MoSRTTH/CMVR/TAP-115/116 as amended from time to time when tested as per procedures laid down in Chapter 6 of Part IV of MoSRTTH/CMVR/TAP -115/116 as amended from time to time.

14.

(i)The CNG and LPG vehicles specified in this sub-clause shall comply with the provisions of clause (i) of sub-rule (2) of rule 115;(ii)All Diesel Fueled Vehicles specified in this sub-clause shall comply with the provisions of clause (ii) of sub-rule (2) of rule 115.

15. The extension of type approval to engine family and engine after treatment system family shall be as described in MosRTH/CMVR/TAP-115/116 as amended from time to time.

16. The vehicles specified in this sub-clause shall be equipped with an On Board Diagnostic systems for emission control which shall have the capability of identifying the likely area of malfunction by means of fault codes stored in computer memory for vehicle manufactured on and from 1st April 2013, as per procedure laid down in MosRTH/CMVR/TAP-115/116 and as amended from time to time.

17. The Diesel engine NOx reduction agent AUS 32 (Aqueous Urea Solution) shall conform to Part 1 and Part 2 of ISO 22241-2006.

Inserted by G.S.R. 84(E), dated 9.2.2009 (w.e.f. 1.4.2010)

(16)[Mass emission standards (Bharat Stage IV) for two wheelers, - The following mass emission standards (Bharat Stage IV) shall come into force for two wheelers manufactured on and after the 1st April, 2016 for new types of vehicle models and from the 1st April, 2017 for existing types of vehicle models -A. Two wheeled vehicles fitted with gasoline engines -I. Mass emission standards (Bharat Stage IV) for two wheelers, with engine capacity exceeding 50 cc and a maximum design speed exceeding 50 km per hour; Based on World-wide Harmonized Motorcycle Test Cycle (WMTC)-Table 1

| Class | TA=COP norms (g/km) | | | | |
|---|---------------------|--|----------|------|--|
| | CO | NOx | HC + NOx | | |
| If the evaporative emission commission with 2g/test | | If the evaporative emission complies with 6 g/test | | | |
| (1) | (2) | (3) | (4) | (5) | |
| Class 1 and Sub-class 2-1 | 1.403 | 0.39 | 0.79 | 0.59 | |
| Sub-class 2-2 | 1.970 | 0.34 | 0.67 | 0.47 | |
| Sub-class 3-1 and Sub-class 3-2 | 1.970 | 0.20 | 0.40 | 0.20 | |

Explanatory Notes :- For the purpose of this clause, -

1. Classification of vehicles and weighting factor for the final emission result shall be as given below :-

| | Definition of class | Cycles | Weighting factors for final emission results |
|---------------|---|---|--|
| Class 1 | Vehicles that fulfill the following specifications belong to class 1 : $50 \text{ cm}^3 < \text{engine capacity} < 150 \text{ cm}^3$ and $50 \text{ km/h} < V_{\text{max}} < 100 \text{ km/h}$ | Part 1 Reduced Speed cold followed by Part 1 Reduced Speed Hot | Part 1 Reduced Speed cold shall be 50% and Part 1 Reduced Speed Hot shall be 50% |
| Sub-Class 2.1 | Vehicles that fulfill the following specifications belong to class 2-1: $\text{Engine capacity} < 150 \text{ cm}^3$ and $100 \text{ km/h} < V_{\text{max}} < 115 \text{ km/h}$ or $\text{Engine capacity} < 150 \text{ cm}^3$ and $V_{\text{max}} < 115 \text{ km/h}$ | Part 1 Reduced Speed cold followed by Part 1 Reduced Speed Hot | Part 1 Reduced Speed cold shall be 50% and Part 1 Reduced Speed Hot shall be 50% |
| Sub-Class 2.2 | Vehicles that fulfill the following specifications belong to class 2-2 : $115 \text{ km/h} < V_{\text{max}} < 130 \text{ km/h}$ | Part 1 cold followed by Part 2 Hot | Part 1 cold shall be 30% Part 2 hot shall be 70% |
| Sub-Class 3-1 | Vehicles that fulfill the following specifications belong to class 3-1: $130 \text{ km/h} < V_{\text{max}} < 140 \text{ km/h}$ | Part 1 cold followed by Part 2 Hot followed by Part 3 reduced speed | Part 1 cold shall be 25% Part 2 Hot shall be 50% and Part 3 reduced shall be 25% |
| Sub-Class 3-2 | Vehicles that fulfill the following specifications belong to class 3-2: $V_{\text{max}} < 140 \text{ km/h}$ | Part 1 cold followed by Part 2 Hot followed by Part 3 | Part 1 cold shall be 25% Part 2 Hot shall be 50% and Part 3 reduced shall be 25% |

2. The test procedure and driving cycles shall be as per United Nations Economic Commission for Europe (UN ECE) Global Technical Regulation (GTR)-2 incorporating Amendment 2, with preconditioning soaking and cold start on chassis dynamometer as specified above.

3. Vehicle preconditioning: Operated through the cycles prescribed as above.

4. Vehicle soaking: The vehicle shall be stored for not less than six hours and not more than thirty six hours prior to the cold start Type 1 test or until the engine oil temperature (TO) or the coolant temperature (TC) or the spark plug seat/gasket temperature (TP), only for air cooled engine, equals the air temperature of the soak area.

- 5. Preparatory running before sampling is not required, sampling starts at T=0 second.**
- 6. Break down of different parts of Worldwide Harmonised Motorcycle Emission Certification (WMTC) shall be as per the details given in Annexure 5 of Chapter XIII A of Ministry of Road Transport and Highways or Central Motor Vehicles Rules or Type Approval Procedure -115/116 (MoRTH/CMVR/TAP-115/116) as amended from time to time.**
- 7. The reference fuel for gasoline vehicle shall be as specified in Annexure-IV-J of the said rules and reference fuel for Compressed Natural Gas (CNG) and for Liquefied Petroleum Gas (LPG) shall be as commercially available.**
- 8. The specification of commercial gasoline shall be as specified in Annexure IV-N of the said rules. For the areas other than those specified in Para (a) of sub-rule 15 of rule 115 of principal rules commercial gasoline shall be as per Bureau of Indian Standards specification IS: 2796-2008 for gasoline. Specification for commercial CNG and LPG shall be as notified from time to time.**
- 9. Requirements of durability (for CO - 1.2, NO_x - 1.2 & HC+NO_x - 1.2 considering 30,000 km. durability run) have been built into the mass emission standards specified above.**
- 10. For vehicles operating on CNG mode, the provisions of rule 115-B shall be applicable.**
- 11. For vehicles operating on LPG mode, the provisions of rule 115-C shall be applicable.**
- 12. Gasoline or CNG or LPG vehicles specified herein shall comply with the provisions of clause (i) of sub-rule (2) of rule 115.**
- 13. Crankcase ventilation system shall not permit the emission of any of the crankcase gases into the atmosphere.**

14. Evaporative emission for gasoline driven vehicles shall not be more than 2g/test or 6 g/test, depending on whether the norm for HC + NOx adopted by manufacturer is from Column (4) or Column (5) respectively of table 1 of mass emission norms and the test procedure shall be as per MoRTH/CMVR/TAP-115/116, as amended from time to time.

15. Conformity of production (COP) frequency and sampling shall be as per clause (e) of sub-rule (12) of rule 115 of the said rules.

II. Mass emission standards (Bharat Stage IV) for two wheelers with Spark Ignition engines, other than those specified in para A.I above: (Vehicles with cc ≤ 50 and Vmax ≤ 50 km/hr): The mass emission standards Table 2

| Pollutant | TA=COP norms (g/km) | Deterioration Factor(D.F.) |
|-----------|---------------------|----------------------------|
| (1) | (2) | (3) |
| CO | 0.75 | 1.2 |
| HC + Nox | 0.75 | 1.2 |

Notes : - 1. For vehicles operating on CNG mode, the provisions of rule 115-B shall be applicable.

2. For vehicles operating on LPG mode, the provisions of rule 115-C shall be applicable.

3. Gasoline or CNG or LPG vehicles specified herein shall comply with the provisions of clause (i) of sub-rule (2) of rule 115.

4. The reference fuel for gasoline vehicle shall be as specified in Annexure IV-J of the said rules and reference fuel for CNG and LPG shall be as available commercially.

5. The specification of commercial gasoline shall be as specified in Annexure IV-N of the said rules and for the areas other than those specified in clause (a) of sub-rule 15 of rule 115 of principal rules commercial gasoline shall be as per Bureau of Indian Standards specification IS: 2796-2008 for gasoline. The Specification for commercial CNG and LPG shall be as notified from time to time.

6. The provision of clauses (a), (c), (i), (e) and (f) of sub-rule 12 of rule 115, except the proviso therein, shall be applicable to the said vehicle.

B. Two wheeled vehicles fitted with diesel engines -The mass emission standards shall be same as those applicable for diesel three-wheelers.] [Inserted by Notification No. G.S.R. 431(E), dated 4.7.2014 (w.e.f. 2.6.1989)](17)[Mass emission standards (Bharat Stage IV) for three wheelers: - Mass emission standards (Bharat Stage IV) for new vehicle models of three wheelers manufactured on or after the 1st April, 2016 and for existing vehicle models of three wheelers manufactured on or after 1st April, 2017:A. Three wheelers fitted with gasoline engine:Table 1

| | CO | HC+ Nox | |
|--|--|------------|------|
| If the evaporative emission complies with 2.0 g/test | If the evaporative emission complies with 6.0 g/test | | |
| (1) | (2) | (3) | (4) |
| TA= COP norms (g/km) | 0.94 | 0.94 | 0.74 |
| D.F.(Deterioration Factor) | 1.2 | 1.2 | 1.2 |

B. Three wheelers fitted with Compressed Natural Gas (CNG) or Liquefied Petroleum Gas (LPG) engine:Table 2

| | CO | HC+ NOx |
|----------------------------|-------|---------|
| (1) | (2) | (3) |
| TA = COP norms (g/km) | 0.940 | 0.940 |
| D.F.(Deterioration Factor) | 1.2 | 1.2 |

C. Three wheelers fitted with compression ignition engine:Table 3

| | CO | HC+ Nox | PM |
|----------------------------|-------|---------|--------|
| (1) | (2) | (3) | (4) |
| TA= COP norms (g/km) | 0.380 | 0.380 | 0.0425 |
| D.F.(Deterioration Factor) | 1.1 | 1.0 | 1.2 |

Explanation. - For the purpose of this clause, it is clarified that, -(i)for vehicles operating on compressed natural gas mode, the provisions of rule 115B shall be applicable;(ii)for vehicles operating on liquefied petroleum gas mode, the provisions of rule 115C shall be applicable;(iii)the provisions of clauses (a), (c), (d), (e) and (f) of sub-rule (12), except the proviso therein at the end of that sub-rule, shall be applicable;(iv)the reference fuel shall be as specified in Annexure IV-J for vehicles equipped with gasoline and Annexure IV-K for vehicles equipped with diesel engines and reference fuel for compressed natural gas and liquefied petroleum gas shall be as available commercially;(v)the specification of commercial gasoline and diesel shall be as specified in Annexure IV-N and Annexure IV-O, respectively and for the areas other than those specified in clause (a) of sub-rule 15, commercial fuel shall be as per the Bureau of Indian Standards specification IS: 2796-2008 (Amendment No. 1- January 2008) for gasoline and IS 1460:2005 (fifth revision) for diesel;(vi)specification for commercial compressed natural gas and liquefied petroleum gas shall be as notified from time to time;(vii)conformity of production (COP) test procedure shall

be as described in MoRTH/CMVR/TAP-115/116 as amended from time to time;(viii)gasoline or compressed natural gas or liquefied petroleum gas vehicles specified herein shall comply with the provisions of clause (i) of sub-rule (2);(ix)diesel vehicles specified herein shall comply with the provisions of clause (ii) of sub-rule (2);(x)crank case ventilation for gasoline driven vehicles system shall not permit the emission of any of the crank case gases into the atmosphere;(xi)evaporative emission for gasoline driven vehicles shall not be more than 2.0 g/test or 6.0g/test, depending on whether the norm for HC+NO_x adopted by manufacturer is from column (3) or column (4), respectively, of Table 1 of mass emission norms and the test procedure shall be as per MoRTH/CMVR/TAP-115/116, as amended from time to time.](18)[(i)The Emission Standards for Bharat Stage VI (BS-VI) for category M and N vehicles having Gross Vehicle Weight not exceeding 3500kg, manufactured on or after 1st April 2020 for all models, shall be as under :-Table 1Limit Values for M and N Category vehicles fitted with PI & CI Engines: BS VI

| | Reference Mass (RM) (kg) | Mass of Carbon Monoxide (CO) | Mass of Total Hydrocarbons (THC) | Mass of Non-Methane Hydrocarbons (NMHC) | Mass of Oxides of Nitrogen (NO _x) | Combined Mass of Hydrocarbons and Oxides of Nitrogen (THC + NO _x) | Mass of Particulate Matter (PM) |
|------------|--------------------------------|---------------------------------------|--|--|--|--|--|
| L1 (mg/km) | L2 (mg/km) | L3 (mg/km) | L4 (mg/km) | L2 + L3 (mg/km) | L5 (mg/km) | L6 (numbers/km) | |
| Category | Class | | PI | CI | PI | CI | PI |
| M(M1 & M2) | - | All | 1000 | 500 | 100 | - | 68 |
| N1 | I | RM ≤ 1305 | 1000 | 500 | 100 | - | 68 |
| II | | 1305 < RM ≤ 1760 | 630 | 130 | - | 90 | - |
| III | | 1760 < RM ≤ 2270 | 740 | 160 | - | 108 | - |
| N2 | - | All | 2270 | 740 | 160 | - | 108 |

PI = Positive
Ignition, CI
=Compression
Ignition(3) For
positive ignition,
particulate mass
and number

of particles limit shall apply only to vehicles with direct injection engines. (4) Until three years after date of implementation for new type approvals and new vehicles, particle number emission limit of $6.0 \times 10^{12} \#/\text{km}$ shall apply to BS VI gasoline direct injection vehicles upon choice of the manufacturer. Note: This Regulation shall apply to vehicles of categories M1, M2, N1 and N2 with a reference mass not exceeding 2,610 kg. At the manufacturer's request, type approval granted under this Regulation may be extended from vehicles mentioned above to M1, M2, N1 and N2 vehicles with a reference mass not

exceeding 2,840 kg and which meet the conditions laid down in this notification.

Table 2 Application of Test Requirements for Type-Approval - BS VI

| | Vehicles with Positive Ignition Engines including Hybrids | Vehicles with Compression Ignition Engines including Hybrids | | | | | |
|---|---|--|--------------------------------|--------------------------|-------------------------|---------------------|---------------------|
| | Mono Fuel | Bi- Fuel(1) | Flex Fuel(1) | Flex Fuel | Mono Fuel | Dual Fuel | |
| Reference Fuel | Gasoline (E5) | LPG | CNG/ Bio-Methane/ Bio-Gas/ LNG | Hydrogen (ICE) 3 | H2 CNG (Hydrogen + CNG) | Gasoline (E5) | Gasoline (E5) |
| LPG | CNG/ Bio-Methane | Hydrogen (ICE)3 | Ethanol (E85)/ (E100) | Bio-Diesel up to 100%(5) | | | |
| Gaseous Pollutants (Type I Test) | Yes | Yes | Yes | Yes2 | Yes | Yes (Both Fuels) | Yes (Both Fuels) |
| Particulate Mass and Particulate Number (Type I Test) | Yes4 | - | - | - | - | Yes (Gasoline only) | Yes (Gasoline only) |
| Idle Emissions (Type II Test) | Yes | Yes | Yes | - | Yes | Yes (Both Fuels) | Yes (Both Fuels) |
| Crankcase Emissions (Type III Test) | Yes | Yes | Yes | - - | Yes | Yes (Gasoline only) | Yes (Gasoline only) |
| Evaporative Emissions (Type IV test) | Yes | - | - | - | - | Yes (Gasoline only) | Yes (Gasoline only) |
| Durability (Type V Test) | Yes | Yes | Yes | Yes | Yes | Yes (Gasoline only) | Yes (Gasoline only) |
| In-Service Conformity | Yes | Yes | Yes | Yes | Yes | Yes (both fuels) | Yes (both fuels) |

| | | | | | | | |
|--|-----|-----|-----|-----|-----|------------------|------------------|
| On-Board Diagnostics and IUPRm | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| (6)CO ₂ emission and fuelconsumption | Yes | Yes | Yes | Yes | Yes | Yes (Both fuels) | Yes (Both fuels) |
| Smoke Opacity | -- | -- | -- | -- | -- | -- | -- |
| Engine Power | Yes | Yes | Yes | Yes | Yes | Yes (Both fuels) | Yes (Both fuels) |
| <p>(1) When a bi-fuel vehicle has flex fuel option, both testrequirements are applicable. Vehicle tested with E100 need not tobe tested for E85.(2) Only NO_x emissions shall be determined when the vehicle isrunning on Hydrogen.(3) Reference Fuel is 'Hydrogen for Internal CombustionEngine' as Specified in Annexure IV-W.(4) For Positive ignition, particulate mass and number limits forvehicles with positive ignition engines including hybrids shallapply only to vehicles with direct injection</p> | | | | | | | |

engines.(5)
Vehicle fueled
with Bio diesel
blends up to 7%
will be tested with
reference diesel
(B7) & vehicles
fueled with
Biodiesel blends
above 7% will be
tested with
respective
blends.(6)
CO₂ emission and
fuel consumption
shall be
measured as per
procedure laid
down in AIS 137
and as amended
time to time.

Notes.-(1)The test shall be on Chassis Dynamometer.(2)The test including driving cycle shall be as provided in sub-rule (10) with the modifications that-(i)the exhaust gas sampling should start at the initiation of the engine start up procedure referred to in Annexure IV-E and as amended from time to time as per AIS-137;(ii)the driving cycle shall be at a maximum speed of 90 km/hour referred to in Annexure IV-E and as amended from time to time as per AIS-137.(3)There shall be no relaxation of norms for Conformity of Production (COP) purposes and procedure for compliance shall be as per AIS 137 as amended from time to time.(4)Specifications for Reference Fuels shall be as below:-(a)Reference natural gas fuel used in Natural Gas or Bio-Methane mono-fuel or bi-fuel vehicles shall be as per Annexure IV-L (G20, G23 and G25).(b)Reference LPG fuel used in LPG mono-fuel or bi-fuel vehicles shall be as per Annexure IV M (Fuel A and Fuel B), however, in case of non-availability of reference fuels for CNG/ LPG, the commercially available CNG as per BIS 15958:2012 and LPG as per BIS 14861:2000 as amended from time to time shall be used for the purpose of Type Approval and Conformity of Production.(c)The reference ethanol fuel (E85) shall be as per the Annexure IV-Q.(d)The Reference Gasoline fuel (E5) shall be as specified in Annexure IV-X.(e)The Reference Diesel fuel (B7) shall be as specified in Annexure IV-T.(f)Hydrogen Fuel vehicles shall be tested with reference fuel specified in the Annexure IV-W to said rules.(g)The reference fuel Biogas (Bio-methane) shall be as per IS 16087:2013 and as amended time to time.(5)Crankcase ventilation system shall not permit the emission of any of the crankcase gases in to the atmosphere.(6)Evaporative emission shall not be more than 2.0g/test from Gasoline fuelled vehicles. The evaporative emission test procedure for gasoline fuelled vehicles shall be as per the procedure specified in AIS 137 and as amended from time to time.(7)The Conformity of Production (COP) testing procedure shall be as described in AIS 137 and as amended from time to time.(8)Conformity of Production (COP) frequency and samples as under :-(i)The Conformity of

Production period for each vehicle model including its variant(s) shall be once a year.(ii)Where production volume in six months is less than 250 per model including its variants, the provisions contained in the provisos to rule 126-A shall apply.(iii)All these tests shall be conducted with the reference fuel as specified in this sub-rule. However, at the manufacturer's request, test may be carried out with commercial fuel.(iv)For vehicles approved as per this sub-rule, at least 50% of Vehicle models, rounded to nearest integer value, produced from particular plant per year shall be selected randomly from dealer's location or warehouse.(9)Specifications for Commercial Fuels as under :-(i)The Commercial Gasoline fuel shall be as per Annexure IV-U and as amended from time to time.(ii)Specification for commercial CNG and commercial LPG shall be in accordance with BIS 15958:2012 and as per BIS 14861:2000 respectively and as amended from time to time.(iii)Biodiesel used in commercial Diesel shall be as per IS 15607 as amended from time to time.(iv)Specification for Commercial Diesel fuel shall be as per Annexure IV-V and as amended from time to time.(v)Specifications for commercial E85 shall be as specified in accordance with the Indian Standards as amended from time to time.(vi)Specification for commercial Biogas (Bio-methane) shall be as per IS 16087:2013 and as amended time to time.(10)Specifications of NO_x reduction agent AUS 32 (Aqueous Urea Solution) shall conform to Part 1 and Part 2 of ISO 22241-2006 or DIN standard - DIN V 70070.(11)For Diesel vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value of smoke density, when expressed as light absorption coefficient for various nominal flows as given in Annex I to sub-rule (9) of rule 115 when tested at constant speeds over the full load. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor at 0.98 to 1.02.(12)The engine power shall be measured on engine dynamometer and the measured power shall conform to the power specified in AIS 137 as amended from time to time, when tested as per the procedures laid down in AIS 137as amended from time to time.(13)Type II Test: Vehicles fitted with PI engines specified in this sub-clause shall comply with the provisions of clause (i) of sub-rule (2) of rule 115 as applicable.(14)Free Acceleration Smoke: Vehicles fitted with CI engines specified in this sub-clause shall comply with the provisions of clause (ii) of sub-rule (2) of rule 115 as applicable.(15)Deterioration Factor shall be as given in the following Table :-TableDeterioration Factor shall be as given below: BS VI

| Engine Category | | Assigned Deterioration Factor | | | | | |
|----------------------|-----|-------------------------------|-----------------|--------------------|-------------------------|----------------------|-----|
| CO | THC | NMHC | NO _x | HC+NO _x | Particulate Matter (PM) | Particle Number (PN) | |
| Positive Ignition | 1.5 | 1.3 | 1.3 | 1.6 | - | 1.0 | 1.0 |
| Compression Ignition | 1.5 | - | - | 1.1 | 1.1 | 1.0 | 1.0 |

(i)Alternatively, the vehicle manufacturer may opt for a vehicle ageing test of 1,60,000 km or bench ageing durability test, for evaluating the Deterioration factor as per AIS 137and as amended from time to time.(ii)This test may be performed by driving vehicle on a test track, on the road, or on a chassis dynamometer or Engine Test Bench as per AIS 137(iii)The maximum lap speed at 10th lap and at 11th lap shall be 72 km/hour and 90 km/hour respectively.(iv)The above ageing test should be carried out by the approved test agency specified in rule 126.(16)The vehicles shall be equipped with On-Board Diagnostic (BS VI - OBD) systems for emission control which shall have the

capability of identifying the likely area of malfunction by means of fault codes stored in computer memory as per the procedure laid down in AIS 137 and as amended from time to time when that failure results in an increase in emission above the limits given in the following Tables

below:-(i)OBD Threshold for BS VI vehicles manufactured on or after 1st April 2020:Table

1On-Board Diagnostic (BS VI- OBD-I) Threshold: BS VI

| Category | Reference mass (RM) (kg) | CO (mg/km) | NMHC (mg/km) | NOx (mg/km) | PM (mg/km) | PI | CI | PI | CI | PI(1) | CI |
|-------------|--------------------------|------------|--------------|-------------|------------|-----|-----|-----|----|-------|----|
| M (M1 & M2) | - | All | 1900 | 1750 | 170 | 290 | 150 | 180 | 25 | 25 | |
| N1 | I | RM ≤ 1305 | 1900 | 1750 | 170 | 290 | 150 | 180 | 25 | 25 | |
| II | 1305 < RM ≤ 1760 | 3400 | 2200 | 225 | 320 | 190 | 220 | 25 | 25 | | |
| III | 1760 < RM | 4300 | 2500 | 270 | 350 | 210 | 280 | 30 | 30 | | |
| N2 | - | All | 4300 | 2500 | 270 | 350 | 210 | 280 | 30 | 30 | |

(1)For positive ignition, particulate mass limits apply only to vehicles with direct injection engines

(ii)OBD Threshold for BS VI vehicles manufactured on or after 1st April 2023:Table 2On-Board Diagnostic (BS VI OBD-II) Threshold: BS VI

| Category | Reference mass (RM) (kg) | CO (mg/km) | NMHC (mg/km) | NOx (mg/km) | PM (mg/km) | PI | CI | PI | CI | PI(1) | CI |
|-------------|--------------------------|------------|--------------|-------------|------------|-----|-----|-----|----|-------|----|
| M (M1 & M2) | - | All | 1900 | 1750 | 170 | 290 | 90 | 140 | 12 | 12 | |
| N1 | I | RM ≤ 1305 | 1900 | 1750 | 170 | 290 | 90 | 140 | 12 | 12 | |
| II | 1305 < RM ≤ 1760 | 3400 | 2200 | 225 | 320 | 110 | 180 | 12 | 12 | | |
| III | 1760 < RM | 4300 | 2500 | 270 | 350 | 120 | 220 | 12 | 12 | | |
| N2 | - | All | 4300 | 2500 | 270 | 350 | 120 | 220 | 12 | 12 | |

(1)For positive ignition, particulate mass limits apply only to vehicles with direct injection engines

(17)In-use performance ratio (IUPR) for BS VI vehicles manufactured on or after 1st April 2023, the in-use performance ratio (IUPR) of a specific monitor M of the OBD systems shall be: IUPRM =

Numerator/ Denominator(i)Comparison of Numerator and Denominator gives an indication of how often a specific monitor is operating relative to vehicle operation. Detailed requirements for tracking IUPR are given in AIS 137.(ii)If, according to the requirements specified in AIS 137, the vehicle is equipped with a specific monitor M, IUPRM shall be greater or equal to 0.1 for all monitors M.(18)In service compliance of vehicles shall be as per procedure laid down in AIS137 and as amended time to time.(19)During type approval and COP applicable from 1st April, 2020, real world driving cycle emission measurement using PEMS shall be carried out for data collection and from 1st April, 2023 real world driving cycle emission conformity shall be applicable. The detailed procedure is laid down in AIS137 and as amended from time to time.(ii)The Emission Standards for Bharat Stage VI (BS-VI) for category M and N vehicles having Gross Vehicle Weight exceeding 3500kg., manufactured on or after 1st April 2020 for all models, shall be as under :-Table 1Limit values for M&N category vehicles: BS-VI

| | Limit values | | | | | | | |
|----------------|-----------------|------------------|--------------------------|-------------|-----------------------|---------------------|----------------------------|--|
| CO (mg/kWh) | THC (mg/kWh) | NMHC (mg/kWh) | CH ₄ (mg/kWh) | NOX(mg/kWh) | NH ₃ (ppm) | PM mass (mg/kWh) | PM number (numbers/kWh) | |
| WHSC (CI) | 1500 | 130 | ---- | ---- | 400 | 10 | 10 | |
| WHTC (CI) | 4000 | 160 | ----- | ---- | 460 | 10 | 10 | |
| WHTC (PI) | 4000 | ---- | 160 | 500 | 460 | 10 | 10 | |

Notes:PI = Positive IgnitionCI = Compression IgnitionFor M1, N1, M2 & N2 category vehicles with a reference mass not exceeding 2840 kg., at the manufacturer's request, type approval may be granted as per the sub-rule (18) (i) of this rule.If a vehicle is tested for type approval on Chassis Dynamometer having Reference Mass up to 2610 kg, manufacturer may seek type approval extensions up to reference mass of 2840 kg for its variants exceeding GVW of 3500 kg. In such cases mass emission testing on Engine Dynamometer shall not be required.Table 2Applicability of Test Requirements for BS-VI

| | Positive-ignition engines | Compression-ignition engines | Dual fuel engines | | | | | |
|--------------------|--------------------------------------|------------------------------|-------------------|-----------------------------|----------------|-------------------|---------------------------------------|-------------|
| Gasoline (E5) | CNG/ Bio-methane/ Bio-Gas/ LNG | LPG | E85 | HCNG (Hydrogen + CNG) | Diesel (B7) | Ethanol (ED95) | Bio-diesel blends up to 100%(1) | Dies +(C |
| Gaseous pollutants | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Particulate Mass | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| PM number | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Durability | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

| | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|-----|
| OBD | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Off Cycle Emissions (WNTE) | -- | -- | -- | -- | -- | Yes | Yes | Yes |
| PEMS Demonstration test at Type Approval | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| In-Service Conformity | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

(1)The vehicles/ engines fuelled with bio diesel blends up to 7% shall be tested with reference diesel (B7) and vehicles fuelled with Bio diesel blends above 7% will be tested with respective blends.(2)The test applicability requirements for dual fuel engine is depending on the Gas Energy Ratio (GER) measured over the hot part of the WHTC test-cycle. GER classification shall be as per AIS 137 and as amended from time to time.Notes.-(1)The test shall be done on engine dynamometer.(2)In case of vehicles equipped with Compression Ignition engines, the gaseous and particulate emissions shall be measured as per WHSC and WHTC cycles as per procedure described in AIS 137 as amended from time to time.(3)In case of vehicles equipped with positive Ignition engines, the gaseous and particulate emissions shall be measured as per WHTC cycle as per procedure described in AIS 137and as amended from time to time.(4)Specifications for Reference fuels are as below:-(a)Reference natural gas fuel used in Natural Gas or Bio-Methane mono-fuel or bi-fuel vehicles shall be as per Annexure IV-L (G20, G23 and G25)(b)Reference LPG fuel used in LPG mono-fuel or bi-fuel vehicles shall be as per Annexure IV M (Fuel A and Fuel B). However, in case of non-availability of reference fuels for CNG/ LPG, the commercially available CNG as per BIS 15958:2012 and LPG as per BIS 14861:2000 as amended from time to time shall be used for the purpose of Type Approval and Conformity of Production.(c)The reference ethanol fuel (ED95) shall be as specified in Annexure IV-R.(d)The Reference Gasoline fuel (E5) shall be in Annexure IV-X.(e)The Reference Diesel fuel (B7) shall be as specified in Annexure IV-T.(f)The reference fuel Biogas (Bio-methane) shall be as per IS 16087:2013 and as amended time to time.(5)The Conformity of Production (COP) testing procedure shall be as described in AIS 137 as amended from time to time.(6)The Conformity of Production (COP) frequency and samples shall be as under:-(i)The conformity of Production period for each engine model including its variant(s) shall be once a year.(ii)Where production volume in six month is less than 250 per model including its variant(s), the provisions contained in the provisos to rule 126-A shall apply.(7)Specifications for Commercial fuels shall be as under:-a. The Commercial Gasoline fuel shall be as per Annexure IV-U and as amended from time to time.b. Specification for commercial CNG and commercial LPG shall be in accordance with BIS 15958:2012 and as per BIS 14861:2000 respectively and as amended from time to time.c. Biodiesel used in commercial Diesel shall be as per IS 15607 as amended from time to time.d. Specification for Commercial Diesel fuel up to 7% of bio diesel blend shall be as per Annexure IV-V and as amended from time to time.e. Specifications for commercial E85 and ED95 shall be as specified in accordance with the Indian Standards as amended from time to time.f. Specification for commercial Biogas (Bio-methane) shall be as per IS 16087:2013 and as amended time to time.(8)For CI engine vehicles, the emission of visible pollutants (smoke) shall not exceed

the limit value of smoke density, as per Annexure I to sub-rule (9) of rule 115. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02.(9)The engine power shall be measured on engine dynamometer and the measured power shall conform to the power specified and tested as per procedures prescribed in AIS 137 as amended time to time.(10)Idle emissions and Smoke Density shall be as under:-a. The vehicles equipped with PI engine specified in this sub-rule shall comply with the provisions of clause (i) of sub-rule (2) of rule 115.b. The Vehicles equipped with CI engine specified in this sub-rule shall comply with the provisions of clause (ii) of sub-rule (2) of rule 115.(11)Deterioration Factors.-(i)Deterioration factors shall be as given in the Table below:Table 1Deterioration Factors for BS-VI

| Test cycle | CO | THC ₁ | NMHC ₂ | CH ₄ ₂ | NO _x | NH ₃ | PM mass | PM number |
|------------|-----|------------------|-------------------|------------------------------|-----------------|-----------------|---------|-----------|
| WHTC | 1.3 | 1.3 | 1.4 | 1.4 | 1.15 | 1.0 | 1.05 | 1.0 |
| WHSC | 1.3 | 1.3 | --- | --- | 1.15 | 1.0 | 1.05 | 1.0 |

(1)Applies in case of a compression ignition engine.(2)Applies in case of a positive ignition engine.(ii)Alternatively, the vehicle manufacturers may opt for evaluation of deterioration factor over normal useful life period as per procedure described in AIS 137and as amended time to time.Useful life period and minimum service accumulation period for evaluation of deterioration factor given in Table below:-Table 2Minimum service accumulation period - BS-VI

| Category of vehicle in which engine will be installed | Useful Life Period | Minimum service accumulation period |
|---|------------------------|-------------------------------------|
| Category N1 vehicles | 1,60,000 km or 5 years | 1,60,000 km |
| Category N2 vehicles | 3,00,000 km or 6 years | 1,88,000 km |
| Category N3 Vehicles with GVW equal to or less than 16,000 kg | 3,00,000 km or 6 years | 1,88,000 km |
| Category N3 Vehicles with GVW above 16,000 kg | 7,00,000 km or 7 years | 2,33,000 km |
| Category M2 vehicles | 1,60,000 km or 5 years | 1,60,000 km |
| Category M3 Vehicles with GVW equal to or less than 7,500 kg | 3,00,000 km or 6 years | 1,88,000 km |
| Category M3 Vehicles with GVW above 7,500 kg | 7,00,000 km or 7 years | 2,33,000 km |

The evaluation of deterioration factor test shall be carried out by the approved test agency specified in rule 126.(12)(a)During type approval and COP applicable from 1st April, 2020, emission measurement on vehicles using PEMS shall be carried out on road for data collection and from 1st April, 2023 in-service conformity factor shall be applicable. The detailed procedure is laid down in AIS137 and as amended from time to time(b)The type approval vehicle used for the PEMS demonstration test shall be representative for the vehicle category intended for the installation of the engine system. The vehicle may be a prototype vehicle or an adapted production vehicle.(c)For PEMS demonstration test at type approval, vehicle shall meet the requirements of in-service

compliance from 1st April, 2023.(13)The vehicles specified in this sub-clause shall meet the following World Not-To-Exceed (WNTE) Off-cycle laboratory testing limits for gaseous and particulate exhaust emissions, and as per procedure laid down in AIS 137 and as amended time to time:-

Test cycle COmg/kWh THCMg/kWh Noxmg/kWh PMmg/kWh

WNTE 2000 220 600 16

(14)The vehicles specified in this sub-clause manufactured on or after 1st April, 2023 shall have the capability of assessing the in-use performance of on-board diagnostic, as per procedure laid down in AIS 137 and as amended time to time.(15)The vehicles specified in this sub-clause fitted with engine, which rely on the use of a reagent in order to reduce emissions, shall ensure the correct operation of NOx control measures, as per procedure laid down in AIS 137 and as amended time to time.(16)The vehicles specified in this sub-rule shall be equipped with an On-Board Diagnostic system (BS VI OBD-I and BS-VI OBD-II) for emission control which shall have the capability of identifying the likely area of the malfunctions by means of fault codes stored in computer memory and communicating that information off-board, as per procedure described in AIS 137, when that failure results in an increase in emission above the limits given in the following Tables below:-(a)BSVI-OBD-I threshold for BS VI vehicles manufactured on or after 1st April 2020 shall be as given below:-Table 1OBD threshold Limits: (BS-VI OBD-I)

| | Limit in mg/kWh | |
|------------------------------|-----------------|---------------------------|
| | NOx | PM Mass |
| Compression ignition engines | 1500 | Performance Monitoring(1) |
| Positive Ignition engines | 1500 | -- |

(1)Performance monitoring for wall-flow diesel particulate filter shall be as per AIS-137 and as amended time to time.(b)BS-VI-OBD-II threshold for BS VI vehicles manufactured on or after 1st April 2023 shall be as given below:-Table 2OBD threshold Limits: (BS-VI OBD-II)

| | Limit in mg/kWh | | |
|------------------------------|-----------------|---------|------|
| | NOx | PM Mass | CO |
| Compression ignition engines | 1200 | 25 | --- |
| Positive Ignition engines | 1200 | -- | 7500 |

At the manufacturer's request type approval may be granted for compliance to BS-VI OBD-II requirements before its implementation(19)(i)The Emission Standards for Bharat Stage-VI (BS-VI) for two wheelers vehicle models manufactured on or after 1st April 2020 shall be as per Tables below:-Table 1Limit Values for Two wheelers fitted with PI & CI engines: BSVI

| Vehicle Class | BS VI Emission Norms | | | | | | | | Durability mileage (km) Type V |
|---------------|----------------------|----------|----------|-----------|------------|----------|--------------|---------|--------------------------------|
| | | CO mg/km | HC mg/km | NOx mg/km | NMHC mg/km | PM mg/km | EVAP mg/test | OBD | |
| PI Vehicles | 1 & 2-1 | 1000 | 100 | 60 | 68 | 4.5* | 1500 | STAGEII | 20000 |

| | | | | | | | | |
|-------------|----------------------|-----|----------------------|----------------------|----------------------|----------|-------|-------|
| 2-2 | 1000 | 100 | 60 | 68 | 4.5* | | | |
| 3-1 & 3-2 | 1000 | 100 | 60 | 68 | 4.5* | 35000 | | |
| CI Vehicles | All | 500 | 100 | 90 | 68 | 4.5* | - | 35000 |
| | DF (for all classes) | 1.3 | 1.3 (SI) 1.1 (CI) | 1.3 (SI) 1.1 (CI) | 1.3 (SI) 1.1 (CI) | 1.0 (CI) | 300** | - |

* Applicable to gasoline direct injection (DI) engines only.**Fixed DF of 300 mg/test shall be added to SHED test results. Alternative to fixed DF, manufacture may opt for ageing of evaporative emission control devices as per procedure specified in AIS 137 and as amended time to time.

2Application of Test Requirements for Type-Approval: BS-VI

| | Vehicle with SI engines including hybrids | Vehicles with CI engines including hybrids | | | | | | | |
|-------------------------------------|---|--|--------------------------------------|---------------------|-------------------------|---------------|---------------------|---------------------|---------------------|
| | Mono-fuel | Bi-fuel(3) | Flex-fuel | Flex-fuel | Mono-fuel | Dual Fuel | | | |
| | Gasoline (E5) | LPG | CNG/ Bio-methane/ Bio-Gas/ LNG | H2 | HCNG (Hydrogen + CNG) | Gasoline (E5) | Gasoline (E5) | Gasoline (E5) | Gasoline (E5) |
| | LPG | CNG/ Bio-methane | H2 | Ethanol (E85)/ E100 | Up to 100%(1)Bio-diesel | | | | |
| Gaseous pollutant Type I test | Yes | Yes | Yes | Yes | Yes | Yes | Yes (both fuels) | Yes (both fuels) | Yes (both fuels) |
| (2)Type I test | | | | | | | | | |
| Particulate mass | Yes | No | No | No | No | No | Yes (gasoline only) | Yes (gasoline only) | Yes (gasoline only) |
| Idle emission (Type II) | Yes | Yes | Yes | No | No | Yes | Yes (both fuels) | Yes (both fuels) | Yes (both fuels) |
| Crankcase emission (Type III test) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Evaporative emission (Type IV test) | Yes | No | No | No | No | No | Yes (gasoline only) | Yes (gasoline only) | Yes (gasoline only) |
| Durability (Type V test) | Yes | Yes | Yes | Yes | Yes | Yes | Yes (gasoline only) | Yes (gasoline only) | Yes (gasoline only) |

| | | | | | | | | |
|--|-----|-----|-----|-----|-----|---------------------------|---------------------------|----------------------|
| (4)CO ₂ & Fuel consumption | Yes | Yes | Yes | Yes | Yes | Yes (both fuels) | Yes (both fuels) | Yes fuel |
| On board diagnosis OBD | Yes | Yes | Yes | Yes | Yes | Yes (gasoline only) | Yes (gasoline only) | Yes (gas only) |
| Smoke Opacity | No | No | No | No | No | No | No | No |

(1)Vehicles fuelled with bio diesel blends up to 7% shall be tested with reference diesel (B7) and vehicles fuelled with Bio diesel blends above 7% will be tested with respective blends.(2)In case of PI engines, applicable only to vehicles with direct Injection engines.(3)Vehicles models and variants having option for Bi-fuel operation and fitted with limp-home gasoline tank of capacity not exceeding two litres on two wheelers shall be exempted from test in gasoline mode.(4)CO₂ emission and fuel consumption shall be measured as per procedure laid down in AIS 137 and as amended time to time. When bi-fuel vehicle is combined with a flex fuel vehicle, both test requirements are applicable. Vehicle tested with E100 need not to be tested with E85. Notes. -(1)The test shall be on Chassis Dynamometer.(2)Classification of vehicles and weighting factor for the final emission result shall be as given below:-Table Classification of vehicles and weighting factor

| | Definition of class | WMTC Cycles | Weighting factors for final emission results |
|---------------|--|---|--|
| Class 1 | Vehicles that fulfill the following specifications belong to class 1: 50 cm ³ < engine capacity < 150 cm ³ and v _{max} 50 km/h or engine capacity < 150 cm ³ and 50 km/h < v _{max} < 100 km/h | Part 1 Reduced Speed cold followed by Part 1 Reduced Speed Hot | Part 1 Reduced Speed cold shall be 50% and Part 1 Reduced Speed Hot shall be 50% |
| Sub Class 2-1 | Vehicles that fulfill the following specifications belong to class 2-1: Engine capacity < 150 cm ³ and 100 km/h < v _{max} < 115 km/h or Engine capacity 150 cm ³ and v _{max} < 115 km/h | Part 1 Reduced Speed cold followed by Part 2 Reduced Speed Hot | Part 1 Reduced Speed cold shall be 50% and Part 2 Reduced Speed Hot shall be 50% |
| Sub Class 2.2 | Vehicles that fulfill the following specifications belong to class 2-2: 115 km/h < v _{max} < 130 km/h | Part 1 cold followed by Part 2 Hot | Part 1 cold shall be 50% and Part 2 hot shall be 50%. |
| Sub Class 3-1 | Vehicles that fulfill the following specifications belong to class 3-1: 130 km/h < v _{max} < 140 km/h | Part 1 cold followed by Part 2 Hot followed by Part 3 reduced speed | Part 1 cold shall be 25% Part 2 Hot shall be 50% and Part 3 reduced shall be 25% |
| Sub Class 3-2 | Vehicles that fulfill the following specifications belong to class 3-2: v _{max} > 140 km/h subclass 3-2. | Part 1 cold followed by Part 2 Hot followed by Part 3 | Part 1 cold shall be 25% Part 2 Hot shall be 50% and Part 3 shall be 25% |

(3)The test procedure and driving cycle for all test types including alternative durability and OBD shall be as per AIS 137 and as amended time to time.(4)Specification of Reference Fuels shall be as under:-a) The Reference Gasoline fuel (E5) shall be as specified in Annexure IV-X.b) The reference ethanol fuel (E85) shall be as per Annexure IV-Q.c) The Reference Diesel fuel (B7) shall be as specified in Annexure IV-T.d) The reference ethanol fuel (E100) shall be as per Annexure IV-Se) Reference natural gas fuel used in Natural Gas or Bio-Methane mono-fuel or bi-fuel vehicles shall be as per Annexure IV-L (G20, G23 and G25).f) Reference LPG fuel used in LPG mono-fuel or bi-fuel vehicles shall be as per Annexure IV M (Fuel A and Fuel B). However, in case of non-availability of reference fuels for CNG/ LPG, the commercially available CNG as per BIS 15958:2012 and LPG as per BIS 14861:2000 as amended from time to time shall be used for the purpose of Type Approval and Conformity of Production.g) Hydrogen Fuel vehicles shall be tested with reference fuel specified in the Annexure IV-W to said rules.h) The reference fuel Biogas (Bio-methane) shall be as per IS 16087:2013 and as amended time to time.(5)Specifications of Commercial Fuels shall be as under:-a) The Commercial Gasoline fuel blend shall be as per Annexure IV-U.b) Specification for commercial CNG and commercial LPG shall be in accordance with BIS 15958:2012 and as per BIS 14861:2000 respectively.c) Bio-diesel used in commercial Diesel shall be as per IS 15607.d) Specification for Commercial Diesel fuel shall be as per Annexure IV-V.e) Specifications for commercial E85 shall be as specified in accordance with the Indian Standards.f) Specification for Biogas (Bio-methane) shall be as per IS 16087:2013 and as amended time to time.(6)Gasoline/CNG/LPG vehicles specified herein shall comply with the provisions of clause (i) of sub-rule (2) of rule 115. The Vehicle equipped with CI engine specified in sub rule shall comply with the provision of clause (ii) of sub-rule (2) of rule 115. For vehicles fitted with CI engine, the emission of visible pollutants (smoke) shall not exceed the limit value of smoke density, as per Annexure I to sub-rule (9) of rule 115. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02.(7)Crankcase ventilation system shall not permit the emission of any of the crankcase gases in to the atmosphere.(8)Alternatively, to the fixed DF mentioned in Table 1 of this sub-rule, the vehicle manufacturers may opt for evaluation of deterioration factor as per procedure described in AIS 137 and as amended time to time.(9)Conformity of Production (COP) test procedure shall be as per clause (e) of sub-rule (12) of rule 115.For 2W vehicles, at least 50% of Vehicle models produced from particular plant shall be selected randomly from dealer's location or warehouse.(10)The engine power shall be measured on engine dynamometer and measured power shall conform to the power specified and tested as per procedure prescribed in AIS 137 and as amended time to time.(11)The vehicle presented for Type approval shall have been run for at least 1000 km before the test.(12)The Two wheeler vehicles shall be equipped with On-Board Diagnostic (OBD) systems for emission control which shall have the capability of identifying the likely area of malfunction by means of fault codes stored in computer memory as per the procedure laid down in AIS 137.The On-Board Diagnostic (OBD) systems for emission control shall be as specified in the following Tables:Table 1OBD Functions and associate

| Monitoring Items | OBD Stage I (BS VI)1stApril,2020 | OBD Stage II (BS VI)1stApril,2023 |
|--|----------------------------------|-----------------------------------|
| Circuit continuity for all emission related power traincomponent (if equipped) | <input type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> |

Distance traveled since MIL (Malfunction indicator lamp) ON

| | | |
|--|--------------------------|--------------------------|
| Electrical disconnection of Electronic evaporative purgecontrol device (if equipped and if active) | <input type="checkbox"/> | <input type="checkbox"/> |
| Catalytic converter monitoring | X | <input type="checkbox"/> |
| EGR system monitoring | <input type="checkbox"/> | <input type="checkbox"/> |
| Misfire detection | X | <input type="checkbox"/> |
| Oxygen sensor deterioration | X | <input type="checkbox"/> |

(13) In-use performance ratio (IUPR) for BS VI vehicles manufactured on or after 1st April 2023, the in-use performance ratio (IUPR) of a specific monitor M of the OBD systems shall be: $IUPR = \frac{\text{Numerator}}{\text{Denominator}}$ Comparison of Numerator and Denominator gives an indication of how often a specific monitor is operating relative to vehicle operation. Detailed requirements for tracking IUPR are given in AIS 137. If, according to the requirements specified in AIS 137, the vehicle is equipped with a specific monitor M, IUPRM shall be greater or equal to 0.1 for all monitors M. Table 2 On-board (OBD) diagnostics emission thresholds for BS VI Applicable from 1st April, 2023

Vehicle Class OBD Stage II/ Gasoline

| | CO mg/km | NMHC mg/km | NOx mg/km | PM mg/km |
|-----------|----------|------------|-----------|----------|
| 1 & 2-1 | 1900 | 250 | 300 | 50(1) |
| 2-2 | 1900 | 250 | 300 | 50(1) |
| 3-1 & 3-2 | 1900 | 250 | 300 | 50(1) |

Vehicle Class OBD Stage II/ Diesel

| | CO mg/km | NMHC mg/km | NOx mg/km | PM mg/km |
|-----|----------|------------|-----------|----------|
| All | 1900 | 320 | 540 | 50 |

(1) In case of P.I. engines, applicable only to vehicles with direct injection engines. (ii) The Emission Standards (Bharat Stage VI) for two wheelers with Spark Ignition engines other than those specified in para (19), (i) above: (Vehicles with cc ≤ 50 and $V_{max} \leq 50$ km/hr) shall be as per the below table: Table

| Pollutant | TA=COP norms mg/km | Deterioration Factor (D.F.) | Test Cycle (Cold Start at T=0 sec) |
|-----------|--------------------|-----------------------------|------------------------------------|
| CO | 500 | 1.2 | IDC as per AIS137 |
| HC | 350 | 1.2 | |
| NOx | 150 | 1.2 | |

Notes: (1) Gasoline/ CNG/ LPG vehicles specified herein shall comply with the provisions of clause (i) of sub-rule (2) of rule 115. (2) The Reference Gasoline fuel (E5) shall be as specified in Annexure IV-X. (3) Reference natural gas fuel used in Natural Gas or Bio-Methane mono-fuel or bi-fuel vehicles shall be as per Annexure IV-L (G20, G23 and G25). (4) Reference LPG fuel used in LPG mono-fuel or bi-fuel vehicles shall be as per Annexure IV M (Fuel A and Fuel B). However, in case of non-availability of reference fuels for CNG/ LPG, the commercially available CNG as per BIS 15958:2012 and LPG as per BIS 14861:2000 as amended from time to time shall be used for the purpose of Type Approval and Conformity of Production. The reference fuel Biogas (Bio-methane) shall be as per IS 16087:2013 and as amended time to time. (5) The provision clause (a) sub-clause (i)

of clause (c), clause (e) and clause (f) of sub-rule (12) of clauses (a), (c)(i), (e) and (f) for sub-rule 12 of rule 115, except the proviso therein, shall be applicable to the said vehicle.(6)The driving cycle for Vehicles with cc ≤ 50 and $V_{max} \leq 50$ km/hr shall be Indian Driving Cycle (IDC) and the exhaust gas sampling shall start at the initiation of cycle in case of gasoline two wheeler vehicles.(7)The engine power shall be measured on engine dynamometer and the measured power shall conform to the power specified and tested as per procedure prescribed in AIS 137 and as amended time to time.(20)The Emission Standards Bharat Stage VI (BS VI) for Three wheelers vehicle models manufactured on or after 1st April 2020 shall be as under:-Table 1Three wheelers fitted with PI and CI Engines: BS VI

Vehicle with
PI engines

| | CO mg/km | HC+NO _x mg/km | NO _x mg/km | EVAP mg/test | OBD | Durability mileage (km) Type V | Test Cycle (Cold Start at T=0 sec) |
|-------|-------------|-----------------------------|--------------------------|-----------------|-------------|--------------------------------------|--|
| Limit | 440 | 435 | 130 | 1500 | Stage II | 35000 | IDC AIS137 |
| D.F. | 1.20 | 1.2 | 1.2 | -- | -- | -- | |

Vehicle with
CI engines

| | CO mg/km | HC+NO _x mg/km | NO _x mg/km | PM mg/test | OBD | Durability mileage (km) Type V | Test Cycle (Cold Start at T=0 sec) |
|-------|-------------|-----------------------------|--------------------------|---------------|-------------|--------------------------------------|--|
| Limit | 220 | 200 | 160 | 25 | Stage II | 35000 | IDC AIS137 |
| D.F. | 1.10 | 1.0 | 1.00 | 1.20 | -- | -- | |

Table 2Application of Test Requirements for Type-Approval : BS-VI

| | Vehicle with PI engines including hybrids | Vehicles with CI engines including hybrids | | | | | | | |
|----------------------|--|--|---------------------------------|-----------------------------|------------------|---------------------|---------------------|---------------|--|
| Mono-fuel | Bi-fuel(3) | Flex-fuel | Flex-fuel | Mono-fuel | Dual Fuel | | | | |
| Gasoline (E5) | LPG | CNG/Bio-methane/ Bio-Gas/LNG | H ₂ | HCNG (Hydrogen + CNG) | Gasoline (E5) | Gasoline (E5) | Gasoline (E5) | Diese (B7) | |
| LPG | CNG/ Bio-methane | Ethanol (E85) | Bio-diesel up to 100% (1) | | | | | | |
| Gaseous pollutant | Yes | Yes | Yes | Yes | Yes | Yes (both fuels) | Yes (both fuels) | Yes (fuels) | |

(Type I test)

(2)Type I test

| | | | | | | | | | |
|---------------------------------------|-----|-----|-----|-----|-----|---------------------|---------------------|---------------------|---------------------|
| Particulate mass | Yes | No | No | No | No | No | No | No | No |
| Idle emission (Type II test) | Yes | Yes | Yes | Yes | Yes | Yes (both fuels) | Yes (both fuels) | Yes (both fuels) | Yes (both fuels) |
| Crankcase emission (Type III test) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Evaporative emission (Type IV test) | Yes | No | No | Yes | Yes | Yes (gasoline only) | Yes (gasoline only) | Yes (gasoline only) | Yes (gasoline only) |
| Durability (Type V test) | Yes | Yes | Yes | Yes | Yes | Yes (gasoline only) | Yes (gasoline only) | Yes (gasoline only) | Yes (gasoline only) |
| (4)CO ₂ & Fuel consumption | Yes | Yes | Yes | No | No | Yes (both fuels) | Yes (both fuels) | Yes (both fuels) | Yes (both fuels) |
| OBD Stage II | Yes | Yes | Yes | | | Yes (gasoline only) | Yes (gasoline only) | Yes (gasoline only) | Yes (gasoline only) |
| Smoke Opacity | No | No | No | No | No | No | No | No | No |

(1)Vehicles fuelled with bio diesel blends up to 7% shall be tested with reference diesel (B7) and vehicles fuelled with Bio diesel blends above 7%will be tested with respective blends.(2)In case of PI engines, applicable only to vehicles with direct Injection engines.(3)Vehicles models and variants having option for Bi-fuel operation and fitted with limp-home gasoline tank of capacity not exceeding three litres on three wheelers shall be exempted from test in gasoline mode.(4)CO₂ emission and fuel consumption shall be measured as per procedure laid down in AIS 137 and as amended time to time.When bi-fuel vehicle is combined with a flex fuel vehicle, both test requirements are applicable. Vehicle tested with E100 need not to be tested with E85.Notes -

1. The test shall be on Chassis Dynamometer.

2. The test including driving cycle shall be as provided in CMV sub-rule (12) with the modifications that

i) The exhaust gas sampling should start at the initiation in case of gasoline and diesel three wheeler as per the engine start up procedure referred to in Annexure II.

3. The provision of clauses (a),(c), (d), (e)and(f)of sub-rule (12)ofrule115,except the proviso therein at the end of this sub rule, shall be applicable to the said vehicles.

4. Specifications of Reference Fuels:

(a)The Reference Gasoline fuel (E5) shall be as specified in Annexure IV-X. The reference Ethanol fuel (E85) shall be as per the Annexure IV-Q.(b)The Reference Diesel fuel (B7) shall be as specified in Annexure IV-T.(c)Reference natural gas fuel used in Natural Gas or Bio-Methane mono-fuel or bi-fuel vehicles shall be as per Annexure IV-L (G20, G23 and G25).(d)Reference LPG fuel used in LPG mono-fuel or bi-fuel vehicles shall be as per Annexure IV M (Fuel A and Fuel B), however, in case of non-availability of reference fuels for CNG/ LPG, the commercially available CNG as per BIS 15958:2000 and LPG as per BIS 14861:2012 as amended from time to time shall be used for the purpose of Type Approval and Conformity of Production.(e)Reference fuel Biogas (Bio-methane) shall be as per IS 16087:2013 and as amended time to time.

5. Specifications of Commercial Fuels shall be as under:-

i) The Commercial Gasoline fuel shall be as per Annexure IV-U.ii) Specification for commercial CNG and commercial LPG shall be in accordance with BIS 15958:2012 and as per BIS 14861:2000 respectively.iii) Bio-diesel used in commercial Diesel shall be as per IS 15607.iv) Specification for Commercial Diesel fuel shall be as per Annexure IV-V.v) Specifications for commercial E85 shall be as specified in accordance with the Indian Standards as amended from time to time.vi) Specification of commercial Biogas (Bio-methane) shall be as per IS 16087:2013 and as amended time to time.

6. There shall be no relaxation of norms for Conformity of Production (COP) purposes.

7. The Conformity of Production (COP) testing procedure shall be as described in AIS 137 and as amended time to time. For 3W vehicles, at least 50% of Vehicle models produced from particular plant shall be selected randomly from dealer's location or warehouse.

8. Alternative to fixed DF mention in Table 1, the vehicle manufacturers may opt for evaluation of deterioration factor as per procedure described in AIS 137.

9. The engine power shall be measured on engine dynamometer and the measured power shall confirm to the power specified and tested as per procedure prescribed in AIS 137 and as amended time to time.

10. The vehicle presented for Type approval shall have been run for 1000km before the test.

11. (a) C.I. vehicles specified herein shall comply with the provisions of clause (ii) of sub-rule(2) of rule 115.

(b)S.I. Vehicles specified herein shall comply with the provision of clause (i) of sub-rule (2) of rule 115.

12. Crank case ventilation system shall not permit the emission of any of the crankcase gases into the atmosphere. Test procedure shall as per AIS 137.

13. Evaporative emission for gasoline driven vehicles shall not be more than 1.5 g/test. Test procedure shall as per AIS 137.

14. The Three wheeler vehicles shall be equipped with On-Board Diagnostic (OBD) systems for emission control which shall have the capability of identifying the likely area of malfunction by means of fault codes stored in computer memory as per the procedure laid down in AIS 137.

The On-Board Diagnostic (OBD) systems for emission control shall be as specified in the below Tables:-Table 1OBD Functions and associate

| Monitoring Items | OBD Stage I (BS VI)1stApril,2020 | OBD Stage II (BS VI)1stApril,2023 |
|--|----------------------------------|-----------------------------------|
| Circuit continuity for all emission related power traincomponent (if equipped) | <input type="checkbox"/> | <input type="checkbox"/> |
| Distance traveled since MIL (Malfunction indicator lamp) ON | <input type="checkbox"/> | <input type="checkbox"/> |
| Electrical disconnection of Electronic evaporative purgecontrol device (if equipped and if active) | <input type="checkbox"/> | <input type="checkbox"/> |
| Catalytic converter monitoring | X | <input type="checkbox"/> |
| EGR system monitoring | X | <input type="checkbox"/> |
| Misfire detection | X | <input type="checkbox"/> |
| Oxygen sensor deterioration | X | <input type="checkbox"/> |

Table 2On-board (OBD) diagnostics emission thresholds for BSVIApplicable from 1st April, 2023

Vehicle OBD Stage II Gasoline

| | |
|--------------|-----------|
| CO mg/km | NOx mg/km |
| Gasoline 88o | 425 |

OBD Stage II Diesel Vehicles

| | | |
|--------|----------|-----------|
| Diesel | CO mg/km | NOx mg/km |
| | 440 | 300] |

[Inserted by Notification No. G.S.R. 889, dated 16.9.2016 (w.e.f. 2.6.1989).][[115A. Emission of smoke and vapour from agricultural tractors, power tillers, construction equipment vehicles and combine harvesters driven by diesel engines. [Inserted by GSR 627(E), dated 8.9.1999 (w.e.f. 1.10.1999).]] [Inserted by Notification No. G.S.R. 487(E), dated 12.6.2015 (w.e.f. 2.6.1989)]] - (1)Every [agricultural tractor and construction equipment vehicles and combine harvester] [Substituted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] manufactured on and from the date of commencement of this rule shall be maintained by its owner in such condition and shall be so used that visible and gaseous pollutants emitted by them comply with the standards as prescribed in this rule.(2)Every manufacturer of an [agricultural tractor and construction equipment vehicle] [Substituted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).]shall comply with the standards for visible pollutants, emitted by it, when tested as per the procedure described in Indian Standards IS: 12062: 1987.(3)The emission of visible pollutants shall not exceed the limit values given below when tested on engine dynamometer at eighty per cent load at six equally spaced speeds, namely:(a)Fifty-five per cent of rated speed declared by the manufacturer or one thousand r.p.m.,whichever is higher; or(b)rated speed declared by the manufacturer.

Maximum Smoke Density

Light absorption coefficient (1m) Hartridge units

3.25 75

(4)Every diesel driven [construction equipment vehicles] [Substituted by GSR 83(E), dated 5.2.2003, for 'agricultural tractor and construction equipment vehicle'(w.e.f. 1.6.2003).]shall be so manufactured and produced by its manufacturer that it complies with the following standards of gaseous pollutants, emitted by them in addition to those of visible pollutants as provided in sub-rule (2) when tested as per the procedures described in ISO 8178-4 Cl 8 mode cycle,namely:The weighted average Mass of Carbon Monoxide (CO), Hydrocarbons (HC) and Mass Oxides of Nitrogen (NOx) in gram or [per] [<SPAN] kilo watt. hr. emitted during the test shall not exceed the limits given below, both for type approval and Conformity On Production tests, namely:

| | |
|----------------------------------|---|
| Mass of Carbon Monoxide (CO) | 14.0 gram or[per] [Substituted by G.S.R. 83(E), dated 5.2.2003, for 'agricultural tractor and construction equipment vehicle]kilo watt.hr. |
| Mass of Hydrocarbon (HC) | 3.5 gram or[per] [Substituted by G.S.R. 83(E), dated 5.2.2003, for 'agricultural tractor and construction equipment vehicle]kilo watt.hr. |
| Mass of Oxides of Nitrogen (NOx) | 18.0 gram or[per] [Substituted by G.S.R. 83(E), dated 5.2.2003, for 'agricultural tractor and construction equipment vehicle]kilo watt.hr.] |

(5)[Every diesel driven agriculture tractor and power tiller shall be so manufactured and produced by the manufacturer that it complies with the following standards of gaseous pollutants emitted by them in addition to those of visible pollutants as provided in sub-rule (2) when tested as per the procedure prescribed in ISO8178-4 C1 8 mode cycle, namely:The weighted average Mass of Carbon Monoxide (CO), Hydrocarbon (HC) and Oxides of Nitrogen (NOx) and Particulate Matter (PM) in gram per kilo watt hour emitted during the test shall not exceed the limits given below in the Table for Type Approval (TA) and Conformity of Production (COP) tests, namely:TABLE

| | Bharat (Term)Stage II norms | Bharat (Term)Stage III norms |
|----------------------------------|-----------------------------|------------------------------|
| (1) | (2) | (3) |
| | TA=COP | TA=COP |
| Mass of Carbon Monoxide (CO) | 9.0 | 5.5 |
| Mass of Hydro-carbons (HC) | | |
| Mass of Oxides of Nitrogen (NOx) | 15.0 | 9.5 |
| Mass of Particulate Matter (PM) | 1.0 | 0.8] |

Notes : (1) The norms mentioned in column (2) of the said Table which are applicable for agricultural tractor with effect from the 1st day of June, 2003, shall be applicable for power tillers from the 1st day of October, 2006. (2) The norms mentioned in column (3) of the said Table shall be applicable for agricultural tractor with effect from the 1st day of October, 2005 and for power tillers from the 1st day of April, 2008. (6) [Every diesel driven construction equipment vehicle [and self propelled combine harvesters] [Inserted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).] shall be so manufactured that it complies with the following standards of gaseous pollutants emitted by them in addition to those of visible pollutants as provided in sub-rule (2), when tested as per the procedure described in ISO 8178 Part-4(1996) CI 8 mode cycle for variable speed engines and ISO 8178 Part-4(1996) D2 5 mode cycle for constant speed engines, namely: The weighted average Mass of Carbon Monoxide (CO), Hydrocarbon (HC) and Oxides of Nitrogen (NOx), and Particulate Matters (PM) in grams per kilo Watt hour emitted during the test shall not exceed the limits given below in the TABLE for Type Approval (TA) and Conformity of Production (COP) tests, namely: TABLE Limit Values for Type Approval (TA) as well as for Conformity of Production (COP)

| Bharat Stage II (CEV) | Applicable with effect from the | CO | HC | NOx | PM |
|------------------------|---------------------------------|-------|--------|-------|------|
| Category | | g/kWh | | | |
| kW<8 | 1st October, 2008 | 8.00 | 1.30 | 9.20 | 1.0 |
| 8□kW<19 | 1st October, 2008 | 6.60 | 1.30 | 9.20 | 1.0 |
| 19□kW<37 | 1st October, 2007 | 6.50 | 1.30 | 9.20 | 0.85 |
| 37□kW<75 | 1st October, 2007 | 6.50 | 1.30 | 9.20 | 0.85 |
| 75□kW<130 | 1st October, 2007 | 5.0 | 1.30 | 9.20 | 0.70 |
| 130□kW<560 | 1st October, 2007 | 5.0 | 1.30 | 9.20. | 0.54 |
| Bharat Stage III (CEV) | Applicable with effect from the | CO | HC+NOx | PM | |
| Category | | q/kWh | | | |
| kW<8 | 1st April, 2011 | 8.00 | 7.50 | 0.80 | |
| 8□kW<19 | 1st April, 2011 | 6.60 | 7.50 | 0.80 | |
| 19□kW<37 | 1st April, 2011 | 5.50 | 7.50 | 0.60 | |
| 37□kW<75 | 1st April, 2011 | 5.0 | 4.70 | 0.40 | |
| 75□kW<130 | 1st April, 2011 | 5.0 | 4.00 | 0.30 | |
| 130□kW<560 | 1st April, 2011 | 3.50 | 4.00 | 0.20 | |

|||||||

Notes :

- 1. The test shall be on Engine Dynamometer.**
- 2. The Test-Procedure for measurement of Gross Power -(without Fan) shall be as per Part IV of MoSRTTH/CMVR/TAP-115/116 Issue No. 3.**
- 3. The Test-Procedure for measurement of emission of visible and gaseous pollutants and Particulate Matter shall be as per MoSRTTH/CMVR/TAP-115/116 Part X (Sub-part B).**
- 4. The emission of visible pollutants shall not exceed the limit values given in sub-rule (3) of rule 115-A when tested on engine dynamometer at eighty per cent load at six speeds as per sub--rule (3) of rule 115-A.**
- 5. To meet Bharat Stage III (CEV) norms with effect from 1st April, 2011, Engine manufacturer may opt for an engine test as mentioned in Table 1 below for evaluating deterioration factors as per Annexure V of Part X, Sub-part B of MoSRTTH/CMVR/TAP-115/116 Issue No. 3**

| Category(power band) (Emission Durability Period) | Useful life (hours) |
|--|---------------------|
| <19 kW | 3000 |
| 19<kW<=(constant speed) | 3000 |
| 19<kW<=37 (variable, speed) | 5000 |
| >37 kw | 8000 |

ORFixed Deterioration factors shall be used as per table 2below.TABLE-2TABLE-2

CO HC NOx PM

1.1 1.05 1.05 1.1

[Substituted by G.S.R. 589(E), dated 16.9.2005.]

- 6. There shall be no relaxation of norms for COP purposes.**
- 7. COP Selection Procedure shall be as per MoSRTTH/CMVR/TAP--115/116 Part VI.**
- 8. COP Frequency:-**

(a)for equipment with annual production up to 200 Nos. shall be once in two years per Engine Family;(b)for equipment with annual production exceeding 200 Nos. shall be once in every year per Engine Family.]

9. [Bharat Stage III (CEV) norms shall be applicable to self propelled combine harvester on and from the commencement of the Central Motor Vehicles (Fourth Amendment) Rules, 2015.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]

(7)[Every diesel driven [agricultural tractor operated combine harvester] [Inserted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] manufactured on and from the date specified in column (2) of the Table 1 shall comply with the Bharat (Trem) Stage-III A norms and the weighted average mass of Carbon Monoxide (CO), Hydrocarbon (HC) and Oxides of Nitrogen (NOx) and Particulate Matters (PM) in grams per kiloWatt/hour emitted by them in addition to those of visible pollutants as provided in sub-rule (2), when tested for Type Approval (TA) and Conformity of Production (COP) in accordance with the procedure specified in ISO 8178 Part-4(1996) C1 8 mode cycle, shall not exceed the limits given in columns (3), (4)and (5) respectively, of the said Table.Limit Values for Type Approval (TA) and Conformity of Production (COP)TABLE-1

| Category | Applicable from | CO | HC+NOx | PM |
|-------------|-----------------|-----|--------|-----|
| (1) | (2) | (3) | (4) | (5) |
| <8kW | | 5.5 | 8.5 | 0.8 |
| 8<=kW<19 | | 5.5 | 8.5 | 0.8 |
| 19<=kW<37 | | 5.5 | 7.5 | 0.6 |
| 37<=kW<56 | | 5.0 | 4.7 | 0.4 |
| 56<=kW<75 | | 5.0 | 4.7 | 0.4 |
| 75<=kW<130 | | 5.0 | 4.0 | 0.3 |
| 130<=kW<560 | | 3.5 | 4.0 | 0.2 |

Notes:-

- 1. The test shall be on Engine Dynamometer.**
- 2. The test procedure for measurement of Gross Power (without Fan) shall be as per Part IV of MoSRTTH/CMVR/TAP-115/116 Issue No.3.**
- 3. The test procedure fro measurement of emission of visible and gaseous pollutants and Particulate matter shall be as per MoSRTTH/CMVR/RAP-115/116 Part X (Sub-part A).**
- 4. Test fuel shall be the reference fuel as specified in Annexure IV-P.**

5. The emission of visible pollutants, when tested as provided in sub-rule (3) of rule 115-A, shall not exceed the limit values given therein.

6. To meet Bharat (Trem) Stage-III A norms with effect from the date specified in column (2) of Table 1, the engine manufacturer may opt for an aging test as specified in Table 2 for evaluating deterioration factors as per Annexure V of Part X (Sub-part B) of MoSRTTH/CMVR/TAP/115-116 Issue No. 3 or fixed deterioration factors as per Table 3.

Table-2

| Category(power band) (Emission Durability Period) | Useful life (hours) |
|--|---------------------|
| <=19kW | 3000 |
| 19<kW<=37 | 5000 |
| >37kW | 8000 |

TABLE-3

| CO | HC | NO _x | PM |
|-----|------|-----------------|-----|
| 1.1 | 1.05 | 1.05 | 1.1 |

7. There shall be no relaxation of norms for Conformity of Production (COP) purposes.

8. Conformity of Production (COP) Selection Procedure Shall be as per MoSRTTH/CMVR/TAP-115/116 Part VI.

9. Conformity of Production (COP) Frequency shall be as per Part X (Sub-part A) of MoSRTTH/CMVR/TAP-115/116.

10. The extension of Type Approval (TA) to engine family and engine after-treatment system family shall be specified in MoSRTTH/CMVR/TAP-115/116 as amended from time to time.

Explanation 1. The term "engine family" includes a range of engines having similar design parameters from emission levels. Explanation 2. The term "engine after-treatment system family" means if same after-treatment system consisting of catalyst, particulate traps, etc., is used on a series of engines, then the deterioration factor based on one engine test shall be applicable to the entire series.](8)[Every gasoline driven power tiller manufactured on and from 01/10/2013, shall comply with the Bharat Stage III norms and the weighted average mass emission of Carbon Monoxide (CO), Hydrocarbon (HC) and Oxides of nitrogen (Nox) in grams per kilo watt hour emitted by them, when tested for Type Approval (TA) and Conformity of Production (COP) in

accordance with the eight mode test cycle given in the following Table 1, shall not exceed the limits given in the following Table 2:-Table 1

| Mode | Engine Speed | Percent Load | Weighting |
|------|--------------------|--------------|-----------|
| (1) | (2) | (3) | (4) |
| 1. | Rated | 100 | 0.15 |
| 2. | Rated | 75 | 0.15 |
| 3. | Rated | 50 | 0.15 |
| 4. | Rated | 10 | 0.1 |
| 5. | Intermediate speed | 100 | 0.1 |
| 6. | Intermediate speed | 75 | 0.1 |
| 7. | Intermediate speed | 50 | 0.1 |
| 8. | Idle | --- | 0.15 |

Table 2 Limit value for Type Approval (TA) and Conformity of Production (COP)
CO(g/Kwhr) HC+Nox(g/Kwhr)

| | |
|-----|-----|
| (1) | (2) |
| 14 | 24 |

Notes:

1. Test shall be on engine dynamometer.

2. The Test procedure for measurement of gross power (without fan) shall be as per 15:14599.

3. The reference fuel for Gasoline power tiller engine shall be as specified in Annexure IV G of the said rules.

4. The test procedure for measurement of emission gaseous pollutants shall be as per procedure laid down in Ministry of Road Transport and Highways/Central Motor Vehicles Rules/Type Approval Procedure-115/116 (MoRTH/CMVR/TAP- 115/116).]

115B. [Mass emission standards for Compressed Natural Gas Driven Vehicles. [Rule 115-B substituted by GSR 853(E) dated 19.11.2001 (w.e.f. 19.5.2002).]

- [1] [Mass emission standards for vehicles when operating on Compressed Natural Gas (hereinafter in this rule referred to as CNG) shall be the same as are applicable for gasoline vehicles with the exception that HC shall be replaced by Non-Methane Hydrocarbon (NMHC), where NMHC = 0.3 x

HC.] [Substituted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).][Provided that bio-compressed natural gas (bio-CNG) shall be permitted for motor vehicles as an alternate composition of the compressed natural gas (CNG):Provided further that the mass emission standards applicable to compressed natural gas (CNG) vehicles under these rules shall be applicable to respective vehicles when they use bio-compressed natural gas (bio-CNG):Provided also that the bio-compressed natural gas (bio-CNG) as per IS 16087 and meets the requirement of Siloxanes max 0.1 ppm (calculated as Si)] [Inserted by Notification No. G.S.R. 498 (E), dated 16.6.2015 (w.e.f. 2.6.1989)]A. Original Equipment/Converted Gasoline Vehicles:(I)For gasoline vehicles with Original Equipment(hereinafter in this rule referred to as O.E.) fitment.(a)In case of CNG fitments by vehicle manufacturers on new petrol vehicles, each model manufactured by vehicle manufacturers shall be type approved as per the prevailing mass emission norms as applicable for the category of new vehicles in respect of the place of its use;] [Clause (a) substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).](b)Base model and variants of such vehicle shall conform to these rules as applicable and type approval emission norms in petrol mode as specified in these rules. In the case of CNG mode, it shall meet mass emission norms as specified in rule 115, excluding crankcase and evaporative emission norms.(c)[vehicle models and variants having option for bi-fuel operation and fitted with limp-home Gasoline tank of capacity not exceeding two litres, three litres and five litres respectively on two-wheeler, three-wheeler and four-wheeler shall be exempted from mass emission tests including all tests specified under sub-rule (2),Notes 6 and 7 mentioned below clause (C) of sub-rule (14) and Notes 6, 7, 15and 16 of sub-clause (i) of clause (b)of sub-rule (15) of rule 115 in Gasoline mode; [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).](d)prevalent conformity of production procedure shall also be applicable.](II)For in-use gasoline vehicles.(a)The in-use vehicles fitted with CNG kits shall meet the type approval emission norms on CNG operation, as specified in these rules for gasoline vehicles as applicable to the corresponding year of manufacture of such vehicles, subject to a minimum norms as under:(i)for the vehicles manufactured up to 31st March, 2000, the type approval norms equivalent to India 2000 (India Stage I)norms as applicable under these rules; and(ii)[for the vehicles manufactured on or after 1st April, 2000, and up to the 30th September, 2010, the type approval norms as specified in the Bharat Stage II norms;] [Substituted by Notification No. G.S.R. 498 (E), dated 16.6.2015 (w.e.f. 2.6.1989)](iii)[for the vehicles manufactured on and after the 1st day of April, 2005, the type approval norms as applicable subject to minimum of Bharat Stage III emission norms in case of four-wheelers and Bharat Stage II emission norms for two and three-wheelers;] [Clause (iii) inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).](iv)[for the vehicles manufactured on and after the 1st day of April 2010, the type approval norms as applicable, subject to minimum of Bharat Stage-IV emission norms for Category M and Category N Vehicles with Gross Vehicle Weight not exceeding 3,500 kg and Bharat Stage-III emission norms for two and three wheelers.] [Inserted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).](b)For purposes of CNG kit approval, kit manufacturer or supplier shall obtain the certificate from any of the test agencies authorized under rule 126 based on engine capacity of vehicle, in the following manner, namely:(i)CNG kit for the vehicle shall be type approved for vehicles irrespective of make and model.Such a kit shall be considered fit for retro fitment in any vehicle within a specified range of engine capacity of c.c. within a range of 125% tolerance.(ii)Separate type approval shall be necessary for the following types of vehicles, namely:(a)Two stroke;(b)Four stroke;(c)Carburetted;(d)Single point fuel injected; and(e)Multi point fuel injected.Explanations. In the case of O.E. or conversion of In-Use Gasoline

Vehicles,(a)For the purposes of granting Type Approval to a CNG kit, the tests shall be carried out as per the Table below by the test agencies.

| Test | Reference Document |
|---|--|
| (1) | (2) |
| (i)Mass emission tests | MOST/CMVR/TAP-115/116and notifications issued by the Government of India in this respect |
| (ii)Engine performance tests on engine dynameter applicable for OE only | IS: 14599-1999 |
| (iii)[Fuel Consumption test] | Sl. No. 31 of the notification number S.O. 1365(E), dated the 13thDecember, 2004] |
| <p>(b)The test procedure and safety guidelines for CNG vehicles, kit components including installation thereof, shall be as per AIS024, as amended from time to time, till such time as corresponding BIS specifications are notified.(c)For OE fitment and retro fitment on in-use vehicles, the responsibility to Type Approval shall be that of the vehicle manufacturer and kit manufacturer or supplier respectively.(d)The Type Approval of CNG kit for retro fitment shall be valid for three years from the date of issue of such approval and shall be renewable for three years at a time.(e)The retro fitment of CNG kits on in-use vehicles shall be carried out by workshops authorized by the kit manufacturer/supplier or vehicle manufacturers, as the case may be.(f)The test agency shall complete the test and give necessary certificate within a period of three months from the date of receiving the kits.(g)The kit manufacturer/supplier shall provide a layout plan for retro fitment of CNG kit in the respective models on which any approved kit is to be installed, to the test agency for vetting and approval. The retro fitment of the kit shall be on the basis of such approved layout plan only. Testing agencies will be required to indicate specifically, the models and their variants on which the certificate will be valid.][* * *] [Item A, Clause by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).]B. O.E. CNG Vehicles/Converted Diesel Vehicle:(I)For O.E. CNG Dedicated Vehicle (including drive-away chassis) made by vehicle manufacturers.(a)[In case of CNG fitments by vehicle manufacturers on new diesel vehicles, each model manufactured by vehicle manufacturers shall be type approved as per the prevailing mass emission norms as applicable for the category of new vehicle sin respect of the place of its use;] [Substituted by G.S.R. 589(E), dated 16.9.2005.](b)O.E. CNG engine approved for specific engine capacity can be installed on the base model and its variants complying with the requirements under these rules as applicable;(c)Tests for particulate matter and emission of visible pollutants (smoke) under these rules shall not be applicable;(d)Prevailing COP procedure will also be applicable.(II)For conversion by modification of engines of In-use Diesel Vehicles .(a)Type approval for diesel vehicle retrofitted/modified for dedicated CNG operation shall be given for specific make and model of the vehicle, in view of major changes or modifications involved in the CNG kit and diesel engine depending upon make and model of the vehicle;(b)CNG kit approved on the vehicle for specific engine capacity can be installed on the base model and its variants fitted with the same capacity engine;(c)[The in-use vehicles when converted to operate on CNG shall meet the type approval norms of diesel vehicles corresponding to the year of their manufacture subject to the following minimum norms: [Substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).](i)for the vehicles manufactured up to the 31st day of March, 2000, the type approval norms equivalent to India-2000(India Stage I)</p> | |

norms as applicable under these rules;(ii)[for the vehicles manufactured on and after the 1st day of April, 2000, and up to the 30th September, 2010, the type approval norms as specified in the Bharat Stage II norms;](iii)for the vehicles manufactured on and after the 1st day of April, 2005, the type approval norms as applicable subject to minimum of Bharat Stage III emission norms in case of four-wheelers and Bharat Stage II emission norms for two and three-wheelers till the validity of these norms;](iv)[for the vehicles manufactured on and after 1st April 2010, the type approval norms as applicable, shall be subject to minimum of Bharat Stage-IV emission norms in case of four wheelers and Bharat Stage--III emission norms in case of two end three wheelers till the validity of these norms;] [Inserted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).](d)Vehicles offered for Type Approval to the testing agency referred in rule 126 of the Central Motor Vehicles Rules, 1989shall have to comply with fitness requirement, as applicable under these rules;(e)Tests for particulate matter and emission of visible pollutants (smoke) under these rules shall not be applicable;(f)Separate Type Approval is required for mechanically controlled and electronically controlled diesel fuel injected vehicles when retrofitted/modified for CNG operation.Explanations. In the case of O.E. or conversion of In-Use vehicles by modification(a)for the purpose of granting Type Approval to the vehicle fitted with CNG engine (converted from diesel engine) as O.E., or conversion by modification of In-Use diesel vehicles, performance tests shall be carried out as per the :

| Test | Reference Document(As amended from time to time) |
|---|--|
| (1) | (2) |
| (i)Mass emission tests | MOST/CMVR/TAP-115/116and notifications issued by the Government of India in this respect |
| (ii)Engine performance tests on engine dynameter applicable for OE only | IS: 14599-1999 |
| (iii)Grade ability | In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 |
| (iv)[Fuel Consumption test [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] | Sl.No. 31 of the notification number S.O. 1365(E), dated the 13thDecember, 2004] [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] |
| (v)Electro-Magnetic Interference (EMI) | In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 |
| (vi)Range Test of at least 250 km for buses | - |
| (vii)Cooling Performance | IS: 14557, 1998 |

Note .The mass emission tests shall be carried out either on engine dynamometer or chassis dynamometer, as applicable.(b)Test procedure and safety guidelines for CNG vehicles, kit components including installation thereof, shall be as per AIS024, as amended from time to time, till such time as corresponding BIS specifications are notified;(c)For O.E. fitment and retro fitment/modification on In-Use vehicles, the responsibility of Type Approval shall be that of the vehicle manufacturer and kit manufacturer or supplier respectively;(d)The Type Approval of CNG kit for retro fitment shall be valid for 3 years from the date of issue and shall be renewable for three years at a time;(e)The retro fitment of CNG kits on in-use vehicles shall be carried out by workshops authorized by the kit manufacturer/supplier or vehicle manufacturers, as the case may be;(f)The test

agency shall complete the test and give necessary certificate within a period of three months from the date of receiving the kits.[* * *] [Item B, Clause (III) omitted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).]C. Replacement of In-use Diesel Engine by New CNG Engine. [Part C substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).] - For Type Approval of in-use vehicle having diesel engine replaced by new Compressed Natural Gas engine, it shall meet prevailing emission norms as applicable to the category of vehicles in respect of its place of use subject to tests mentioned in the Table given below.] [Inserted by Notification No. G.S.R. 515 (E) dated 29.7.2012 (w.e.f. 2.6.1989)]

| Test | Reference Document(As amended from time to time) |
|--|--|
| (1) | (2) |
| (i)Mass emission tests | MOST/CMVR/TAP-115/116and notifications issued by the Government of India in this respect |
| (ii)Engine performance tests | IS: 14599-1999 |
| (iii)Grade ability test | In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 |
| (iv)Electro-Magnetic Interference (EMI) | In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 |
| (v)Range Test of at least 250 km for buses | - |
| (vi)Cooling Performance | IS: 14557, 1998 |
| (vii)Fuel Consumption test [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] | Sl.No. 31 of the notification number S.O. 1365(E), dated the 13thDecember, 2004] [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] |

Explanation. -(a)Vehicles offered for Type Approval to the testing agency referred in rule 126 shall have to comply with fitness requirement, as applicable under these rules.(b)Test procedure and safety guidelines for such CNG vehicles, kit components including installation thereof shall be as per AISo24, as amended from time to time, till such time as corresponding BIS specifications are notified.(c)The test agency shall complete the test and give necessary certificate within three months of the same being submitted for tests.(d)Testing agencies will be required to indicate specifically, the models and their variants on which the replacement of new engine will be valid.D. Applicable Emission Norms [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).]

| Category of Engines | Applicable Emission Norms |
|---|---------------------------|
| (i)OC CNG Category M and Category N Vehicles with GVW equal to or less than 3,500 kg, three wheelers and two wheelers. | Prevailing gasoline norms |
| (ii)CNG Category M and Category N vehicles with GVW equal to or less than 3,500 kg, three and two wheelers retro fitment from gasoline vehicles | Prevailing gasoline norms |
| (iii)CNG Category M and Category N vehicles with GVW equal to or less than 3,500 kg, three and two wheelers retro fitment from diesel vehicles | Prevailing diesel norms |

| | |
|--|---|
| (iv)CNG engines Category M and Category N vehicles with GVW greater than 3,500 kg manufactured up to 1stApril 2010 | Prevailing diesel engine norms based on 13-mode steady-state engine dynamometer test or 13-mode Engine Steady State Cycle as applicable |
|--|---|

| | |
|---|---|
| (v)CNG engines for Category M and Category N vehicles with GVW greater than 3,500 kg manufactured on and from 1stApril 2010 | Prevailing diesel engine emission norms.] |
|---|---|

[E. [CNG/ bio-CNG/ LNG] [substituted by Notification No. G.S.R. 534(E) dated 24.7.2014 (w.e.f. 2.6.1989)] vehicle/s kit components, including their installation, shall conform to the Safety Checks given in the Annexure IX.]F. Testing agencies shall issue every Type Approval certificate containing the Safety and Procedural Requirements for Type Approval of CNG and LPG Operated Vehicles for CNG vehicles and conversion kits, as mentioned in Annexure X.Note :

1. For the purpose of these rules, O.E. fitment means the vehicles which are manufactured for CNG operation by the vehicle manufacturer prior to their first registration.

2. Conversion of In-use Gasoline Vehicle means a vehicle already registered as a gasoline vehicle and is subsequently converted for operation on CNG by fitting the conversion kit and carrying out the other necessary changes.

3. O.E. CNG Dedicated Vehicles means the vehicles which are manufactured for CNG operation by the vehicle manufacturer prior to their first registration.

[3(a) "O.E. LNG Dedicated Vehicle" means the vehicles which are manufactured for LNG operation by the vehicle manufacturers prior to their first registration;] [Inserted by Notification No. G.S.R. 643(E), dated 27.6.2017 (2.6.1989).]

4. Converted diesel vehicle means a vehicle already registered as a diesel vehicle and is subsequently converted for operation on CNG by modifying the diesel engine fitted on that vehicle by fitting the conversion kit and carrying out the other necessary changes.

5. Retro fitment (or replacement)of diesel vehicle means a vehicle already registered as a diesel vehicle and is subsequently converted for operation on CNG fitting a new engine adapted to operate on CNG.

6. The AIS or IS specifications may be amended from time to time.

7. [In case of conversion kits on in-use gasoline vehicles or converted diesel vehicles, the validity of the type approval certificate issued by the testing agencies shall cover vehicles manufactured between the year of manufacture of the vehicle, on which such kit has been tested and date of the validity of the applicable norms prescribed for such category of vehicles as per clause (a) of Item (II) of part A of rule 115-B. Testing agencies shall be required to indicate specifically the model and their variants for diesel vehicles and capacity range of gasoline vehicles on which the certificate shall be valid for conversion.] [Substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).]

(2)[The mass emission standards applicable to Original Equipment CNG Dedicated Vehicles under sub-rule (1) shall be applicable to Original Equipment manufactured vehicle having GVW ≤ 3.5 T, when Liquefied Natural Gas is used as fuel.(3)The Liquefied Natural Gas composition used for carrying out emission shall meet the fuel specification as notified by the Government of India in the Ministry of Petroleum and Natural Gas, or Bureau of Indian Standard, as the case may be, for automotive application from time to time:Provided that till such time the Liquefied Natural Gas fuel complying to the requirements as provided in Annexure IV-LA shall be used for the purpose of type approval and conformity of production.(4)The Original Equipment manufactured Liquefied Natural Gas dedicated vehicle having GVW ≤ 3.5 T shall meet the safety requirements as laid down in AIS-024 and AIS- 028 as amended from time to time.] [Inserted by Notification No. G.S.R. 643(E), dated 27.6.2017 (w.e.f. 2.6.1989).][115-C. Mass emission standards for Liquefied Petroleum Gas (hereinafter in this rule referred to as LPG), driven vehicles. [Inserted by GSR 284(E), dated 24.4.2001 (w.e.f. 24.5.2001).]- [(1) Mass emission standards for vehicles when operating on Liquefied Petroleum Gas (hereinafter in this rule referred to as LPG) shall be same as are applicable for gasoline vehicles with the exception that HC shall be replaced by Reactive Hydrocarbon(RHC), where $RHC = 0.5 \times HC$.(2)For gasoline vehicles with Original Equipment(hereinafter in this rule referred to as O.E.) Fitment,(a)[in case of LPG fitments done by vehicle manufacturers on new gasoline vehicles, each model manufactured by vehicle manufacturers shall be type approved as per the prevailing mass emission norms as applicable for the category of new vehicles in respect of the place of its use.] [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).](b)base model and variants of such vehicle shall conform to these rules as applicable and type approval emission norms in petrol mode as specified in these rules. In the case of LPG mode, it shall meet mass emission norms as specified in rule 115 only excluding crankcase and evaporative emission norms;(c)vehicle models and variants having option for bi--fuel operation and fitted with limp-home Gasoline tank of capacity not exceeding two litres, three litres and five litres respectively on two-wheeler, three-wheeler and four-wheeler shall be exempted from mass emission tests including all tests specified under sub-rule (2),Notes 6 and 7 mentioned below clause (c) of sub-rule (14) and Notes 6,7, 15 and 16 of sub-clause (i) of clause (b)of sub-rule (15) of rule 115 in Gasoline mode; [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).](d)prevalent conformity of production procedure shall also be applicable.](3)For in-use gasoline vehicles,(a)[On and after expiry of one year from the date of publication of the Central Motor Vehicles (Fifth Amendment) Rules, 2005 in the Official Gazette, the in-use vehicles fitted with LPG kits shall meet the type approval emission

norms specified in these rules for gasoline vehicles as applicable to the corresponding year of manufacture of such vehicle, subject to the following minimum norms: [Substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).](i)for the vehicles manufactured up to the 31st day of March, 2000, the type approval norms equivalent to India-2000(India Stage I) norms as applicable under these rules;(ii)[for the vehicles manufactured on and after the 1st day of April, 2000, and up to the 30th September, 2010, the type approval norms as specified in the Bharat Stage II norms;](iii)for the vehicles manufactured after the 1st day of April, 2005, the type approval norms as applicable subject to minimum of Bharat Stage III emission norms in case of four-wheelers and Bharat Stage II emission norms for two and three-wheelers:Provided that in respect of vehicle model/conversion kits/engine replacements type approved and certified under rule 115-C prior to commencement of these rules (as per notification number G.S.R. 284(E), dated the 24th April, 2001), such certificates shall cease to be valid after one year from the date of publication of the Central Motor Vehicles (Fifth Amendment) Rules, 2005, in the Official Gazette notwithstanding the period of validity specified in such certificates. Such certificates need to be revalidated by testing agencies in terms of these rules:Provided further that respective kit manufacturer/retro fitter/converters shall be free to obtain from testing agencies type approval in terms of new rules even prior to commencement of these rules;](iv)[for the vehicles manufactured on and after the 1st day of April 2010, the type approval norms as applicable, subject to minimum of Bharat Stage-IV emission norms for Category M and Category N Vehicles with Gross Vehicle Weight not exceeding 3,500 kg and Bharat Stage-III emission norms for two and three wheelers.] [Inserted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).](b)for purposes of LPG kit approval, kit manufacturer or supplier shall obtain the certificate from any of the test agencies authorized under rule 126 based on capacity of vehicle, in the following manner, namely:(i)LPG kit for the vehicles shall be type approved for vehicles irrespective of make and model based on engine capacity in cubic cm. Such a kit shall be considered fit for retro fitment in any vehicle having engine capacity within a range of $\pm 25\%$ tolerance;(ii)[separate type approval shall be necessary for the following types of vehicles [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).](a)two stroke(b)four stroke(c)carburetted(d)single point fuel injected; and(e)multi point fuel injected.](4)(a)For the purpose of granting type approval to LPG kit the following performance tests shall be carried out by the test agencies:(i)Mass emission tests.(ii)Engine performance tests.(iii)Constant speed fuel consumption test;(b)the tests specified under sub-clause (ii) of clause (a) shall be carried out either on engine dynamometer or chassis dynamometer as applicable under these rules.However, in case of vehicle above 100 HP the tests shall be only on engine dynamometer;(c)the safety checks for such kit components including installation shall be as per the norms and standards given in the Annexure VIII, apart from detailed test procedure or safety guidelines contained in AIS 025 D1, as approved by the Central Government from time to time;(d)for OE fitment and retro fitment on in-use vehicles, the responsibility of Type Approval shall be that of the vehicle manufacturer and kit manufacturer or supplier, respectively;(e)the Type Approval of LPG kit for retro fitment shall be valid for three years from the date of issue of such approval and shall be renewable for three years at a time;(f)the retro fitment of LPG kits on in-use vehicles, shall be carried out by workshops authorized by the kit manufacturer/kit supplier or vehicle manufacturers, as the case may be;(g)the test agency shall complete the test and give necessary certificate within a period of three months from the date of receiving the kits;(h)the kit supplier/manufacturer shall provide a layout plan for retro fitment of LPG kit in the respective models on which any approved kit is to be installed, to the test agency for

vetting and approval. The retro fitment of the kit shall be on the basis of such approved layout plan only.[* * *] [Sub-rule (5) omitted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).](6)[For Diesel Vehicles with Original Equipment fitment. [(i) In case of LPG fitments by vehicles manufacturers on new diesel vehicles, each model manufactured by vehicle manufacturers shall be type approved as per the prevailing mass emission norms as applicable for the category of new vehicles in respect of the place of its use;] [Inserted by GSR 788(E), dated 27.11.2002 (w.e.f. 2.6.2003).](ii)O.E. fitment LPG engine approved for specific appropriate engine capacity can be installed on the vehicle base model and its variants complying with the other requirements under these rules as applicable;(iii)Tests for particulate matter and emission of visible pollutants (smoke) under these rules shall not be applicable; and(iv)Prevailing COP procedures shall also be applicable;(v)In case of limits for Hydrocarbons, the mass emission standards formula as specified in sub-rule (1) shall be applicable.]Explanation. - In the case of O.E. fitment vehicles:(a)For the purpose of granting Type Approval to the vehicle manufactured by O.E., in addition to the tests as specified in Central Motor Vehicles Rules, 1989, following performance tests shall be carried out,as per the Table given below by the test agency, namely:

| SL.NO. | Test | Reference Document(as amended from time to time) |
|---|--|---|
| (1) | (2) | (3) |
| 1. | Mass emission tests | MOST/CMVR/TAP-115/116 and notification issued by the Government of India in this respect |
| 2. | Engine performance test | IS: 14599-1999 |
| 3. | Grade ability test | In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 |
| 4. [[Substituted by G.S.R. 84(E), dated 9.2.2009(w.e.f. 9.2.2009)] | [Fuel Consumption test [Sub-R (7) substituted by G.S.R. 589(E), dated 16.9.2005(w.e.f. 16.9.2006).] | [Sl.No. 31 of the notification number S.O. 1365(E), dated the 13thDecember, 2004] [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] |
| 5. | Electro-Magnetic Interference (EMI) | In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 |
| 6. | Range test of at least 250 km for buses. For other vehicle categories range test to be carried out and test results to be reported | AIS 055 |
| 7. | Cooling performance | IS: 14557-1998 |

Note :The mass emission tests shall be carried out either on engine dynamometer or chassis dynamometer, as applicable;(b)Test procedure and safety guidelines for LPG vehicles, kit components including installation thereof, shall be as per AIS025, AIS 026, AIS 027 as amended from time to time, till such time as corresponding BIS specifications are notified and shall be as

given in Annexure-VIII in addition to the detailed procedure of Safety Checks contained in AIS 025, AIS 026, AIS 027;(c)For O.E. fitment manufactured vehicles, the responsibility of Type Approval shall be that of the vehicle manufacturer;(d)The test agency shall complete the test and give necessary certificate within a period of three months from the date of receiving the kits.(7)[Replacement of In-use Diesel Engine by new LPG Engine.For type approval of in-use vehicle having diesel engine replaced by new Liquefied Petroleum Gas engine it shall meet the prevailing emission norms as applicable to the category of vehicles in respect of its place of use subject to the tests mentioned in the Table given below] [Sub-Rule(7) substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).]:TABLE

| SL.NO. | Test | Reference Document(as amended from time to time) |
|---|--|--|
| (1) | (2) | (3) |
| 1. | Mass emission tests | MOST/CMVR/TAP-115/116 and notification issued by the Government of India in this respect |
| 2. | Engine performance test | IS: 14599-1999 |
| 3. | Grade ability test | In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 Sl.No. 31 of the notification |
| 4. [[Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] | Fuel Consumption test [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] | number S.O. 1365(E), dated the 13thDecember, 2004] [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] |
| 5. | Electro-Magnetic Interference (EMI) | In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 |
| 6. | Range test of at least 250 km for buses. For other vehicle categories range test to be carried out and test results to be reported | AIS 055 |
| 7. | Cooling performance | IS: 14557-1998 |

Explanation. - (a) In case of in-use vehicles offered for Type Approval to the test agency referred to in rule 126, it shall have to comply with fitness requirement, as applicable under these rules and the said test agency may, if it thinks so, verify the same;(b)In case of non-transport vehicles offered for retro fitment as per the tests mentioned in the Table, it shall be the responsibility of the retro fitter to make necessary inspection/checks regarding fitness of the such vehicles as applicable under these rules: In the case of retro fitment of in-use transport vehicles offered for the tests mentioned in the Table, the certificate of fitness granted under section 56 of the Act, shall be essential before the vehicle is accepted for retro fitment/conversion;(c)Test procedure and safety guidelines for such LPG vehicles, kit components including installation thereof shall be as per AIS025, as amended from time to time, till such time as corresponding BIS specifications are notified and shall be as

given in Annexure VIII in addition to the detailed procedure or Safety checks contained in AIS 025;(d)The test agency shall complete the test and give necessary certificate within a period of three months from the date of the vehicle being submitted for tests; and(e)The test agency shall be required to indicate specifically, the models and their variants on which the replacement of new engine shall be valid.(8)Applicable emission norms.The emission norms as mentioned in column (3) of the Table below excluding particulate matter shall be applicable to the corresponding categories of engines as mentioned against them in column (2) of the said Table.

| Sl.No. | Category of Engines | Applicable Emission Norms |
|--|---|---|
| 13a[(i) [Substituted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] | [OE LPG Category M and Category N Vehicles with GVW equal to or less than 3,500 kg, three wheelers and two wheelers. | Prevailing gasoline norms |
| (ii) | LPG Category M and Category N vehicles with GVW equal to or less than 3,500 kg, three and two wheelers retro fitment from gasoline vehicles | Prevailing diesel norms |
| (iii) | LPG Category M and Category N vehicles with GVW equal to or less than 3,500 kg, three and two wheelers retro fitment from diesel vehicles | Prevailing diesel norms |
| (iv) | LPG engines Category M and Category N vehicles with GVW greater than 3,500 kg manufactured up to 1stApril 2010. | Prevailing diesel engine norms based on 13-mode steady state engine dynamometer test or 13-mode Engine Steady State Cycle as applicable |
| (v) | LPG engines fro Category M and Category N vehicles with GVW greater than 3,500 kg manufactured on and from 1stApril 2010 | Prevailing diesel engine emission norms.] |

(9)LPG vehicle/kit components including installation shall comply with the Safety Checks as given in Annexure VIII.(10)The test agency shall, in addition to the Type Approval Certificate, issue Safety and Procedural Requirements for Type Approval Certificate containing the Safety and Procedural Requirements for Type Approval of CNG and LPG Operated Vehicles, for LPG vehicles and conversion kits, as mentioned in Annexure X.Note :For the purposes of these rules,(1)OE fitment means the vehicle engines which are manufactured for LPG operation by the vehicle manufacturer prior to their first registration;(2)Conversion of In-use gasoline vehicle means a vehicle already registered as a gasoline vehicle and subsequently converted for operation on LPG by fitting the conversion kit and carrying out the other necessary changes;(3)O.E. fitment LPG dedicated vehicle means a vehicle which is manufactured for LPG operation by the vehicle manufacturer prior to their first registration;(4)Type approval of In-use vehicle having diesel engine replaced by new LPG engine means a vehicle already registered as a diesel vehicle and is subsequently converted for operation on LPG by fitting a new engine adapted for operation on LPG;(5)The AIS or IS specifications may be as amended and notified from time to time.](6)[In case of conversion kits on

in-use gasoline vehicles or replacement of in-use diesel engines by new LPG engines, the validity of the type approval certificates issued by the testing agencies shall cover vehicles manufactured between the year of manufacture of the vehicle, on which such kit had been tested and the date of validity of the norms prescribed for such category of vehicles as per clause (a) of sub-rule (3) of rule 115-C. Testing agencies shall be required to indicate specifically, the model and their variants for diesel vehicles and capacity range of gasoline vehicles on which the certificate shall be valid for conversion.] [Note 6 inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).]

**115D. [Retro-fitment of hybrid electric system or electric kit to vehicles.
[Substituted by Notification No. G.S.R. 629(E), dated 24.6.2016 (w.e.f. 2.6.1989).]**

(1) The Retro-fitment of hybrid electric system kit to vehicles having Gross Vehicle Weight not exceeding 3500 kg. shall be permitted if---(a) the vehicle intended for retro-fitment complies with following conditions, namely:-(i) it conforms to Bharat Stage-II or subsequent emission norms;(ii) it belongs to category M1 or category M2 or category N1 with Gross Vehicle Weight not exceeding 3500 kg.;(iii) it is fueled by either gasoline or diesel fuel;(iv) it was not retrofitted earlier;(v) it shall not be fueled by any other alternate fuel;(b) the mass emission standards for vehicles so retrofitted shall be the same as prevalent for corresponding petrol or diesel vehicles as applicable for the year of manufacture of the said vehicle;(c) the vehicle, after retro-fitment, shall meet the requirement of AIS-123 (Part 1): 2013 as amended from time to time till such time as corresponding Bureau of Indian Standard specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986): Provided that for the purpose of hybrid electric system kit approval, kit manufacturer or supplier shall obtain the type approval certificate from a test agency specified in rule 126 and the validity of such certificate shall be three years from the date of its issue;(d) the installation of type approved hybrid electric system kit shall be done only by an installer authorized by the hybrid electric system kit manufacturer or supplier, and the installer shall adhere to the installer's responsibilities and the Code of Practice detailed in the AIS-123 (Part 1): 2013, as amended from time to time, till such time as corresponding Bureau of Indian Standards (BIS) specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986):(e) the vehicle is manufactured in the period of manufacture of the prototype retrofitted vehicle on which kit has been tested, type approved and the date of validity of applicable emission norms prescribed for such category of vehicles: Provided that responsibility of vehicle retro-fitted with Hybrid Electric System Kit shall be transferred from OEM to kit manufacturer or supplier, for the parts added or affected by Hybrid Electric System kit retro-fitment, except in case of zero kilometer fitment.(2) The Retro-fitment of hybrid electric system kit to vehicles having Gross Vehicle Weight exceeding 3500 kg. shall be permitted if---(a) the vehicle intended for retro-fitment complies with following conditions, namely:-(i) it conforms to Bharat Stage-II or subsequent emission norms;(ii) it belongs to category M & N with Gross Vehicle Weight exceeding 3500 kg.;(iii) it was not retrofitted earlier;(iv) it is not provided with permits for carrying dangerous or hazardous good, as defined in Central Motor Vehicle Rules, 1989;(b) the vehicle, after retro-fitment, shall meet the requirement of AIS-123 (Part 2): 2016, as amended from time to time, till such time as corresponding Bureau of Indian Standard specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986): Provided that for the purpose of hybrid electric system kit approval, kit manufacturer or supplier shall obtain

the type approval certificate from a test agency specified in rule 126 and the validity of such certificate shall be three years from the date of its issue;(c)the installation of type approved hybrid electric system kit shall be done only by an installer authorized by the hybrid electric system kit manufacturer or supplier, and the installer shall adhere to the installer's responsibilities and the Code of Practice detailed in the AIS-123 (Part 2): 2016, as amended from time to time, till such time as corresponding Bureau of Indian Standards (BIS) specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(d)The vehicle is manufactured after the year of manufacture of the prototype retrofitted vehicle on which such kit has been tested and type approved.Provided that responsibility of vehicle retro-fitted with Hybrid Electric System Kit shall be transferred from OEM to kit manufacturer or supplier, for the parts added or affected by Hybrid Electric System kit retro-fitment, except in case of zero kilometer fitment.(3)The conversion of vehicles for pure electric operation with fitment of electric kit shall be permitted if-(a)The vehicle intended for conversion complies with following conditions, namely:-(i)It belongs to category L5 or category M or category N1 or category N2;(ii)It was manufactured on or after 1st January 1990;(iii)It is not provided with permits for carrying dangerous or hazardous goods, as defined in CMV Rules, 1989;(b)the vehicle, after retro-fitment, shall meet the requirement of AIS-123 (Part 3): 2016, as amended from time to time, till such time as corresponding Bureau of Indian Standard specifications are notified under the Bureau of Indian Standards Act. 1986 (63 of 1986):Provided that for the purpose of electric kit approval, kit manufacturer or supplier shall obtain the type approval certificate from a test agency specified in rule 126 and the validity of such certificate shall be three years from the date of its issue;(c)the installation of type approved electric kit shall be done only by an installer authorized by the electric kit manufacturer or supplier, and the installer shall adhere to the installer's responsibilities and the Code of Practice detailed in the AIS-123 (Part 3): 2016, as amended from time to time, till such time as corresponding Bureau of Indian Standards (BIS) specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986):(d)the vehicle is manufactured after the year of manufacture of the prototype converted vehicle on which such kit has been tested and type approved.Provided that the responsibility of vehicle converted with Electric Propulsion Kit shall be transferred from OEM to kit manufacturer/ supplier for the parts added or affected by Electric Propulsion Kit, except in case of zero kilometer fitment.]

115D. [Retro fitment of hybrid electric system kit to in-use vehicles. [Inserted by G.S.R. 364(E), dated 28.5.2014 (w.e.f. 2.6.1989).]- Retro fitment of hybrid electric system kit to in-use vehicles registered in India shall be permitted if-(a) the in-use vehicle intended for retro fitment complies with following conditions, namely:-(i) it conforms to Bharat Stage-II or subsequent emission norms;(ii) it belongs to category M1 or category M2 or category N1 with Gross Vehicle Weight not exceeding 3500 kg.(iii) it is fueled by either gasoline or diesel fuel;(iv) it was not retrofitted earlier;(v) it will not be fueled by any other alternate fuel;(b) mass emission standards for vehicles so retrofitted shall be the same as prevalent for corresponding petrol or diesel vehicles as applicable for the year of manufacture of the said vehicle;(c) the vehicle, after retro fitment, shall meet the requirement of AIS-123 : 2013 as amended from time to time till such time as corresponding Bureau of Indian Standard specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986):Provided that for the purpose of hybrid electric system kit approval, kit manufacturer or supplier shall obtain the type approval certificate from a test agency specified in rule 126 and the validity of such certificate shall be three years from the date of its issue;(d) the

installation of type approved hybrid electric system kit shall be done only by an installer authorized by the hybrid electric system kit manufacturer or supplier, and the installer shall adhere to the installer's responsibilities and the Code of Practice detailed in the AIS-123 : 2013, as amended from time to time, till such time as corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986.]

115E. [[Mass emission standards for flex-fuel ethanol (E85) or E100 and ethanol (ED95) vehicles.] [Inserted by Notification No. G.S.R. 412(E), dated 19.5.2015 (w.e.f. 2.6.1989)]

-(1)[The newly manufactured gasoline vehicles fitted with spark ignition engine compatible to run on gasoline or a mixture of gasoline and ethanol up to 85 per cent. Ethanol blend (E85) or mixture of gasoline and ethanol up to 100 per cent (E100), (hereinafter referred to as flex-fuel ethanol vehicle), shall be type approved as per prevailing gasoline emission norms.] [Substituted by Notification No. G.S.R. 682 (E), dated 12.7.2016 (w.e.f. 2.6.1989).](2)The newly manufactured ethanol vehicle with Gross Vehicle Weight above 3.5 tonnes compatible to run on ethanol fuel (ED95), shall be type approved as per prevailing diesel emission norms, as applicable for that category.(3)[The compatibility of vehicle to level of ethanol blend of E85 or E100 or ED95 shall be defined by the vehicle manufacturer and the same shall be displayed on vehicle by putting a clearly visible sticker.] [Substituted by Notification No. G.S.R. 682 (E), dated 12.7.2016 (w.e.f. 2.6.1989).](4)Test requirements for the type approval and extension for different classes of vehicles are specified in Table 1, Table 2 and Table 3 below, respectively:[Table 1 [Substituted by Notification No. G.S.R. 682 (E), dated 12.7.2016 (w.e.f. 2.6.1989).]Test requirements for type approval and extensionFor four wheeled vehicles with Gross Vehicle Weight less than or equal to 3,500 kg

| S. No. | Test | Flex-fuel ethanol vehicle |
|--------|--|---------------------------------------|
| 1 | Gaseous pollutants (Type I test) | On both gasoline and E85 or E100 fuel |
| 2 | Idle and high idle emission (Type II test) | On both gasoline and E85 or E100 fuel |
| 3 | Crank case emission (Type III) | Only on gasoline fuel |
| 4 | Evaporative emissions (Type IV) | Only on gasoline fuel |
| 5 | Durability (Type V) | Only on gasoline fuel |
| 6 | On-board diagnostics (OBD II) | On both gasoline and E85 or E100 fuel |

Table 2Test requirements for type approval and extensionFor two or three wheeled vehicles

| S. No. | Test | Flex-fuel ethanol vehicle |
|--------|----------------------------------|---------------------------------------|
| 1 | Gaseous pollutants (Type I test) | On both gasoline and E85 or E100 fuel |
| 2 | Idle and emission (Type II test) | On both gasoline and E85 or E100 fuel |
| 3 | Crankcase emission (Type III) | Only on gasoline fuel |
| 4 | Evaporative emissions (Type IV) | Only on gasoline fuel |
| 5 | Durability (Type V) | Only on gasoline fuel] |

Table 3 Test requirements for type approval and extension for four wheeled vehicles with Gross Vehicle Weight greater than 3,500 kg

| S. No. | Test | Applicability |
|--------|---|--|
| 1 | Gaseous pollutants | Test on ED95 fuel (as per prevailing emission norms BSIII orBIV) |
| 2 | Free acceleration smoke | Test on ED95 |
| 3 | Durability, if opted for, instead of fixed deterioration factor | Test on ED95 |
| 4 | On-board diagnostics (OBD) | Test on ED95 |

Notes. - (i) Mass emission tests shall be carried out as per MoRTH/CMVR/TAP-115/116 Issue 4 and its subsequent issues or amendments, as applicable and suitable updation of the ratios of gas component densities to exhaust gas density, hydrogen-carbon-oxygen ratio and fuel consumption formula shall be done in type approval procedure.(ii) Vehicle manufacturer shall submit the vehicle to any of the test agencies specified in rule 126, for type approval.(iii) Flex fuel vehicles with Gross Vehicle Weight less than or equal to 3.5 tonnes shall be tested on chassis dynamometers using the prevailing gasoline vehicle emission driving cycle; and ED95 fuel vehicles with Gross Vehicle Weight greater than 3.5 tonnes shall be tested on engine dynamometers using the prevailing diesel engine emission driving cycle.(iv) Flex fuel vehicles shall be tested with reference fuel specified in Annexures IV-J and IV-Q and pure ethanol fuel vehicle shall be tested with reference fuel specified in Annexure-IV-R to these rules.(v) For Conformity of Production test applicability, refer to MoRTH/CMVR/TAP-115/116 Issue 4 and its subsequent issues or amendments, as applicable; and fuel requirement for applicable tests, refer to above Table 1, Table 2 and Table 3.(vi) The reference fuel shall be as specified in Annexure IV-J for gasoline; Annexure IV Q for E85 vehicles and in Annexure-IV-R for ED95 vehicles.(vii) For commercial fuel specifications for gasoline IS 2796:2008 and its subsequent amendments may be referred.(viii) For base ethanol specifications refer IS 15464:2004 and for E85 and ED95 commercial fuel, oil marketing companies shall use suitable additives to produce and dispense such grade of fuel. Specification for commercial E85 and ED95 shall be prepared by Bureau of Indian Standards.(ix) The Conformity of Production frequency and sampling shall be as per requirements given in MoRTH/CMVR/TAP-115/116 Issue 4 and its subsequent issues or amendments, as applicable, according to category of vehicle.(x) Deterioration factors shall be as per prevailing emission norms, according to the vehicle categories, where durability test is applicable.(xi) For spark ignition vehicle, where measurement of net power is specified in the case of normal gasoline vehicles, it shall be carried out on engine dynamometer as per IS: 14599-1999, with gasoline, as amended from time to time.](xii)[The reference fuel shall be as specified in Annexure IV-J for gasoline; Annexure S for E100 vehicles.] [Inserted by Notification No. G.S.R. 682 (E), dated 12.7.2016 (w.e.f. 2.6.1989).]

115F. [Fuel consumption standard. [Substituted by Notification No. G.S.R. 954 (E), dated 4.10.2016 (w.e.f. 2.6.1989).]

(1) Every manufacturer or importer of M1 motor vehicles which are type approved under rule 126, with at least four wheels, other than quadricycles, used for carriage of passengers and their luggage and comprising not more than nine seats including driver's seat, and of gross vehicle weight not

exceeding 3,500 kilograms, manufactured or imported for sale in India, shall on and from the 1st day of April, 2017, comply with the Average Fuel consumption Standard, notified under the Energy Conservation Act, 2001 vide notification of the Government of India in the Ministry of Power number 1072 (E), dated the 23rd April, 2015.(2)The procedure for ensuring compliance under sub-rule (1) shall be as laid down in Document No. MoRTH/CMVR/ TAP-115/116, as amended from time to time.(3)The procedure specified under sub-rule (2) shall be evaluated annually by the International Centre for Automotive Technology (ICAT), Manesar.]

115F. [Mass emission standards for bio-diesel (B100). [Inserted by Notification No. G.S.R. 412(E), dated 11.4.2016 (w.e.f. 2.6.1989).]- (1) The newly manufactured vehicles fitted with compression ignition engine compatible to run on diesel or mixture of bio-diesel up to hundred per cent bio-diesel (B100) (hereinafter referred to as flex-fuel bio-diesel vehicle), shall be type approved as per prevailing diesel emission norms.(2) The compatibility of vehicle to level of bio-diesel blend or B100 shall be specified by the vehicle manufacturer and the same shall be displayed on vehicle by putting a clearly visible sticker.(3) Test requirements for the type approval and extension for different classes of vehicles are specified in Table 1, Table 2 and Table 3 below, respectively:Table 1Test requirements for type approval and extension for four wheeled vehicles with Gross Vehicle Weight less than or equal to 3,500 kilogramme{]

| S. No. | Test | Flex-fuel bio-diesel vehicle |
|--------|---|------------------------------|
| 1. | Gaseous pollutants (type I test) | On both diesel and B100 fuel |
| 2. | Free acceleration smoke (type II Test) | On both diesel and B100 fuel |
| 3. | Durability (Type V), if opted for instead of fixedDeterioration Factor (DF) | Only on diesel fuel |
| 4. | On-board diagnostics (India OBD II) | On both diesel and B100 fuel |

Table 2Test requirements for type approval and extension for three wheeled vehicles

| S. No. | Test | Flex-fuel bio-diesel vehicle |
|--------|----------------------------------|------------------------------|
| 1. | Gaseous pollutants (Type I test) | |

| | | |
|----|--|------------------------------|
| | | On both diesel and B100 fuel |
| 2. | Free acceleration smoke (Type II test) | On both diesel and B100 fuel |
| 3. | Durability (Type V test), if opted for instead of fixed Deterioration Factor | Only on diesel fuel |

Table 3 Test requirements for type approval and extension for four wheeled vehicles with Gross Vehicle Weight greater than 3,500 kg

| S. No. | Test | Flex-fuel bio-diesel vehicle |
|--------|--|------------------------------|
| 1. | Gaseous pollutants | On both diesel and B100 fuel |
| 2. | Free acceleration smoke | On both diesel and B100 fuel |
| 3. | Durability, if opted for instead of fixed DF | Only on diesel fuel |
| 4. | On-board diagnostics (OBD) | On both diesel and B100 fuel |

Diesel vehicles which are declared as compatible to run on bio diesel up to 20 per cent blend shall be tested only with Reference Diesel Fuel for prevailing emission norms. Notes- 1. Mass emission tests shall be carried out as per MoRTH/CMVR/TAP-115/116 Issue 4 and its subsequent issues or amendments, as applicable, and suitable updation of the ratio of gas component densities to exhaust gas density, hydrogen-carbon-oxygen ratio and fuel consumption formula shall be done in type approval procedure.

2. Vehicle manufacturer shall submit the vehicle to any of the test agencies specified in rule 126, for type approval.

3. Bio-diesel vehicles with Gross Vehicle Weight less than or equal to 3.5 tonne shall be tested on chassis dynamometer using the prevailing diesel vehicle emission driving cycle. B100 fuel vehicles with Gross Vehicle Weight greater than 3.5 tonne shall be tested on engine dynamometers using the prevailing diesel engine emission driving cycle.

4. Bio-diesel vehicles shall be tested with reference fuel (as per IS 15607:2005) specified in Annexure IV-S to these rules.

5. For Conformity of Production test applicability, refer to MoRTH/CMVR/TAP-115/116 Issue 4 and its subsequent issues or amendments, as applicable; and for fuel requirement for applicable tests, refer to above Table 1, Table 2 and Table 3.

6. The Conformity of Production frequency and sampling shall be as per requirements given in MoRTH/CMVR/TAP-115/116 Issue 4 and its subsequent issues or amendments, as applicable, according to category of vehicle.

7. Deterioration factors shall be as per prevailing emission norms, according to the vehicle categories.]

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116. Test for smoke emission level and carbon monoxide level for motor vehicles.

- [(1) Notwithstanding anything contained in sub-rule (7) of rule 115 any officer not below the rank of Sub-Inspector of Police or the Inspector of Motor vehicles who has reason to believe that a motor vehicle is not complying with the provisions of sub-rule (2) or sub-rule (7) of rule 115, may, in writing, direct the driver or any person in charge of the vehicle to submit the vehicle for conducting the test to measure the standards of emission in any one of the authorized testing stations, and produce the certificate to an authority at the address mentioned in the written direction within 7 days from the date of conducting the check.(2)The driver or any person in charge of the vehicle shall upon such direction by the officer referred to in sub-rule(1) submit the vehicle for testing for compliance of the provisions of [sub-rule(2) and sub-rule (7) of rule 115] [Substituted by G.S.R 338(E), dated 26-3-1993 (w.e.f. 26-3-1993).], at any authorized testing station.(3)The measurement for compliance of the provisions of [sub-rule (2) and sub-rule (7) of rule 115] [Substituted by GSR 111(E), dated 10.2.2004, for 'sub-rule (2) of rule 115'(w.e.f. 10.8.2004).] shall be done with a meter of the type approved by any agency referred to in rule 126 of the principal rules or by the National Environmental Engineering Research Institute, Nagpur-440 001:[Provided that such a testing agency shall follow MoSRTTH/CMVR/TAP--115/116 for approval of measuring metres.] [Substituted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).](4)If the result of the tests indicate that the motor vehicle complies with the provisions of [sub-rule (2) and sub-rule (7) of rule 115] [Substituted by GSR 111(E), dated 10.2.2004, for 'sub-rule (2) of rule 115'(w.e.f. 10.8.2004).], the driver or any person in charge of the vehicle shall produce the certificate to the authority specified in sub-rule (1) within the stipulated time-limit.(5)If the test results indicate that the motor vehicle does not comply with the provisions of the sub-rule (2) and [sub-rule (2) and sub-rule (7) of rule 115] [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).], the driver or any person in charge of the vehicle shall rectify the defects so as to comply with the provisions of the sub-rule(2) of rule 115 within a period of 7 days and submit the vehicle to any authorized testing station for re-check and produce the certificate so obtained from the authorized testing station to the authority referred to in sub-rule (1).(6)If the certificate referred to in sub-rule (1) is not produced within the stipulated period of seven days or if the vehicle fails to comply with the provisions of [sub-rule (2) and sub-rule (7) of rule 115] [Substituted by G.S.R 276 (E), dated 10.4.2007 (w.e.f. 10.4.2007).] within a period of seven days, the owner of the vehicle shall be liable for the penalty prescribed under sub-section (2) of section 190 of the Act.(7)If the driver or any person in charge of the vehicle referred to in sub-rule (1) does not produce the said certificate within the said period of 7 days, such vehicle shall be

deemed to have contravened the provisions of the sub-rule (2) of rule 115 and the checking officer shall report the matter to the registering authority.(8)The registering authority shall on receipt of the report referred to in sub-rule (7), for reasons to be recorded in writing suspend the certificate of registration of the vehicle, until such time the certificate is produced before the registering authority to the effect that the vehicle complies with the provisions of [sub-rule (2) and sub-rule (7) of rule 115] [Substituted by G.S.R. 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).](9)On such suspension of the certificate of registration of the vehicle, any permit granted in respect of the vehicle under Chapter V or under Chapter VI of the Motor Vehicles Act, 1988 (59 of 1988) shall be deemed to have been suspended until a fresh Pollution under control certificate is obtained.]Speed governors

117. Speedometer.

(1)[Every motor vehicle (including construction equipment vehicle)], [Substituted by GSR 642(E), dated 28.7.2000, for 'Every motor vehicle, other than an invalid carriage'(w.e.f. 28.7.2000).] [other than an invalid carriage or an E-rickshaw or E-cart or a vehicle] [Substituted for the words 'other than an invalid carriage or a vehicle, the designed speed of which does not exceed thirty kilometres per hour'by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)], shall be fitted with an instrument(hereinafter referred to as speedometer) so constructed and fixed in such a position as to indicate to the driver of the vehicle the speed at which the vehicle is travelling :[Provided that every agricultural tractor [and combine harvester] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] shall be fitted with an Engine RPM-cum-Hour Meter:][Provided further that the requirement of provision of speedometer is exempted for construction equipment vehicle in which the drivers cabin rotates about a vertical axis.] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).](2)[On and after the 1st April, 2015 (in the case of new models) and 1st April 2016 (in the case of existing models), every motor vehicle shall be fitted with a speedometer conforming to the requirements of IS:11827-2008, specified by the Bureau of Indian Standards, as amended from time to time.] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014](3)[On and after 1st April, 2015 every construction equipment vehicle manufactured shall be fitted with a speedometer that shall conform to the requirements of IS 11827-2008 specified by the Bureau of India Standards concerning the speedometer] [Inserted by Notification No. G.S.R. 291 (E) dated 24.4.2014]

118. [Speed governor. [Substituted by Notification No. G.S.R. 290 (E) dated 15.4.2015 (w.e.f. 2.6.1989)]

(1)Every transport vehicle notified by the Central Government under sub-section (4) of section 41 of the Motor Vehicles Act, 1988 (59 of 1988) save as provided herein, and manufactured or on after the 1st October, 2015 shall be equipped or fitted by the vehicle manufacturer, either in the manufacturing stage or at the dealership stage, with a speed governor (speed limiting device or speed limiting function) having maximum pre-set speed of 80 kilometre per hour conforming to the Standard AIS 018/2001, as amended from time to time:Provided further that the transport vehicles that are -(i)two wheelers;(ii)three wheelers;(iii)quadricycle's;(iv)[* * *](v)fire tenders;(vi)ambulances;(vii)police vehicles;(viii)verified and certified by a testing agency specified in rule 126 to have maximum rated speed of not more than 80 kilometre per hour;Provided further that the transport vehicles manufactured on or after 1st October, 2015 that are dumpers, tankers,

school buses, those carrying hazardous goods or any other category of vehicle, as may be specified by the Central Government by notification in the Official Gazette from time to time, shall be equipped or fitted by the vehicle manufacturer, either in the manufacturing stage or at the dealership stage, with a speed governor (speed limiting device or speed limiting function) having maximum speed of 60 kilometre per hour conforming to the Standard AIS 018/2001, as amended from time to time.[Provided also that on and from 1st April 2017, articulated or truck-trailer or tractor-trailer vehicles engaged by automobile manufacturers to carry motor vehicles from their factories to different sale outlets in the country, shall be equipped or fitted by the vehicle manufacturer, either in the manufacturing stage or at the dealership stage, with a speed governor (speed limiting device or speed limiting function) having maximum speed of 60 kilometers per hour conforming to AIS 018/2001, as amended from time to time, till such time the corresponding Bureau of Indian Standards specifications are notified.] [Inserted by Notification No. G.S.R. 963 (E), dated 7.10.2016 (w.e.f. 2.6.1989).](2)The State Government shall, by notification in the Official Gazette, specify on or before 1st October, 2015, the categories of transport vehicles registered prior to the 1st October, 2015 which are not already fitted with a speed governor (speed limiting device or speed limiting function), and are not covered under the first proviso to sub-rule 1 above, that such transport vehicles shall be equipped or fitted by the operators of those vehicles on or before 1st April, 2016 with a speed governor (speed limiting device or speed limiting function), having maximum pre-set speed of 80 kilometre per hour or such lower speed limit as specified by the State Government from time to time, conforming to the Standard AIS: 018/2001, as amended from time to time:Provided that the categories of transport vehicles carrying hazardous goods and those transport vehicles that are dumpers, tankers or school buses, registered prior to the 1st October, 2015 and not already fitted with a speed governor (speed limiting device or speed limiting function), shall be equipped or fitted by the operator of such vehicle, with a speed governor (speed limiting device or speed limiting function) having maximum pre-set speed of 60 kilometre per hour or such other lower speed limit as may be specified by the State Government, conforming to the Standard AIS: 018/2001, as amended from time to time".](3)[. An Airport Passenger Bus, referred to in rule 93C, shall be equipped or fitted with a speed governor (speed limiting device or speed limiting function) having maximum pre-set speed of thirty kilometer per hour or such lower speed limit as specified by the State Government from time to time, conforming to the standard AIS: 018/2001 as amended from time to time.] [Inserted by Notification No. G.S.R. 594(E), dated 13.6.2016 (w.e.f. 2.6.1989).]Reduction of noise

119. Horns.

(1)[On and after expiry of one year from the date of commencement of the Central Motor Vehicles(Amendment) Rules, 1999, [every motor vehicle, agricultural tractor, power tiller and construction equipment vehicle] [Substituted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).]manufactured shall be fitted with an electric horn or other devices conforming to the requirements of IS: 18841992,specified by the Bureau of Indian Standards] for use by the driver of the vehicle and capable of giving audible and sufficient warning of the approach or position of the vehicle:[Provided that vehicles manufactured on and from the 1st October, 2014, the horn installation requirements for motor vehicles shall be as per IS:15796-2008, specified by the Bureau of Indian Standards, as amended from time to time.] [Substituted by Notification No. G.S.R. 291 (E)

dated 24.4.2014](1A)[Every combine harvester shall be fitted with an electric horn or other devices confirming to the requirements of IS 1884 : 1993 specified by the Bureau of Indian Standards for use by the driver of the vehicle and capable of giving audible and sufficient warning of the approach or position of the vehicle:Provided that the horn installation requirement for combine harvester shall be as per IS 15796:2008 specification as amended from time to time.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](2)No [motor vehicle including agricultural tractor] [Substituted by GSR 111(E), dated 10.2.2004, for 'motor vehicle'(w.e.f. 10.8.2004).] [and combine harvester] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall be fitted with any multi-toned horn giving a succession of different notes or with any other sound-producing device giving an unduly harsh, shrill, loud or alarming noise.(3)Nothing contained in sub-rule (2) shall prevent the use on vehicles used as ambulance or for fire fighting or salvage purposes or on vehicles [used by police officers or operators of construction equipment vehicles or officers of the Motor Vehicles Department] [Substituted by GSR 116(E), dated 27.2.2002 (w.e.f. 27.8.2002).][in the course of their duties or on construction equipment vehicles,] [Substituted by GSR 642(E), dated 28.7.2000, for 'in the course of their duties'(w.e.f. 28.7.2000).] of such sound signals as may be approved by the registering authority in whose jurisdiction such vehicles are kept.[Provided that requirements for sirens of Road Ambulances shall be in accordance with AIS:125 (Part 1)-2014, as amended from time to time, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [Inserted by Notification No. G.S.R. 868(E), dated 1.4.2018 (w.e.f. 2.6.1989).]

120. Silencers.

(1)[Every motor vehicle including agricultural tractor] [Substituted by GSR 111(E), dated 10.2.2004, for 'Every motor vehicle'(w.e.f. 10.8.2004).] [and combine harvester] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall be fitted with a device(hereinafter referred to as a silencer) which by means of an expansion chamber or otherwise reduces as far as practicable, the noise that would otherwise be made by the escape of exhaust gases from the engine.(2)[Noise standards [Substituted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).].Every motor vehicle shall be constructed and maintained so as to conform to noise standards specified in Part E of the Schedule VI to the environment (Protection) Rules, 1986, when tested as per IS:3028-1998, as amended from time to time]:[Provided that on and from the 1st day of April, 2006, where different noise levels are prescribed for vehicles, the lowest limits prescribed for vehicles of such category, shall apply to Battery Operated Vehicles.] [Proviso added by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).](3)[In the case of agricultural tractor, the measurement test for driver perceived noise level and permissible sound level at bystander shall be carried out as per AIS-115 (Part 1)-2009 and AIS-115 (Part 2)-2009 respectively, as amended from time to time till such time the corresponding Bureau of Indian Standards specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986) and shall conform to the levels as specified in the Table 1 and Table 2 below :-] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014][TABLE 1] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014]

| serialnumber | AgricultureTractor | Dateof Implementation | Driver-perceivednoise level |
|--------------|--------------------|-----------------------|-----------------------------|
| (1) | All | 1stApril,2015 | 96dB(A)* 92 dB (A)* |

[* As per Annexure I of AIS-115 (Part 1)-2009 [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014]** As per Annexure II of AIS-115 (Part 1)-2009][TABLE 2] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014]

| Serialnumber | AgricultureTractor | Dateof Implementation | Bystander's position |
|--------------|--------------------|-----------------------|----------------------|
|--------------|--------------------|-----------------------|----------------------|

| | | | |
|-----|-----------|----------------|----------|
| (1) | >1.5 TGVW | 1stApril, 2015 | 88 dB(A) |
|-----|-----------|----------------|----------|

| | | | |
|-----|-----------|----------------|-----------|
| (2) | <1.5 TGVW | 1stApril, 2015 | 85 dB(A)' |
|-----|-----------|----------------|-----------|

(4)[In the case of power tiller with a riding attachment or power tiller coupled to trailer, the noise level when tested as per IS:12180:2000, as amended from time to time,shall not exceed 88dB(A) at the bystander position and 98dB(A) at the operators ear level.] [Sub-Rule(4) inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 1.10.2006).](5)[In the case of combine harvester, the noise level at operator's ear level shall be measured as per Annex B of IS 12180 (Part-1): 2000, whereas the noise level at bystander's position shall be measured as per IS 12180 (Part-2): 2000:Provided that the noise level shall not exceed 98 dB (A) at operator's ear level and 88 dB (A) at bystander position.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]

121. Painting of motor vehicles.

(1)[No motor vehicle including [agricultural tractor and construction equipment vehicle and combine harvester] [Substituted by GSR 642(E), dated 28.7.2000, for 'No motor vehicle'(w.e.f. 28.7.2000).]] shall be painted in olive green colour except those belonging to the Defence Department.(2)No contract carriage other than a tourist vehicle covered by permit under sub-section (9) of section 88 shall be painted in the manner specified in sub-rule (11) of rule 128.(3)No goods carriage other than a goods carriage covered by national permit shall be painted in the manner specified in sub-rule (1) of rule 90.Chassis number and engine number

122. [[Embossment of the chassis number and engine number or in the case of battery operated vehicles,motor number and month of manufacture.] [Rule 122 substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

- [(1) Every L, M and N categories of Motor vehicles, manufactured on and after 1st day of April, 2009, shall bear the identification number including month and year of manufacture, embossed or etched or punched on it, in accordance with AIS 065:2005 till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986(63 of 1986):] [Substituted by GSR 784(E), dated 12.11.2008 (w.e.f. 1.4.2009).]Provided that every N category vehicle, manufactured on and after the 1st day of April, 2009 shall bear manufacturers plate as prescribed in AIS 065:2005 till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986(63 of 1986).](1A)[Every [agricultural tractor, construction equipment vehicle, hydraulic modular trailer and combine harvester] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014] shall bear the identification number including month and year of manufacture, embossed or etched or punched on it:[Provided further that on and from the 1st day of April, 2016 in case of the construction equipment vehicles the identification number including month and year of manufacture, embossed or etched or punched on it shall be in accordance with AIS-136:2015, as amended from time to time, till the corresponding Bureau of Indian Standards specification are

notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [Inserted by Notification No. G.S.R. 133(E), dated 29.1.2016 (w.e.f. 2.6.1989).] Provided that in case of agricultural tractor the identification number including month and year of manufacture, embossed or etched or punched on it shall be in accordance with AIS 117- 2011, as amended from time to time till the corresponding Bureau of Indian Standards specifications are notified under Bureau of Indian Standards Act, 1986 (63 of 1986)] [Provided further that on and from 1st day of April, 2016 in case of the construction equipment vehicles the identification number including month and year of manufacture, embossed or etched or punched on it shall be in accordance with AIS - 136:2015, as amended from time to time till the corresponding Bureau of Indian Standards specification are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [Inserted by Notification No. G.S.R. 913(E), dated 18.11.2015 (w.e.f. 2.6.1989).] (1B) [Every combine harvester and hydraulic modular trailer shall bear the identification number plate including the following information embossed or etched or punched on it:

- (i) Name of manufacturer :
- (ii) Model name :
- (iii) Chassis number :
- (iv) Engine/Tractor make & model :
- (v) Engine Sl. No. (in case of Self propelled combine) :
- (vi) Month & year of manufacture :]

[Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] (2) [The vehicle manufacturer shall intimate to the certifying testing agency regarding the place where the numbers shall be embossed or etched or punched including code for the year and month of production in respect of each model and such testing agency shall include these details in the certificate of compliance granted by that agency under rule 126. No manufacturer shall change the place of embossing, etching or punching and the code for the month and year of production without prior intimation by registered post to the testing agency which granted the certificate of compliance to these rules:] [Substituted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).] [* * *] [Proviso omitted by GSR 784(E), dated 12.11.2008 (w.e.f. 1.4.2009).] (3) [In case of E-rickshaw or E-cart, the registered E-rickshaw or E-cart Association or manufacturer producing E-rickshaw or E-cart shall intimate to the State Transport Authority regarding the place where the number shall be embossed or etched or punched including the code for the year and month of production for each model of E-rickshaw or E-cart.] [Inserted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)] Safety Devices Safety devices for drivers, passengers and road users

123. Safety devices in motor cycle.

- No motor cycle, [which has provision for pillion rider] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] shall be constructed without provision for a permanent hand grip on the side or behind the drivers seat and a foot rest and a protective device covering not less than half of the rear wheel so as to prevent the clothes of the person sitting on the pillion from being entangled in the wheel: [Provided that on and from 1st January, 2003, the pillion hand holds shall be governed by IS: 14495-1998 specifications, as may be amended from time to time.] [Inserted by GSR 400(E), dated

31.5.2002 (w.e.f. 31.5.2002).][Provided that on and after 1st October, 2016, a light weight container may be fitted on a motorcycle provided it meets the following requirements:(i)the dimensions of the container shall not exceed 550 mm in length, 510 mm in width and 500 mm in height;(ii)weight of the container including its mounting and the load carried in the container shall not exceed 30 kgs;(iii)if such container is fitted on the pillion rider space, then no pillion rider shall be allowed:Provided that the weight of container including its mounting and the load carried in the container, shall be within the permissible Gross Vehicle Weight in kg, specified by the vehicle manufacturer and also approved by the test agency referred to in rule 126;(iv)if such container is fitted behind the pillion rider space then no pillion rider should be allowed to be seated:Provided that the weight of the pillion rider, and weight of the container including its mounting and the load carried in the container, shall be within permissible Gross Vehicle Weight in kg, specified by the vehicle manufacturer and also approved by the test agency referred to in rule 126.] [Inserted by Notification No. G.S.R. 473(E), dated 2.5.2016 (w.e.f. 2.6.1989.).][Provided further that on and after the 1st day of April, 2016, a box not exceeding 550 mm in length, 510 mm in width and 500 mm in height may be fitted on a motor cycle for carriage of any items:Provided also that no pillion rider shall be allowed on a motor cycle on which a box as specified in the above proviso has been fitted.] [Inserted by Notification No. G.S.R. 789(E), dated 19.10.2015 (w.e.f. 2.6.1989).]

124. [Safety standards of components. [Rule124 substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

- [(1) The Central Government may, from time to time,specify, by notification in the Official Gazette, the standards or the relevant standards specified by the Bureau of Indian Standards of any part, component or assembly to be used in the manufacture of a vehicle including construction equipment vehicle and the date from which such parts, components or assemblies are to be used in the manufacture of such vehicle and on publication of such notification every manufacturer shall use only such of these parts, components or assemblies in manufacture of the vehicle:[Provided that any notification issued under this sub-rule before the commencement of the Central Motor Vehicles (6th Amendment) Rules, 2001, shall not be applicable after such commencement up to and including [26th August, 2002] [Inserted by GSR 675(E), dated 17.9.2001 (w.e.f. 17.9.2001).] in respect of any construction equipment.](1A)[the general requirements of vehicle rear under run protecting device and the technical requirements of vehicle lateral protection side shall be as per IS:14812-2005 and as per IS:14682-2004, specified by Bureau of Indian standards, respectively, as amended from time to time, for the motor vehicles of categories mentioned therein.] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014][Provided that the vehicle manufacturers shall ensure the fitment of the rear under run protective device in vehicles of categories N2, N3 and their trailers except special purpose vehicles namely tractors and tippers at their end and lateral under run protective device either at their factory or at their dealers end. Vehicle not fitted with such devices shall not be registered under these rules. They shall also ensure to supply necessary kits if the fitment is not done by them in the case of lateral under-run protective device:Provided further that the rear under run protective device shall also be painted with yellow and white zebra stripes on the entire rear face of the device.] [[Provisos inserted by GSR 589(E), dated 16.9.2005 (w.e.f.16.3.2006).]](1B)[There shall not be any requirement regarding fitment of rear under run protection device and lateral protection device in modular hydraulic trailers.(1C)"T" signs, wherever used on modular hydraulic

trailers, shall comply with IS : 9942 : 1981.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](2)[Every manufacturer shall get the prototype of the part, component or sub-assembly for which standards have been notified, approved from any agency as referred to in rule 126 [and in the case of tyre and rubber components from the Indian Rubber Manufacturers Research Association, Thane] [Substituted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).], or in case of compliance with notified Indian Standards from any laboratory duly authorized by the Bureau of Indian Standards. On the basis of such approval, every manufacturer shall also certify compliance with the provisions of this rule in Form 22.][(2-A) In case of E-rickshaw or E-cart, the registered E-rickshaw or E-cart Association or manufacturer producing E-rickshaw or E-cart shall get the prototype of the part, component or sub-assembly for which standards have been notified, approved from any agency as referred to in rule 126 or the Central Institute of Road Transport, Pune, or in case of compliance with notified Indian Standards from any laboratory duly authorized by the Bureau of Indian Standards, and on the basis of such approval, the E-rickshaw or E-cart association or manufacturer shall also certify compliance with the provisions of this rule in Form 22.] [Inserted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)](3)[The Central Government may, by notification in the Official Gazette, frame a scheme for marking to be affixed on any part or component or assembly to be used in the manufacture of the vehicle and specify the date from which such parts, components or assemblies are to be used in the manufacture of the vehicle.] [Inserted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).](4)[The procedure for type approval and establishing conformity of production for components, listed in table below, shall be in accordance with AIS:037-2004 till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986(63 of 1986).TABLE

| Sl. No. | Component | Reference Rule | Effective for vehicles manufactured on and from |
|---------|---------------------------------|---|---|
| 1. | 2. | 3. | 4. |
| 1. | Safety Glass | Rule 100(2), (3) and (3-A) Sl.No.2 of Table of S.O. 1365 (E), dated 13-12-2004 and Sl.No. 3 of 124-A | 1stApril, 2009 |
| 2. | Brake hose | Rule 199(1) | 1stApril, 2009 |
| 3. | Horn | Rule 95(1) | 1stApril, 2009 |
| 4. | Tyre | Sl.No.3 of Annexure IX | 1stApril, 2009 |
| 5. | CNG Regulator | Sl.No. 3 of Annexure VIII Sl.No. 1 of Table of S.O. 1365 (E), dated 13-12-2004 and Sl.No. 1 of 124-A | 1stApril, 2009 |
| 6. | LPG vaporizer/regulator | Rule 125(2) | 1stOctober, 2009 |
| 7. | Bulb | Rule 118(1) | 1stOctober, 2009 |
| 8. | Rear view mirror | Rule 125(1-A) | 1stOctober, 2009 |
| 9. | Speed limiting devices | | 1stOctober, 2009 |
| 10. | Safety Belt | | 1stOctober, 2009 |
| 11. | Wheel rims for M and N category | | 1stOctober, 2009 |

| | | |
|---|--|------------------|
| | Sl.No. 8 of Table of S.O. 1365(E), dated 13-12-2004 | |
| 12. Lighting and light signalling devices for M and N Category | Sl.No.20 of Table of S.O. 1365(E), dated 13-12-2004 | 1stOctober, 2009 |
| 13. Retro-reflectors for M and N Category | Rule 104(4) and 104-A(vi) | 1stOctober, 2009 |
| 14. Warning triangle | Rule 138(4)(c) | 1stOctober, 2009 |
| 15. Lighting and light signalling devices for L category | Sl.No.32 of Table of S.O. 1365(E), dated 13-12-2004 | 1stApril, 2010 |
| 16. Retro-reflectors for L category | Rule 104(4) and 104-A(vi) | 1stApril, 2010 |
| 17. Retro-reflector for Agricultural Tractors and Constructional Equipment Vehicles | Rule 104-A and Rule 104-B | 1stApril, 2010 |
| 18. Lighting and signalling devices for Agricultural Tractors and Constructional Equipment Vehicles | Sl.No.2 of Rule 124-A | 1stApril, 2010 |
| 19. Door locks and Door retention components | Sl.No.16 of Table of S.O. 1365(E), dated 13-12-2004 | 1stApril, 2010 |
| 20. Fuel tanks | Sl.No.7 and 25 of Table of S.O. 1365(E), dated 13-12-2004. Sl. No.6 of Rule 124-A | 1stApril, 2010 |
| 21. Reflective tapes | Rule 104(1) | 1stApril, 2010 |

Provided that the component manufacturers shall comply with the requirements six months prior to the date mentioned in column (4) above.] [Inserted by GSR 784(E), dated 12.11.2008 (w.e.f. 12.11.2008).][[124-A. Safety standards of components for agricultural tractors and combine harvesters.] [Inserted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004) and as corrected by vide GSR 176(E), dated 53.2004.](1)The bulbs of the following lamps used on agricultural tractors [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall conform to [AIS:034-2010] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014], as amended from time to time.(a)Head light main and dip;(b)Parking light;(c)Direction indicator lamp;(d)Tail lamp;(e)Reversing lamp;(f)Stop lamp;(g)Rear Registration mark indicating lamp; and(h)Top light.(2)The lighting and light signalling devices for agricultural tractor [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall be in accordance with AIS:030, as amended from time to time, till such time the corresponding BIS standard is notified:Provided that the performance requirements of the lighting, light signalling and indicating systems of agricultural tractor [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] manufactured on and from [1st October, 2005] [Substituted by GSR 206(E), dated 1.4.2005, for '1st April, 2005'(w.e.f.1.4.2005).] shall be in accordance with safety standard AIS:062, as amended from time to time, till such time corresponding BIS standards are notified:[Provided further that the performance requirements of the lighting and light-signaling devices of agricultural tractors manufactured on and after the 1st day of April, 2017 shall be in accordance with AIS:062 (Rev.1): 2014, as amended from time to time, till such time corresponding BIS standards are notified:] [Inserted by Notification No. G.S.R. 880(E),

dated 14.9.2016 (w.e.f. 2.6.1989).][Provided also] [Inserted by GSR 784(E), dated 12.11.2008 (w.e.f. 12.11.2008).] that the performance of rear warning triangle fitted on agricultural tractors manufactured on and after the 1st day of April, 2009, shall be in accordance with AIS:088-2005, except for clause 1.4.3 of Annexure 6 therein till such time corresponding BIS standards are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).][Provided also that in case of combine harvesters, if the shape of body work makes it impossible to comply with the height requirement of installation of the following lighting and light-signalling devices, it shall be allowed at a height not exceeding 3000 mm:(i)Dipped-beam headlamp (Ref. clause 6.2.4.2)*(ii)Front direction indicator lamp (Ref. clause 6.5.4.2.3)*(iii)Front position lamp (Ref. clause 6.9.4.2)*(iv)Front parking lamp (Ref. clause 6.12.4.2)**Note :Reference clause numbers of AIS-030:2001:Provided also that the performance requirements of the lighting, light signalling and indicating systems of combine harvester shall be in accordance with safety standards AIS:062-2004, as amended from time to time, till such time as the corresponding Bureau of Indian Standards are notified:Provided also that the performance of rear warning triangle fitted on combine harvester shall be in accordance with AIS:088-2005, except clause 1.4.3 of Annexure 6 therein, as amended from time to time, till such time the corresponding Bureau of Indian Standards are notified.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](3)The hydraulic brake hoses wherever used in agricultural tractor [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] and its trailer shall be in accordance with [IS:7079-2008] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014], as amended from time to time.(4)The vegetable, non-mineral based hydraulic fluids wherever used in agricultural tractor [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall be in accordance with IS:8654 -1986, as amended from time to time.(5)The tow hook wherever used in agricultural tractor [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall be in accordance with IS:12362 (Part 2), as amended from time to time.(6)[The fuel tank of agricultural tractors shall conform to AIS: 104-2008, as amended from time to time:] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014]Provided that the clause 3.2.1 of IS:12056 -1987 be exempted for agricultural tractor that have a gravity feed fuel flow system.(7)The wheel nuts and hub caps used in agricultural tractor [and combine harvesters] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall be in accordance with IS:13941 -1994, as amended from time to time.](8)[On and after the 1st October, 2012, the ballast mass, wherever used in agriculture tractor, shall conform to AIS 105: 2008, as amended from time to time, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(9)On and after the 1st October, 2012, the protective structures, wherever provided in agriculture tractor, shall conform to IS:11821 (Part 1)- 1992 or IS:11821 (Part 2)-1992, as the case may be.(10)On and after the 1st October, 2012, the load platform, wherever used in agriculture tractors, shall conform to AIS:106-2009, as amended from time to time, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(11)On and after the 1st October, 2012, the attendant's seat, wherever used in agricultural tractors, shall conform to AIS:111-2009, as amended from time to time, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(12)On and after the 1st October, 2012, for agricultural tractors, the driver's field of vision shall conform to AIS:107-2009, as amended from time to time, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).](13)[On and after 1st April, 2015, for

agricultural tractors, the maximum design speed shall be in accordance with AIS-116-2009.] [Inserted by Notification No. G.S.R. 291 (E) dated 24.4.2014][124-B. Safety standards of components for power tillers. [Rule 124-B inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).](1)The lamps and bulbs used on power tillers for(a)the head light main and dip;(b)the parking light;(c)the direction indicator lamp;(d)the tail lamp;(e)the reversing lamp;(f)the stop lamp;(g)the rear Registration mark illuminating lamp,shall be in accordance with AIS:034:2004 as amended from time to time till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(2)The lighting and signalling devices shall be in accordance with AIS:062:2004 as amended from time to time, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(3)The safety and comfort of the operator of a power tiller shall be in accordance with IS:12239 (Part3):1996, as amended from time to time.(4)The grade ability of a power tiller coupled to a trailer under the declared combination weight by the manufacturer shall be in accordance with IS:9980:1988, as amended from time to time.] [Inserted by Notification No. G.S.R. 625 (E) dated 8.8.2012 (w.e.f. 2.6.1989)]

125. [Safety belt,collapsible steering column, auto dipper and padded dash boards. [Rule125 substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

- [(1)] One year from the date of commencement of the Central Motor Vehicles(Amendment) Rules, 1993, the manufacturer of every motor vehicle other than motor cycles and three-wheelers [* * *] [The words, figures and letters 'of engine capacity not exceeding 500 cc'omitted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).], shall equip every such vehicle with a seat belt for the driver and for the person occupying the front seat.[(1-A) The manufacturer of every motor vehicle of M-1 category shall equip every motor vehicle with a seat belt for a person occupying the front facing rear seat:Provided that the specifications of Safety Belt Assemblies and Safety Belt Anchorages in Motor vehicles shall conform to [IS: 15140-2003 and IS: 15139-2002 respectively] [Sub-Rule(1-A) substituted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).]:Provided further that on and after 1st October, 2002, the specification of Safety Belt Assemblies and safety Belt Anchorages in motor vehicles shall conform to [IS:15140-2003 and IS:15139-2002 respectively] [Substituted by GSR 784(E), dated 12.11.2008 (w.e.f. 1.4.2009).].][[(1-B) On and after the 1st day of October, 2009, the front under run protective n (sic)after 1st day of October, 2009 shall comply with the requirements specified in AIS: 069-2006, till the corresponding HIS specifications are devices fitted on N2 and N3 categories of motor vehicles, manufactured o (sic) notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).(1-C) On and after the 1st day of April, 2009, the temporary cabin fitted on drive away chassis vehicles of Category M and N, manufactured on and after the 1st day of October, 2008 that are driven off from the factory premises for purposes of body building, shall comply with the requirements specified in AIS: 070-2004 till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [Inserted by GSR 784(E), dated 12.11.2008 (w.e.f. 12.11.2008).][Provided that this sub-rule is applicable only to those drive away chassis vehicles driven on road, whenever and wherever, by its own wheels using own power and not applicable to those drive away chassis vehicles that are transported upon trailers or by any other mode of transportation.] [Inserted by Notification No. G.S.R. 121 (E), dated 10.2.2017 (w.e.f.

2.6.1989).](2)Six months from the date of commencement of the Central Motor Vehicles (Amendment) Rules 1993, all motor vehicles shall be equipped with rear view mirror.[Provided that [on and from 1st May, 2003] [Inserted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).], the rear view mirror specifications and installation requirements shall be as specified by AIS: 001-2001 and AIS: 002-2001 respectively, as may be amended from time to time, till such time as corresponding Bureau of Indian Standards specifications are notified.][Provided further that on and after the 1st October, 2012, for agricultural tractors, the rear view mirror specifications and installation requirements shall conform to AIS: 001-2001 and AIS:114- 2009 respectively, as amended from time to time, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [Inserted by Notification No. G.S.R. 625 (E) dated 8.8.2012 (w.e.f. 2.6.1989)][* * *] [Sub-Rule(3) omitted by GSR 29(E), dated 15.1.1998 (w.e.f. 15.1.1998).][* * *] [Sub-Rule(4) omitted by GSR 659(E), dated 12.9.2001 (w.e.f. 12.9.2001).](5)[On and after 1st January, 2003, the size and specifications on seats, their Anchorages and Head Restraints(excluding luggage retention) on M-1 vehicle category shall conform to [IS: 15546-2005] [Inserted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).].(6)[On and from the 1st day of October,2007, the seats, their anchorages and their head restraints for M2, M3, N1, N2and N3 category of vehicles, shall be in accordance with AIS:023:2005 as amended from time to time till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [[Sub-Rule(6) inserted by GSR 589(E), dated 16.9.2005 (w.e.f.16.9.2005).]][(8) Motor vehicles of category M1] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014] excluding transport vehicles and special purpose vehicles manufactured on and after 1st April, 2015, shall have a provision for installation of at least one category of child restraint system for all weight groups on at least one of the seating positions, as specified in AIS: 072-2009, as amended from time to time, till the corresponding Bureau of Standards specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986):Provided that the manufacturer or importer or dealer of the child restraint system shall provide the guidelines for fitment and use of such system to the buyer of such vehicles:Provided further that for such vehicles, vehicle manufacturer or importer or dealer of the motor vehicle shall provide the guidelines for recommended position in the vehicle.](9)[Motor vehicles of category M1, manufactured on and after the 1st day of July, 2019, shall comply with the additional safety features and its requirements stipulated in AIS-145-2017, as amended from time to time.] [Inserted by Notification No. G.S.R. 1483(E), dated 7.12.2017 (w.e.f. 2.6.1989).][125-A. Safety belt, etc., for construction equipment vehicles and combine harvesters.] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).]- One year from the date of commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, the manufacturer of every construction equipment vehicle other than an agriculture tractor shall equip every such vehicle with a seat belt for the driver and for the person occupying the front seat, and with a rear view mirror.][Provided that every combine harvester fitted with a cabin, shall be equipped with a seat belt for the driver and with a rear view mirror.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)][125-B. Special requirements for transport vehicles that are driven on hills. [Rule 125-B and 125-C inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2005).](1)On and from the 1st day of October, 2006, such four wheeled transport vehicles as may be notified by State Governments in the Official Gazette plying on such routes or areas in hilly terrains shall be fitted with fog lamp, power steering, defrosting and demisting system and that the State Government would provide a lead time of six months for this purpose.(2)Anti-Lock Braking System shall be introduced in all

M-2category buses including those plying on All India Tourist Permit on and from the 1st day of October, 2007 in hill areas.

125.

-C. Bodybuilding and approval.- [(1) On and after the 1st day of October, 2014, the testing and approval for body building of new models of buses with seating capacity of 13 or more passengers excluding driver shall be in accordance with AIS:052 (Revision 1)-2008, as amended from time to time, for vehicles mentioned therein, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986)] [Substituted by Notification No. G.S.R. 287 (E) dated 22.4.2014 (w.e.f. 2.6.1989)][Provided that the provision of this rule shall be implemented in two phases. [Substituted by Notification No. G.S.R. 895 (E) dated 20.9.2016 (w.e.f. 2.6.1989)]In first phase, the provisions of AIS 052 (Rev. 1) - 2008, excluding the parameters and requirements given in Table-1 below, shall be applicable on and after 1st day of January, 2017. In second phase, the provisions of AIS-052 (Rev. 1) - 2008, as amended from time to time, and the parameters and requirements given in (Table-1) below, shall be applicable on and after 1st day of January, 2018.(Table -1)(Additional Technical Provisions of AIS: 052(Rev-1))

| Sr. No. | Nature of Test/ Parameters | Requirements of Specific Clauses of AIS-052(Rev.1) |
|---------|--|--|
| (1) | (2) | (3) |
| 1. | Scope and Definitions (As applicable) | 1.0 |
| 2. | Body Structure Strength | 3.1 |
| 3. | Body Structure Stability | 3.2 |
| 4. | Window Retention | 3.6 |
| 5. | Window Frames | 3.6.5.5 |
| 6. | Wind Screen Wiping System and Driver's field of Vision | 3.10 |
| 7. | Test Methods (As applicable) | Chapter 6 |
| 8. | Vertical orientation for dipped beam - head lamp | Annexure I, Table with title "Details about SafetyCritical Components" |
| 9. | Seat Anchorages/ Systems.] | |

[Provided further that the operation of the airport passenger bus shall be restricted within the airport premises, for movement of passengers and such buses shall be provided with a marking "Restricted Use: Within Airside Operations Only" with a letter size of not less than 50mm in height on each side of the bus.] [Inserted by Notification No. G.S.R. 594(E), dated 13.6.2016 (w.e.f. 2.6.1989).](2)The testing and approval for the body building of school buses shall be in accordance with AIS:063:2005 as amended from time to time for vehicles mentioned therein, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).](3)[All goods vehicles of Category N2 and of Category N3, either manufactured by a vehicle manufacturer or a body builder on drive away chassis vehicles shall, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986) comply with

the provisions of AIS-093 (Rev. 1)-2015, as specified in Table I and Table II below, namely:-Table I

| Sr. No. | Test Parameters | Requirements of Specific Clauses of AIS-093(Rev.1) |
|---------|--|--|
| (1) | (2) | (3) |
| 1. | Overall Dimensions | 2.1.1 |
| 2. | External Projections for cabin | 2.1.2 |
| 3. | Driver/ Co-passenger Door | 2.1.3 |
| 4. | Climb Facility | 2.1.4 |
| 5. | Hand Holds | 2.1.5 |
| 6. | Window on Cab Door | 2.1.6 |
| 7. | Driver Seat/ Co passenger seat | 2.1.7 |
| 8. | Safety Belt Assemblies and Anchorages | 2.1.8 |
| 9. | Sleeper Berth | 2.1.9 |
| 10. | Mudguards/ Spray suppression devices | 2.1.10 |
| 11. | Driver Work Area | 2.1.11 |
| 12. | Steering Wheel | 2.1.12 |
| 13. | Placement of Instrument Panel | 2.1.13 |
| 14. | Position of Controls | 2.1.14 |
| 15. | Stowage Space | 2.1.15 |
| 16. | First Aid Box | 2.1.16 |
| 17. | Truck Cab Structural Strength | 2.2.1 |
| 18. | Front Under run Protective Device (FUPD) | 2.2.2 |
| 19. | Cab Mounting Arrangement and Strength Requirements | 2.2.3 |
| 20. | Protection of the Occupants in the Event of a Lateral Collision | 2.2.4 |
| 21. | Installation requirements for Lighting & Signaling devices(except for the vertical orientation of the dipped beam) | 2.2.5 |
| 22. | Rear view mirror | 2.2.6 |
| 23. | Driver's Work Area | 2.2.7 |
| 24. | Door Locks & Hinges | 2.2.8 |
| 25. | Window | 2.2.9 |
| 26. | Wind Screen and Wind Screen Wiping System | 2.2.11 |
| 27. | Fire extinguishers | 2.2.12 |
| 28. | Cab and Body gap | 3.2.2 |
| 29. | Stowage Space/ Luggage Carrier | 3.2.3 |
| 30. | Mudguards/ Spray Suppression Devices | 3.2.4 |
| 31. | | 3.4.1 |

| | | |
|-----|--|-------|
| | Protection of the Occupants of Goods-carrying Power-driven Vehicles against the Shifting of Loads | |
| 32. | Retro-Reflective Markings for Heavy and Long Vehicles | 3.4.5 |
| 33. | Lateral Protective device | 3.4.6 |
| 34. | Rear Under run Protective Device (RUPD) | 3.4.7 |
| 35. | Internal Lighting | 4.1.2 |
| 36. | Position of illumination devices | 4.1.3 |
| 37. | Driver Cab lighting | 4.2 |
| 38. | Electrical cables | 4.3.1 |
| 39. | Fuse | 4.3.2 |
| 40. | Terminals, Connectors and Elements | 4.3.3 |
| 41. | Safety requirements | 4.4 |
| 42. | Batteries | 4.5 |
| 43. | Technical Provisions for Base Vehicles | 5.3 |
| 44. | Manner of Display of Class Labels and Identification Marks | 5.5 |

Table II

| Sr. No. | Nature of Test/ Parameters | Requirements of Specific Clauses of AIS-093(Rev.1) |
|------------|--|---|
| 1. | Categorization of Truck Load Bodies | 3.1 |
| 2. | General Requirements | 3.2 |
| 3. | Overall Dimensions | 3.2.1 |
| 4. | Rope Hooks and other Provisions | 3.2.5 |
| 5. | Working Stability | 3.3.1 |
| 6. | Mounting of the Body or Load Platform of Commercial Vehicles | 3.3.2 |
| 7. | Body Construction requirements | 3.3.3 |
| 8. | Securing the Load on the Load body | 3.4.2 |
| 9. | External Projection | 3.4.3 |
| 10. | Installation requirements for Lighting & Signaling devices(except for the vertical orientation of the dipped beam) | 3.4.4 |
| 11. | External Lighting | 4.1.1 |
| 12. | Type of Bulbs for lamp Assemblies | 4.1.4 |
| 13. | Technical Provisions for Bodies | 5.4 |
| 14. | Container Size Designations and Sizes Codes | 6.4 |
| 15. | Recommendations for Stacking of Load | 6.5 |
| 16. | Twist Locks | 6.6 |
| 17. | Container securing arrangements | 6.7 |

| | |
|--|---------------|
| 18. Attaching Sub-frames and Bodies | 6.8 |
| 19. Tanker Mounting | 6.9 |
| 20. Stability Criteria | 7.5 |
| 21. Modification of the Vehicle Type and Extension of Approval | 7.6 |
| 22. Roll Over Stability/ Tilt Table Test Procedure | Annexure - 1 |
| 23. Lateral Stability Calculation | Annexure - 2] |

[Substituted by Notification No. G.S.R. 1034 (E) dated 2.11.2016 (w.e.f. 2.6.1989)](4)[On and after expiry of six months from the date of commencement of the Central Motor Vehicles (14th Amendment) Rules, 2016, the testing and approval for body building of sleeper coaches shall be in accordance with AIS-119 (Rev.1): 2016, as amended from time to time, for vehicles mentioned therein, till the corresponding Bureau of Indian Standards specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [Inserted by Notification No. G.S.R. 905 (E), dated 23.9.2016 (w.e.f. 2.6.1989).](5)[On and after the expiry of six months from the date of commencement of the Central Motor Vehicles (Third Amendment) Rules, 2017, the testing and approval for body building of double decked buses shall be in accordance with AIS-139:2016, as amended from time to time, till the corresponding Bureau of Indian Standard specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] [Inserted by Notification No. G.S.R. 240(E), dated 14.3.2017 (w.e.f. 2.6.1989).]

126. [Prototype of every motor vehicle to be subject to test. [Rule126 substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

- On and from the date of commencement of central Motor Vehicles (Amendment) Rules, 1993, every [manufacturer or importer] of motor vehicles [including trailers, semi-trailers and modular hydraulic trailer] [Substituted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)] shall submit the prototype of the vehicle [to be manufactured or imported by him] [Substituted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).] for test by the vehicle Research and Development Establishment of the Ministry of Defence of the Government of India or Automotive Research Association of India, Pune, [or the Central Farm Machinery Testing and Training Institute, Budni (MP),] [Substituted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).]or the Indian Institute of Petroleum, Dehradun, [or the Central Institute of Road Transport Pune, or the International Centre for Automotive Technology, Manesar] [Added by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).],[or the Northern Region Farm Machinery Training and Testing Institute, Hissar (for testing of combine harvester)] [Inserted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] [or the Global Automotive Research Centre, Chennai] [Inserted by Notification No. G.S.R. 247(E), dated 15.3.2017 (w.e.f. 2.6.1989).] and such other agencies as may be specified by the Central Government for granting a certificate by that agency as to the compliance of provisions of the Act and these rules:][Provided that the procedure for type approval of certification of motor vehicles for compliance to these rules shall be in accordance with the AIS: 017-2000, as amended from time to time] [Inserted by GSR 400(E), dated 28.7.2000 (w.e.f. 2.6.1989).] [and information on technical specifications shall be submitted by the vehicle manufacturer in accordance with AIS-007(Rev.5):2014.] [Inserted by Notification No. G.S.R. 880(E), dated 14.9.2016 (w.e.f. 2.6.1989).][Provided further that in respect to the vehicles imported into India as completely built

units (CBU), the importer shall submit a vehicle of that particular model and type to the testing agencies for granting a certificate by that agency as to the compliance to the provisions of the Act and these rules.] [Inserted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).][Provided also that prototype of bus bodies and truck bodies may be submitted for testing and type approval to engineering colleges specified by the State Government or the State Road Transport Undertakings duly approved by the State Government.] [Inserted by Notification No. G.S.R. 247(E), dated 15.3.2017 (w.e.f. 2.6.1989).]

126A. [[Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

The testing agencies referred to in rule 126 shall, in accordance with the procedures laid down by the Central Government, also conduct tests on vehicles drawn from the production line of the manufacturer to verify whether these vehicles conform to the provisions of [rules made under section 110 of the Act:][Provided that in case the number of vehicles sold in India for a given base model and its variants(manufactured in India or imported to India) are less than 250 in any consecutive period of six months in a year, then such base model and its variants need not be subjected to the above test, if at least one model or its variants manufactured or imported by that manufacturer or importer, as the case may be, is subjected to such tests at least once in a year:Provided further that,in case the number of base models and its variants manufactured/imported is more than one and if the individual base model and its variants are less than 250 in any consecutive period of six months in a year, then the testing agencies can pick up one of the vehicles out of such models and their variants once in a year for carrying out such test.] [Inserted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).][[126-B. Prototype of every construction equipment vehicle and combine harvester to be subject to test.] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).](1)On and from the date of commencement of the Central Motor Vehicles (Sixth Amendment) Rules,2000, every manufacturer of construction equipment vehicle shall submit the prototype of the construction equipment vehicle to be manufactured by him for test by any of the agencies referred to in rule 126 for granting a certificate by that agency as to the compliance of provisions of the Act and these rules.(1A)[On and from the date of commencement of Central Motor Vehicle (Fourth Amendment) Rules, 2015, every manufacturer of combine harvester shall submit the prototype of the combine harvester to be manufactured by him for test by any of the agencies referred to in rule 126 for granting a certificate by that agency as to the compliance of the provisions of the Act and these rules.] [Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)](2)The testing agencies referred to in rule 126 shall in accordance with the procedure laid down by the Central Government conduct tests on vehicles drawn from the production line of the manufacturer to verify whether the vehicles conform to the provisions of the Act, or rules or orders issued thereunder shall be renumbered as sub-rule (1)thereof and after sub-rule (1) as so, renumbered:][Provided that the provisions of this sub-rule shall not be applicable in respect of any construction equipment up to and including [26th August, 2002] [Inserted by GSR 675(E), dated 17.9.2001 (w.e.f. 17.9.2001).].](2A)[The testing agencies referred to in rule 126 shall, in accordance with the procedure laid down by the Central Government, conduct tests on combine harvesters drawn from the production line of the manufacturer to verify whether the combine harvesters conform to the provisions of the Act, or rules, or orders issued there under:Provided that the provisions of this sub-rule shall not be

applicable in respect of any combine harvester up to and including the 1st day of April, 2015.]
[Inserted by Notification No. G.S.R. 212 (E) dated 20.3.2015 (w.e.f. 1.4.2015)]

127. Quality certificate by manufacturer.

- [(1)] [Rule 127 renumbered as sub-Rule (1) thereof by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] On and from the [date] [1st day of April, 1991 vide Section O.941(E), dated 11th December, 1990.] of commencement of this rule, the sale of every motor vehicle manufactured shall be accompanied by a certificate of road-worthiness issued by the manufacturer in Form 22. (1A) [On and from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 2015, the sale of every E-rickshaw or E-cart manufactured shall be accompanied by a certificate of road worthiness issued by the E-rickshaw or E-cart manufacturer or the registered E-rickshaw or E-cart Association, in Form 22.] [Inserted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)] (2) [On and from the date of commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, the sale of every construction equipment vehicle manufactured shall be accompanied by a certificate of road-worthiness issued by the manufacturer in Form 22.] [Inserted by GSR 642(E), dated 28.7.2000 (w.e.f. 28.7.2000).] Special provisions

128. Tourist vehicles other than motor cabs, etc.

- A tourist vehicle other than motor cab, taxicab, campers van house trailer, shall conform to the following specifications, namely: (1) [The dimension shall conform to the dimensions specified in rule 93.] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] (2) Structure. Structure of the tourist vehicle should be sturdy and strong structural frame work using suitable material of adequate sectional area and an aerodynamical shape. For exterior panelling, aluminium sheet or good quality panelling material should be used. As regards interior panelling it should cover the entire interior roof, sides, back and bulk head portions. The body should be made completely leak proof and dustproof. The vehicle should also be rattle proof. Sound deadening should also be done for all panelling including the floor. (3) [Passenger entrance and exit. The passenger entrance-cum-exit door shall be located on the left side of the vehicle and minimum door width shall be 685 millimetres. The door handle should be capable of being handled from inside as well as from outside. The door may be operated pneumatically or hydraulically or electrically with suitable locking devices.] [Sub-Rule (3) substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] (4) [Emergency exit. The emergency exit provided on the tourist vehicle shall meet the following requirements, namely: (i) be clearly marked Emergency Exit in bold letters on the inside and the outside of the tourist vehicle; (ii) be so designed as to open from inside and the outside of the tourist vehicle; (iii) be equipped with a fastening device which can be quickly released but so designed as to offer protection against accidental release; (iv) be easily accessible to persons of normal height standing on the ground outside the vehicle; (v) be easily accessible to the passengers; (vi) be such that no seat or other object placed in the vehicle shall restrict the passage to the emergency door; (vii) be located either at the back or on to the right hand side of the vehicle; and (viii) emergency exit may be provided in the form of a window with breakable glass. In such cases, a suitable device shall be provided at a convenient place to break open the glass in the event of an emergency.] (5) Driver entry and exit. A separate door with suitable sliding window shall be provided for the driver near the driver

seat.(6)Windscreen.(i) The front windscreen shall be of clear view and distortion free, with safety glass and shall be of full width of the tourist vehicle. If made in two halves, the width of the centre vertical joint, inclusive of the rubber glazing fitment of the front windshield shall be such as to enhance the elegance of the tourist vehicle.(ii)Rear windscreen shall be of safety glass or laminated safety glass. It shall match with the windows provided on the vehicle. Sliding curtains shall be provided on the rear windscreen.(7)Windows.Windows of tourist vehicles should have a minimum space of 14.25 millimetres and shall be of safety or laminated safety glass.Windows shall be of double sliding type slider running smoothly in channels without rattle. All safety or laminated safety glasses used for windows should conform to standards laid down by the Bureau of Indian Standards. Windows shall be provided with sliding curtains.(8)Ventilation.Adequate arrangements shall be provided for ventilation for the passenger compartment as well as the driver compartment. All ventilators and windows shall be such that when closed they will not permit ingress of rain water or dust in the passenger or driver compartment.(9)Luggage.(i) Luggage holds shall be provided at the rear or at the sides, or both, of the tourist vehicle with sufficient space and size, and shall be rattle proof, dustproof and waterproof with safety arrangements;(ii)The light luggage racks, on strong brackets shall be provided inside the passenger compartment running along the sides of the tourist vehicle. Except where nylon netting is used, the under side of the rack shall have padded upholstery to protect the passengers from an accidental hit. The general design and fitment of the rack shall be so designed as to avoid sharp corners and edges.(10)Seats and seating arrangements. [* * *] [Sub-Clause (i) omitted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).](ii)Seating layout shall be [two and two or one and two or one and one] [Substituted by GSR 933(E), dated 28.10.1989, for 'two and two'(w.e.f. 28.10.1989).] on either side, all seats facing forward, with a clear gangway of at least 355 millimetres width at the centre. Each passenger seat shall have a minimum area of 447 millimetres × 457 millimetres and an arm rest on both sides and seat back of full height.(iii)The seat frames shall be sturdy, properly finished and so mounted as to transfer the weight directly to the structural members of frame-work. The seats shall be of reclining type and adjustable.(iv)The seats shall be so mounted as to provide at least 280 millimetres legroom from the front of the rear seat to the back of the front seat. A foot rest at suitable location and height shall be provided for every passenger.(11)Painting and finishing.The tourist vehicle shall be painted in a manner referred to in sub-rules (7) and (8) of rule [85] [Substituted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).] in white colour with a blue ribbon of five centimetres width at the centre of the exterior of the body.(12)Lighting.(i)(a) The passenger compartment shall be adequately illuminated.(b)Arrangement shall be provided to eliminate reflection of the light from the passenger compartment on the windscreen.(c)In addition to the lights in passenger compartment, at least two night-lights with coloured domes, shall be provided in the passenger compartment.(ii)Front and rear destination boxes, if provided, shall be illuminated.(iii)One independently operated light fitting shall be provided for illumination of the drivers or attendants seat area.(iv)A light fitting shall be provided for illuminating the steps at the passenger entrance door.(v)Each luggage hold shall have a light fitting for illumination of that hold.(vi)Wiring in the passenger compartment shall be with low tension cable conforming to IS: 2465 of size commensurate with the estimated current loading. The wires shall be carried in PVC sleeveings or conduit or casing of adequate size. When any wire passes through a hold in a panel or sheet metallic components, a rubber grommet of adequate size shall be provided for protection of the insulation.(13)Fittings and accessories.A tourist vehicle shall be equipped with the following, namely:(i)Convex rear view mirrors one on each side, universally

adjustable and of adequate dimensions.(ii)First-aid box with glazed front, with necessary medicines for first-aid.(iii)Fire extinguisher, dry powder type located near the engine compartment.(iv)Insulation on interior or exterior of the engine bonnet for reducing the noise and heat from the engine.(v)Provision for locating vehicle tools securely.(vi)Heavy duty windscreen wiper system.(vii)Adjustable sun visors of adequate size for the driver and for the attendant.(viii)Electrically operated wide indicators or blinkers, stop lights and parking lights.(ix)Dual head lamps.(x)Suitable illumination for the registration number plate at the rear.(xi)Horn.(xii)Electric fans, of 8 inches* sweep adjustable, at least eight in number, suitably spaced in the passenger compartment and controlled by switches located near the seat.(xiii)Electric bell or buzzer located near the seat of driver or attendant and operated by at least four push button controls placed at suitable location in the passenger compartment.(xiv)Ash trays near passenger seats of a design convenient for cleaning them at intermediate stops of the tourist vehicle.(xv)Drinking water and ice-box.(xvi)Rack for magazines and other reading material.(xvii)Back pockets and numbers for each seat.(xviii)Public address system with at least four speakers suitably located in the passenger compartment.(xix)Document frame, located near the seat of driver, for carrying vehicle documents, tax token, license and permit.(xx)Mud flaps for front and rear wheels:[Provided that the provisions of clauses (2) and (7), sub-clause (iv)of clause (12), sub-clauses (ix), (xii) and (xiii) of clause (13), of this rule shall not apply to the vehicles of integral construction.] [Added by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).][Provided further that provisions of this rule shall not apply tourist buses which comply with the provisions of AIS:52, AIS:119 or AIS:139.] [Inserted by Notification No. G.S.R. 1462(E), dated 27.11.2017 (w.e.f. 2.6.1989).]

128A. [Special provision for M3 category of vehicles. [Rule 128A inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2007).]

- The provisions of sub-rule (4) of rule 128 shall apply to all M3 category of vehicles.] [Sub-Rule(4) substituted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.9.2006).]

129. Transportation of goods of dangerous or hazardous nature to human life.

(1)Every owner of a goods carriage transporting any dangerous or hazardous goods shall, in addition to complying with the provisions of any law for the time being in force in relation to any category of dangerous or hazardous goods, comply with the following conditions, namely:(i)every such goods carriage, carrying the same type of dangerous or hazardous goods (whether in bulk or in packages), shall display a distinct mark of the class label appropriate to the type of dangerous or hazardous goods specified in column 3 of the Table I to rule 137;(ii)every package containing dangerous or hazardous goods shall display the distinct class labels appropriate to the type of dangerous or hazardous goods specified in column 3 of the Table I to rule137;(iii)in the case of packages containing goods listed in Table III in rule 137 and which represents two hazards as given in column 2 thereof, such packages shall display distinct labels to indicate both the hazards;(iv)[every goods carriage carrying any dangerous or hazardous goods shall be equipped with safety equipments for

preventing fire, explosion or escape of hazardous or dangerous goods.] [Added by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](2)[One year from the date of commencement of Central Motor Vehicles (Amendment) Rules, 1993, every goods carriage carrying goods of dangerous or hazardous nature to human life, shall be fitted with tachograph (an instrument to record the lapse of running time of the motor vehicle; time speed maintained, acceleration, deceleration, etc.) conforming to the specifications of the Bureau of Indian Standards.] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][129-A. Spark arrester. [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]- Six months from the date of commencement of Central Motor Vehicles (Amendment) Rules, 1993, every goods carriage carrying goods of dangerous or hazardous nature to human life shall be fitted with a spark arrester.]

130. Manner of display of class labels.

(1) Where a class label is required to be displayed on a vehicle, it shall be so positioned that the size of the class label is at an angle of 45 degrees to the vertical and the size of such label shall not be of less than twenty-five millimetres square which maybe divided into two portions, the upper half portion being reserved for the pictorial symbol and the lower half for the text: Provided that in the case of smaller packages a suitable size of the label may be adopted. (2) Where the class label consists of adhesive material, it shall be waterproof and where it consists of metal or other substance on which the pictorial symbol and the text are printed, painted or affixed, they shall be affixed directly on such material and in every case, the surface of the vehicle surrounding the label shall be of a colour that contrasts vividly with the background of the class label. (3) Every class label displayed on a vehicle shall be positioned in such a manner that it does not obscure other markings required to be displayed under any other law. (4) Every goods carriage carrying any dangerous or hazardous goods shall display the class label on the places shown in the Table in rule 134.

131. [Responsibility of the consignor for safe transport of dangerous or hazardous goods. [Rule 131 substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

(1) It shall be the responsibility of the consignor intending to transport any dangerous or hazardous goods listed in Table III, to ensure the following, namely: (a) the goods carriage has a valid registration to carry the said goods; (b) the vehicle is equipped with necessary first-aid, safety equipment and antidotes as may be necessary to contain any accident; (c) that the transporter or the owner of the goods carriage has full and adequate information about the dangerous or hazardous goods being transported; and (d) that the driver of the goods carriage is trained in handling the dangers posed during transport of such goods. (2) Every consignor shall supply to the owner of the goods carriage, full and adequate information about the dangerous or hazardous goods being transported as to enable such owner and its driver to, (a) comply with the requirements of rules 129 to 137 (both inclusive) of these rules; and (b) be aware of the risks created by such goods to health or safety of any person. (3) It shall be the duty of the consignor to ensure that the information is accurate and sufficient for the purpose of complying with the provisions of rules 129 to 137 (both inclusive) of these rules.]

132. [Responsibility of the transporter or owner of goods carriage. [Rule132 substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

(1)It shall be the Responsibility of the owner of the goods carriage transporting any dangerous or hazardous goods to ensure the following, namely:(a)that the goods carriage has a valid registration to carry the said goods and the said carriage is safe for the transport of the said goods; and(b)the vehicle is equipped with necessary first-aid, safety equipment, tool box and antidotes as may be necessary to contain any accident.(2)Every owner of a goods carriage shall, before undertaking the transportation of dangerous or hazardous goods in his goods carriage,satisfy himself that the information given by the consignor is full and accurate in all respects and correspond to the classification of such goods specified in rule 137.(3)The owner of a goods carriage shall ensure that the driver of such carriage is given all the relevant information in writing as given in Annexure V of these rules in relation to the dangerous or hazardous goods entrusted to him for transport and satisfy himself that such driver has sufficient understanding of the nature of such goods and the nature of the risks involved in the transport of such goods and is capable of taking appropriate action in case of an emergency.(4)The owner of the goods carriage carrying dangerous or hazardous goods, and the consignor of such goods shall lay down the route for each trip which the driver shall be bound to take unless directed or permitted otherwise by the Police Authorities. They shall also fix a time table for each trip to the destination and back with reference to the route so laid down.(5)It shall be the duty of the owner to ensure that the driver of the goods carriage carrying dangerous or hazardous goods holds a driving license as per provisions of rule 9 of these rules.(6)Notwithstanding anything contained in rules 131 and 132,it shall be sufficient compliance of the provisions of these rules if the consignor transporting dangerous or hazardous goods and the owner of the goods carriage or the transporter, abides by these conditions within six months after the date of coming into force of the Central Motor Vehicles (Amendment) Rules,1993.]

133. [Responsibility of the driver. [Rule133 substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

(1)The driver of a goods carriage transporting dangerous or hazardous goods shall ensure that the information given to him in writing under sub-rule (3) of rule132 is kept in the drivers cabin and is available at all time while the dangerous or hazardous goods to which it relates, are being transported.(2)Every driver of a goods carriage transporting any dangerous or hazardous goods shall observe at all times all the directions necessary for preventing fire, explosion or escape of dangerous or hazardous goods carried by him while the goods carriage is in motion, and when it is not being driven he shall ensure that the goods carriage is parked in a place which is safe from fire, explosion and any other risk, and at all times the vehicle remains under the control and supervision of the driver or some other competent person above the age of 18 years.]

134. Emergency information panel.

(1)Every goods carriage used for transporting any dangerous or hazardous goods shall be legibly and conspicuously marked with an emergency information panel in each of the three places indicated in

the Table below so that the emergency information panel faces to each side of the carriage and to its rear and such panel shall contain the following information, namely:(i)the correct technical name of the dangerous or hazardous goods in letters not less than 50 millimetres high;(ii)the United Nations class number for the dangerous or hazardous goods as given in Column 1, Table 1 appended with rule 137, in numerals not less than 100 millimetres high;(iii)the class label of the dangerous or hazardous goods of the size of not less than 250 millimetres square;(iv)the name and telephone number of the emergency services to be contacted in the event of fire or any other accident in letters and numerals that are not less than 50 millimetres high and the name and telephone number of the consignor of the dangerous or hazardous goods or of some other person from whom expert information and advice can be obtained concerning the measures that should be taken in the event of an emergency involving such goods.(2)[The information contained in sub-rule (1) shall also be displayed on the vehicle by means of a sticker relating to the particular dangerous or hazardous goods carried in that particular trip.] [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).](3)[[Sub-Rule(2) renumbered as sub-Rule(3) by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] Every class label and emergency information panel shall be marked on the goods carriage and shall be kept free and clean from obstructions at all times.

135. Driver to be instructed.

- The owner of every goods carriage transporting dangerous or hazardous goods shall ensure to the satisfaction of the consignor that the driver of the goods carriage has received adequate instructions and training to enable him to understand the nature of the goods being transported, by him, the nature of the risks arising out of such goods, precautions he should take while the goods carriage is in motion or stationary and the action he has to take in case of any emergency.

136. [Driver to report to the police station about accident. [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]

- The driver of a goods carriage transporting any dangerous or hazardous goods shall, on the occurrence of an accident involving any dangerous or hazardous goods transported by this carriage, report forthwith to the nearest police station and also inform the owner of the goods carriage or the transporter regarding the accident.]

137. Class labels.

- In respect of the dangerous or hazardous goods specified in column (2) of the Table below, the labels specified in the corresponding entry in column (3) shall be the class labels, namely:

Table I

Classification of Labels

| UN Class No. | Classification of goods | Class labels |
|--------------|-------------------------|--------------|
| (1) | (2) | (3) |

| | | |
|---|--|---|
| 1. Explosive | Symbol (exploding bomb) Background | : Black: Orange |
| 2. Gases, compressed, liquefied, dissolved under pressure or deeply refrigerated. | | |
| 2.1 Non-flammable gases | Symbol (gas cylinder) Background | : Black or White: Green |
| 2.2 Inflammable gases | Symbol (Flame) Background | : Black or White: Red |
| 2.3 Poison (toxic) gases | Symbol (skull and crossbones) Background | : Black: White |
| 3. Inflammable Liquids | Symbol (flame) Background | : Black or White: Red |
| 4. Inflammable solids, substance liable to spontaneous combustion; substances which, on contact with water, emit inflammable gases. | | |
| 4.1 Inflammable solids | Symbol (flame) Background | : Black or white: Red |
| 4.2 Substances liable to spontaneous combustion | Symbol (flame) Background | : Black: Upper half white and lower half red |
| 4.3 Substances which, on contact with water, emit inflammable gases | Symbol (flame) Background | : Black or White: Blue |
| 5. Oxidizing substances and organic peroxides. | | |
| 5.1 Oxidizing substances | Symbol (flame over circle) Background | : Black: Yellow |
| 5.2 Organic peroxides | Symbol (flame over circle) Background | : Black: Yellow |
| 6. Poisonous (toxic) substances and infectious substances. | | |
| 6.1 Poisonous (toxic) substances | Symbol (skull and crossbones) Background | : Black: White |
| 6.2 Harmful substances | | The bottom half of the label should bear the inscription : Harmful : Stow away from food-stuffs Symbol (St. Andrew's cross over and ear of wheat): Background: White |

6.3 Infectious substances

The bottom half of the label should bear:
Infectious substances (optional) and the inscription "In the case of damage or leakage immediately notify Public Health Authority (optional) Symbol (three crescents superimposed on a circle) and inscription Background: Black: Right

7. Radioactive substances

Symbol - 3 segments of a circle - a number and lettering of the class label shall be black on a white background and the parallel lines bordering the class label shall be black and shall be 5 mm thick

8. Corrosives

Symbol (liquids spilling from two glass vessels and attaching a hand and a metal) :
Black Lower half black with white border

[TABLE II] [Substituted by G.S.R. 349(E), dated 1.6.2005, for Table II (w.e.f. 1.6.2005).] Indicative criteria (A) Explosives: An explosive means a solid or liquid or pyrotechnic substance (or a mixture of substances) or an article, (i) which is in itself capable by chemical reaction of production of gas at such a temperature and as such a speed as to cause damage to the surroundings; (ii) which is designed to produce an effect, by heat, light, sound, gas or smoke or a combination of these, of non-detonative self-sustaining exothermic chemical reaction. (B) Gas: (1) A gas is a substance which (i) at 50°C has a vapour pressure greater than 300 kPa; or (ii) is completely gaseous at 20°C at a standard pressure of 101.3 kPa. (2) Substances of gas are assigned to one of three following divisions based on the primary hazard of the gas during transport; (a) Flammable gases: Gases which at 20°C and a standard pressure of 101.3 kPa, (i) are ignitable when a mixture of 13 per cent or less by volume with air; c.. (ii) have a flammable range with air of at least 12 percentage point, regardless of the lower flammable limit. Flammability shall be determined by tests or by calculation in accordance with methods adopted by International Standards Organisation [ISO: 10156: 1996] or by Bureau of Indian Standards [IS: 1446-1985] (b) Non flammable, non-toxic gases: Gases which are transported a pressure not less than 280 kPa at 20°C, or as refrigerated liquids and which, (i) are asphyxiant-gases which dilute or replace the oxygen normally in the atmosphere; (ii) are oxidizing-gases which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does; or (iii) do not come under the other divisions; (c) Toxic gases: Gases which are known to be so toxic or corrosive to humans as to pose a hazard to health. Note.-Gases meeting the above criteria owing to their corrosivity are classified as toxic with a subsidiary corrosive risk. (C) Flammable chemicals: (i) Flammable gases.-Gases which at 20°C and at standard pressure of 101.3 kPa are: (a) ignitable when a mixture of 13 per cent or less by volume with air, or (b) have a flammable range with air of at least 12 percentage points regardless of the lower flammable limits. Note.-The flammability shall be determined by tests or by calculation in accordance with methods adopted by International Standards Organisation (ISO: 10156: 1996) or by Bureau of Indian Standards (IS: 1446-1985). (ii) Extremely flammable liquids.-Chemicals which have flash point lower than or equal to 23°C and boiling point less than 35°C. (iii) Very high/flammable liquids.-Chemicals which have a flash point lower than or equal to 23°C and initial boiling point higher than 35°C. (iv) Highly flammable liquids.-Chemicals with a flash point lower than or equal to

60°C but higher than 23°C.(v)Flammable liquids.-Chemicals which have a flash point higher than 60°C: but lower than 90°C.(D)Reactive Substances:Reactive substances are those substances which start reacting chemically with any other material and reducing gases through their own decomposition. Such substances are Inorganic Alkalies (for example NaOH, Iodine and the like) and Acids (for example H₂SO₄, HNO₃, HCl and the like)(E)Oxidizing Substances:(a)Oxidizing substances:Substances which, while in themselves not necessarily combustible, may generally by yielding oxygen, cause or contribute to the combustion of other material. Such substances maybe contained in an article;(b)Organic peroxides:Organic substances which contain the bivalent-o-o-structure and may be considered derivative of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced by organic radicals. Organic peroxides are thermally unstable substances which may undergo exothermic self-accelerating decomposition. In addition, they may have one or more of the following properties,(i)be liable to explosive decomposition;(ii)burn rapidly;(iii)be sensitive to impact or friction;(iv)react dangerously with other substances;(v)cause damage to the eyes.(F)Toxic:Toxic chemicals:-Chemical having the following values of acute toxicity and which owing to their physical and chemical properties, are capable of producing major accident hazards:

| Sl.No. | Toxicity | Oral toxicity (mg/kg) | Dermal toxicity (mg/kg). | Inhalation toxicity (mg/I) |
|--------|-----------------|-----------------------|--------------------------|----------------------------|
| 1 | Extremely toxic | >5 | <40 | <0.5 |
| 2. | Highly toxic | >5-50 | >40-200 | <0.5-2.0 |
| 3. | Toxic. | >50-200. | >200-1000. | >2-10 |

1. LD50 oral in rats

2. LD50 coetaneous in rats or rabbits

3. LC50 by inhalation (four hours) in rats.

(G)Radioactive:Radioactive materials mean any material containing radionuclide where both the activity concentration and the total activity in the consignment exceed the values specified, depending on the type of material by the Atomic Energy Commission of India.(H)Corrosive:Corrosive substances are substances which by chemical action will cause severe damage when in contact with living tissue or in the case of leakage will materially damage or even destroy other goods or the means of transport. They may also cause other hazards.][TABLE III] [Substituted by G.S.R. 349(E), dated 1.6.2005, for Table III (w.e.f. 1.6.2005).]List of Hazardous Goods

E – Explosive, F – Flammable, O – Oxidising, R – Reactive,
C – Corrosive, Ra – Radioactive, T – Toxic, G - Gas

| Sr. No. | Name | E | F | O | R | C | Ra | T | G |
|---------|---|---|---|---|---|---|----|---|---|
| 1. | 1 Hexene | E | F | | | | | | |
| 2. | 1Methylpiperidine | | F | | | | | | |
| 3. | 1, l-Difluoroethylene (Refrigerated GasR 1132a) | | | | | | | | G |

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|-----|--|---|---|---|
| 4. | 1,2-Dichloro- 1, 1, 2, 2-Tetrafluoroethane(Refrigerated Gas R 114) | | | G |
| 5. | 1, 1,1, 2-Tetrafluoroethane (Refrigerant GasR 134a) | | | G |
| 6. | 1, 1,1 -Trifluoroethane (Refrigerant Gas R 143a) | | | G |
| 7. | 1, 1; Trichloroethane | | T | |
| 8. | 1, 1-Dichloro-1-Nitroethane | | T | |
| 9. | 1,1-Dichloroethane | F | | |
| 10. | 1,1-Difluoroethane | | | G |
| 11. | 1,1-Dimethoxyethane | F | | |
| 12. | 1, 2,3, 6-Tetrahydrobenzaldehyde | F | | |
| 13. | 1, 2,3, 6-Tetrahydropyridine | F | | |
| 14. | 1,2-Butylene Oxide, Stabilized | F | | |
| 15. | 1,2-Di-(Dimethylamino) Ethane | F | | |
| 16. | 1,2-Dibromobutan 3-one | | T | |
| 17. | 1,2-Dichloroethylene | F | | |
| 18. | 1,2-Dichloropropane | F | | |
| 19. | 1,2-Dimethoxyethane | F | | |
| 20. | 1,2-Epoxy-3-Ethoxypropane | F | | |
| 21. | 1,2-Propylenediamine | | C | |
| 22 | 1, 3,5-Trimethylbenzene | F | | |
| 23 | 1,3-Dichloroacetone | | T | |
| 24 | 1,3-Dichloropropanol-2 | | T | |
| 25 | 1,3-Dimethylbutylamine | F | | |
| 26 | 1,4-Butynediol | | T | |
| 27 | 1, 5,9-Cyclododecatriene | | T | |
| 28 | 1-Bromo-3-chloropropane | | T | |
| 29 | 1-Bromo-3-Methylbutane | F | | |
| 30 | 1-Chloro-1,1-Difluoroethane(Refrigerant Gas R 142b) | | | G |
| 31 | 1-Chloro-2,2, 2-Trifluoroethane(Refrigerant Gas R 133a) | | | G |
| 32 | 1-Ethylpiperidine | F | | |
| 33 | 1-Methoxy-2-Propanol | F | | |
| 34 | 1-Pentol | | C | |
| 35 | 2-(2-Aminoethoxy) Ethanol | | C | |
| 36 | 2,2-Dimethylpropane | | | G |
| 37 | 2,4-Toluylenediamine | | T | |
| 38 | 2,2'-Dichlorodiethyl Ether | | T | |
| 39 | 2,3 Dihydropyran | F | | |
| 40 | 2,3-Dimethylbutane | F | | |

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|----|------------------------------------|---|---|-------------|
| 41 | 2-Amino-4,6-Dinitrophenol Wetted | F | | |
| 42 | 2-Amino-4-Chlorophenol | | | T |
| 43 | 2-Amino-5-Diethylaminopentane | | | T |
| 44 | 2-Bromo-2-Nitropropane-1,3-Diol | F | | |
| 45 | 2-Bromoethyl Ethyl Ether | F | | |
| 46 | 2-Bromopentane | F | | |
| 47 | 2-Chloroethanal | | | T |
| 48 | 2-Chloropropane | F | | |
| 49 | 2-Chloropropene | F | | |
| 50 | 2-Chloropropionic Acid, Solid | | | T |
| 51 | 2-Chloropropionic Acid, Solution | | C | |
| 52 | 2-Chloropyridine | | | T |
| 53 | 2-Diethylaminoethanol | | C | |
| 54 | 2-Dimethylaminoacetonitrile | F | | |
| 55 | 2-Dimethylaminoethanol | | C | |
| 56 | 2-Dimethylaminoethyl Acrylate | | | T |
| 57 | 2-Dimethylaminoethyl Methacrylate | | | T |
| 58 | 2-Ethylaniline | | | T |
| 59 | 2-Ethylbutanol | F | | |
| 60 | 2-Ethylbutyraldehyde | F | | |
| 61 | 2-Ethylhexyl Chloroformate | | | T |
| 62 | 2-Ethylhexylamine | F | | |
| 63 | 2-Iodobutane | F | | |
| 64 | 2-Methyl-1-Butene | F | | |
| 65 | 2-Methyl-2-Butene | F | | |
| 66 | 2-Methyl-2-Heptanethios | | | T |
| 67 | 2-Methyl-5-Ethylpyridine | | | T |
| 68 | 2-Methylfuran | F | | |
| 69 | 2-Methylpentan-2-OL | F | | |
| 70 | 2-Trifluoromethylaniline | | | T |
| 71 | 3, 3-Diethoxypropene | F | \| | 72 3,3'-Imi |
| 73 | 3-Bromopropyne | F | \| |  |
| 74 | 3-Chloro-4-Methylphenyl Isocyanate | | | T |
| 75 | 3-Chloropropanol-1 | | | T |
| 76 | 3-Methyl-1-Butene | F | | |
| 77 | 3-Methylbutan-2-One | F | | |

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|-----|--|---|---|-----|
| 78 | 3-Nitro-4-Chlorobenzotrifluoride | | C | |
| 79 | 3-Trifluoromethylaniline | | | T |
| 80 | 4 Methoxy-4-Methylpentan 2-one | F | | |
| 81 | 4,4'-Diaminodiphenylmethane | | | T |
| 82 | 4-Chloro-o-Toluidine Hydrochloride | | | T |
| 83 | 4-Methylmorpholine(N-Methylmorpholine) | F | | |
| 84 | 4-Thiapentanal | | | T |
| 85 | 5-Methylhexan-2-one | F | | |
| 86 | 5-Nitrobenzotriazol | E | | |
| 87 | 5-tert-Butyl-2,4, 6-Trinitro-m-Xylene(Musk Xylene) | F | | |
| 88 | 9-Phosphabicyclononanes(CyclooctadienePhosphines | F | | |
| 89 | Acetaldehyde | F | | T |
| 90 | Acetaldehyde Ammonia | | | T |
| 91 | Acetic Acid | | C | |
| 92 | Acetic Acid Solution | | C | |
| 93 | Acetic Acid, Glacial or Acetic Acid Solution | | C | |
| 94 | Acetic Anhydride | | C | |
| 95 | Acetic Cyanothdrin | | | T |
| 96 | Acetone | F | | |
| 97 | Acetone Cyanohydrin | | | T |
| 98 | Acetone Cyanohydrine (2-Cyanopropan-2-OL) | | | T |
| 99 | Acetone Oils | F | | |
| 100 | Acetone Thiosemicarbazide | | | T |
| 101 | Acetonitrile | F | | T |
| 102 | Acetyl Bromide | | C | |
| 103 | Acetyl Chloride | F | C | T |
| 104 | Acetyl Iodide | | C | |
| 105 | Acetyl Methyl Carbinol | F | | |
| 106 | Acetylene | | | T G |
| 107 | Acetylene(Ethyne) | F | | |
| 108 | Acetylene Tetra Chloride | | | T |
| 109 | Acridine | | | T |
| 110 | Acrolein(2-Propenal) | F | | T |
| 111 | Acrolein Dimer, Stabilized | F | | |
| 112 | Acrylamide | | | T |
| 113 | Acrylic Acid, Stabilized | | C | |
| 114 | Acrylonitrile | F | | T |

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|-----|--|---|---|---|----|
| 115 | Adiponitrile | | | T | |
| 116 | Aerosols | | | | G. |
| 117 | Aircraft Hydraylic Power Unit Fuel Tank | F | | | |
| 118 | Alcoholates Solution, N.O.S. | F | | | |
| 119 | Alcoholic Beverages | F | | | |
| 120 | Alcohols, Flammable, Toxic, N.O.S. | F | | | |
| 121 | Alcohols, N.O.S. | F | | | |
| 122 | Aldehydes, Flammable, Toxic, N.O.S. | F | | | |
| 123 | Aldehydes, N.O.S. | F | | | |
| 124 | Aldicarb | | | T | |
| 125 | Aldol | | | T | |
| 126 | Alkali Metal Alloy, Liquid, N.O.S. | F | | | |
| 127 | Alkali Metal Amalgam | F | | | |
| 128 | Alkali Metal Amides | F | | | |
| 129 | Alkali Metal Dispersion or AlkalineEarth Metal Dispersion | F | | | |
| 130 | Alkaline Earth Metal Alcoholates, N.O.S. | F | | | |
| 131 | Alkaline Earth Metal Amalgam | F | | | |
| 132 | Alkaline Metal Alcoholates, Self-l-leating,Corrosive, N.O.S. | F | | | |
| 133 | Alkaloids, Liquid, N.O.S. or AlkaloidSalts, Liquid, N.O.S. | | | T | |
| 134 | Alkyl Phthalate | | C | | |
| 135 | Alkylphenols, Liquid, N.O.S. | | C | | |
| 136 | Alkylphenols, Solid, N.O.S. | | C | | |
| 137 | Alkylsulphuric Acids | | C | | |
| 138 | Alkysulphonic Acids, LiquidArkysulphonic Acids, Liquid | | C | | |
| 139 | Alkylsulphonic Acids, Liquid or ArylsulphonicAcids, Liquid | | C | | |
| 140 | Alkysulphonic Acids, Solid or ArylsulphonicAcids, Solid | | C | | |
| 141 | Allyl Alcohol | F | | T | |
| 142 | Allyl Alcohol (2-Propen-l-OL) | F | | T | |
| 143 | Allyl Amine | | | T | |
| 144 | Allyl Bromide | F | | T | |
| 145 | Allyl Chloride | F | | T | |
| 146 | Allyl Chloroformate | | | T | |
| 147 | Ally]Glycidyl Ether | F | | | |
| 148 | Allyl Iodide | F | | | |
| 149 | Allylamine | | | T | |
| 150 | Allyltrichlorosilane,Stabilized | | C | | |
| 151 | Alpha Naphthyl Thiourea | | C | | |

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|-----|---|---|----|---|
| 152 | Alpha-Methylbenzyl Alcohol | | | T |
| 153 | Alpha-Methylvaleraldehyde | F | | |
| 154 | Alpha-Naphthylamine | | | T |
| 155 | Alpha-Pinene | F | | |
| 156 | Aluminium(Powder) | | | T |
| 157 | Aluminium Alkyl Haldies, Liquid/Solid | F | | |
| 158 | Aluminium Alkyl Hydrides | F | | |
| 159 | Aluminium Alkyls | F | | |
| 160 | Aluminium Azide | F | | T |
| 161 | Aluminium Borohydride | F | | T |
| 162 | Aluminium BromideSolution | | C. | |
| 163 | Aluminium Bromide, Anhydrous | | C | |
| 164 | Aluminium Carbide | F | | T |
| 165 | Aluminium Chloride | | C | |
| 166 | Aluminium Chloride Solution | | C | |
| 167 | Aluminium Chloride, Anhydrous | | C | |
| 168 | Aluminium Fluoride | | C | |
| 169 | Aluminium Hydride | F | | |
| 170 | Aluminium Nitrate | | O | |
| 171 | Aluminium Phosphide | F | | |
| 172 | Aluminium Phosphide Pesticide | | | T |
| 173 | Aluminium Resinate | F | | |
| 174 | Aluminium Smelting By-Products orAluminium Remelting By-Products | F | | |
| 175 | Amines, Flammable, Corrosive, FlammableN.O.S. Polyamines, Liquid, Corrosive, Flammable,N.O.S. | | C | |
| 176 | Amines, Flammable, Corrosive, N.O.S. orPolyamines, Flammable, Corrosive, N.O.S. | F | | |
| 177 | Amines, Liquid, Corrosive, N.O.S. orPolyamines, Flammable, Liquid, Corrosive, N.O.S. | | C | |
| 178 | Amines, Solid, Corrosive, N.O.S. orPolyamines, Solid, Corrosive, N.O.S. | | C | |
| 179 | Amino Diphenyl | | | T |
| 180 | Amino Pyridine | | | T |
| 181 | Aminodiphenyl,-4 | | | T |
| 182 | Aminophenol-2 | | | T |
| 183 | Aminophenols(o-, m-, p-) | | | T |
| 184 | Aminopyridines | | | T |

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|-----|---|---|-----|---|----|
| 185 | Aminopterin | | | T | |
| 186 | Amiton | | | T | |
| 187 | Amiton Dialate | | | T | |
| 188 | Ammonia | | | T | |
| 189 | Ammonia Solution | | | T | G |
| 190 | Ammonium Arsenate | | | T | |
| 191 | Ammonium Chloro Platinate | | | T | |
| 192 | Ammonium Dichromate | | O | | |
| 193 | Ammonium Dinitro-o-Cresolate | | | T | |
| 194 | Ammonium Fluoride | | | T | |
| 195 | Ammonium Fluorosilicate | | | T | |
| 196 | Ammonium Hydrogendifluoride Solution | | | C | |
| 197 | Ammonium Hydrogendifluoride, Solid | | | C | |
| 198 | Ammonium Metavanadate | | | | T |
| 199 | Ammonium Nitrate Fertilizer | | O | | |
| 200 | Ammonium Nitrate Fertilizer, N.O.S. | | O | | |
| 201 | Ammonium Nitrate Fertilizers | | O | | |
| 202 | Ammonium Nitrate, Liquid | | O | | |
| 203 | Ammonium Nitrates | | O R | | |
| 204 | Ammonium Nitrates in Fertilizers | | O R | | |
| 205 | Ammonium Perchlorate | | O | | |
| 206 | Ammonium Persulphate | | O | | |
| 207 | Ammonium Picrate | E | | | Ra |
| 208 | Ammonium Picrate, Wetted | F | | | |
| 209 | Ammonium Polysulphide Solution | | | C | |
| 210 | Ammonium Polyvanadate | | | | T |
| 211 | Ammonium Sulfamate | | | | T |
| 212 | Ammonium Sulphide Solution | | | C | |
| 213 | Ammunition, Tear-Producing, Non-Explosive | | | | T |
| 214 | Ammunition, Toxic, Non-Explosive | | | | T |
| 215 | Ammonium Hydrogen Sulphate | | | C | |
| 216 | Amyl Acetates | F | | | T |
| 217 | Amyl Acid Phosphate | | | C | |
| 218 | Amyl Butyrates | F | | | |
| 219 | Amyl Formates | F | | | |
| 220 | Amyl Nitrate | F | | | |
| 221 | Amylamine | F | | | |

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|-----|---|-----|---|---|
| 222 | Amyltrichlorosilane | | C | |
| 223 | Anabasine | | | T |
| 224 | Aniline | | | T |
| 225 | Aniline 2,4, 6-Trimethyl | | | T |
| 226 | Aniline Hydrochloride | | | T |
| 227 | Anisidine-P | | | T |
| 228 | Anisidines | | | T |
| 229 | Anisole | F | | |
| 230 | Anisoyl Chloride | | C | |
| 231 | Anthraquinone | | | T |
| 232 | Anthrawuine | | | T |
| 233 | Antimony and Compounds | | C | T |
| 234 | Antimony Hydride (Stibine) | F | | T |
| 235 | Arasinous Trichloride | | | T |
| 236 | Argon, Refrigerated Liquid | | | G |
| 237 | Arsenic and All Arsenic Compounds in any Form | | | T |
| 238 | Arsenic Hydride (Arsene) | | | T |
| 239 | Arsenic Pentoxide, Arsenic (V) Acid and Salts | | | T |
| 240 | Arsenic Trioxide, Arsenious (III) Acids and Salts | | | T |
| 241 | Asbestos | | | T |
| 242 | Aviation Regulated Liquid, N.O.S./Solids, N.O.S. | E F | | |
| 243 | Azinphos-Ethyl | | | T |
| 244 | Azinphos Methyl | | | T |
| 245 | Azodic Arbonamide | F | \| |  |
| 246 | Barium Azide | E | | |
| 247 | Barium Bromate | | O \| |  |
| 248 | Barium Chlorate | | O | |
| 249 | Barium Cyanide | | | T |
| 250 | Barium Hypochlorite | | O | |
| 251 | Barium Nitrate | | C | |
| 252 | Barium Nitride | | C | |
| 253 | Barium Oxide | | | T |
| 254 | Barium Perchlorate | | O | |
| 255 | Barium Permanganate | | O | |
| 256 | Barium Peroxide | | O | |

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|-----|--|---|---|---|
| 257 | Batteries Fluid, Alkali | | C | |
| 258 | Batteries Wet, Filled with Acid | | C | |
| 259 | Batteries Wet, Filled with Alkali | | C | |
| 260 | Batteries Wet, Non-Spillable | | C | |
| 261 | Batteries, containing Sodium, or Cells,containing Sodium | F | | |
| 262 | Batteries, Dry, containing PotassiumHydroxide Solid | | C | |
| 263 | Benxoyl Peroxide | | O | |
| 264 | Benzal Chloride | | O | |
| 265 | Benzaldehyde | | O | |
| 266 | Benzenamine,3-Trifluoromethyl | | C | |
| 267 | Benzene | F | | T |
| 268 | Benzene Arsenic Acid | | | T |
| 269 | Benzene Chloride | | | T |
| 270 | Benzene Sulfonyl Chloride | | | T |
| 271 | Benzene,1-(Chloromethyl)-4 Nitro | | | T |
| 272 | Benzene,1-(Chloromethyl) 4-Nitro | | | T |
| 273 | Benzenesulphonyl Chloride | F | C | |
| 274 | Benzidine | | | T |
| 275 | Benzidine Salts | | | T |
| 276 | Benzimidazole,4, 5-Dichloro-2(Trifluoromethyl) | | | T |
| 277 | Benzonitrile | | | T |
| 278 | Benzoquinone | | | T |
| 279 | Benzoquinone-P | | | T |
| 280 | Benzotrichloride | | C | |
| 281 | Benzoyl Chloride | | C | |
| 282 | Benzoyl Peroxide | E | | T |
| 283 | Benzyl Bromide | | | T |
| 284 | Benzyl Chloride | | | T |
| 285 | Benzyl Chloroformate | | C | |
| 286 | Benzyl Cyanide | | | T |
| 287 | Benzyl Iodide | | | T |
| 288 | Benzyl dimethylamine | | C | |
| 289 | Benzylidene Chloride | | | T |
| 290 | Beryllium(Powder) | | | T |
| 291 | Beryllium(Powders, Compounds) | | | T |
| 292 | Beryllium Compound, N.O.S. | | | T |
| 293 | Beryllium Nitrate | | O | |

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|-----|---|---|---|------|
| 294 | Beryllium Powder | | | T |
| 295 | Bibyrilium Pesticide Solid, Toxic | | | T |
| 296 | Bibyrilium Pesticide, Liquid, Flammable, Toxic | F | | |
| 297 | Bicyclo(2,2,1) Heptane-2-Carbonitrile | | | T |
| 298 | Bicyclo(2.2.1) Hepta-2, 5-Diene, Stabilized(2, 5-Norbornadiene, Stabilized) | F | | |
| 299 | Biphenyl | | | T |
| 300 | Bipyridilium Pesticide, Liquid, Toxic | | | T |
| 301 | Bipyridilium Pesticide, Liquid, Toxic, Flammable | | | T |
| 302 | BIS(2,4, 6-Trinitrophenylamine) | | C | |
| 303 | BIS(2, 4, 6-Trinitrophenyl) Amine | E | | T |
| 304 | BIS(2-Chloromethyl) Sulphide | | | T |
| 305 | BIS(2-Chloromethyl) Ketone | | | T |
| 306 | BIS(Chloromethyl) Ether | | | T |
| 307 | BIS(Chloromethyl) Ketone | | | T |
| 308 | BIS(Terbutylperoxy) Butane | F | | T |
| 309 | BIS(Tert-Butyl Peroxy) Cyclohexane | | C | T |
| 310 | BIS(Tert-Butylperoxy Butane, -2,2) | | C | T |
| 311 | BIS(Tert-Butylperoxy) Cyclohexane, 1, 1 | | C | T |
| 312 | BIS(Tert-Butylperoxy) Cyclohexane-1,1 | | R | |
| 313 | BIS(Teri-Butylperoxy, Butane, 2, -2) | | R | |
| 314 | BIS,1, 2 Tribromophenoxy-Ethane | | | T |
| 315 | Bismuth& Compounds | | | Ra T |
| 316 | Bisphenol | | | T |
| 317 | Bi sulphates, Aqueous Solution | | C | |
| 318 | Bisulphites, Aqueous Solution, N.O.S. | | C | |
| 319 | Bitoscanate | O \| |  |  |
| 320 | Blue Asbestos or Brown Asbestos | | | T |
| 321 | Bombs, Smoke, Non-Explosive | | C | |
| 322 | Boron and Compounds | | | T |
| 323 | Boron Powder | | | T |
| 324 | Boron Tribyomide | | C | |
| 325 | Boron Trichoride | | | G |
| 326 | Boron Trifluoride | | | T |
| 327 | Boron Trifluoride Acetic Acid Complex | | C | |
| 328 | Boron Trifluoride Comp. with Methyl-Ether 1:1 | | | T |
| 329 | Boron Trifluoride Diethyl Etherate | | C | |

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|------|---|---|---|---|---|
| 330 | Boron Trifluoride Dihydrate | | | C | |
| 331 | Boron Trifluoride Dimethyl Etherate | F | | | |
| 332 | Boron Trifluoride Propionic Acid Complex | | | C | |
| 333' | Boron Trifluoride, Compressed | | | | G |
| 334 | Boron Trichloride | | | | T |
| 335 | Bromates, Inorganic, Aqueous Solution, N.O.S. | | O | | |
| 336 | Bromates, Inorganic, N.O.S. | | O | | |
| 337 | Bromine | | | | T |
| 338 | Bromine Chloride | | | | G |
| 339 | Bromine or Bromine Solution | | | C | |
| 340 | Bromine Pentafluoride | | O | | |
| 341 | Bromine Trifluoride | | O | | |
| 342 | Bromo Chloro Methane | | | C | |
| 343 | Bromoacetic acid | | | C | |
| 344 | Bromomethyl Bromide | | | C | |
| 345 | Bromobenzene | F | | C | |
| 346 | Bromobenzyl Cyanides, Liquid/Solid | | | | T |
| 347 | Bromochloromethane | | | | T |
| 348 | Bromoform | | | | T |
| 349 | Bromomethylpropanes | F | | | |
| 350 | Bromopropanes | F | | | |
| 351 | Bromotrifluoroethylene | | | | G |
| 352 | Bromotrifluoromethane | | | | G |
| 353 | Butadiene | | | | T |
| 354 | Butadiene-1,3 | | R | | T |
| 355 | Butadienes, Stabilized | | | | G |
| 356 | Butane | | | | G |
| 357 | Butanedione | F | | | |
| 358 | Butanone-2 | | R | | T |
| 359 | Butoxy Ethanol | | | | T |
| 360 | Butyl Acid Phosphate | | | C | |
| 361 | Butyl Acrylates, Stabilized | F | | | |
| 362 | Butyl Alcohol | F | R | | |
| 363 | Butyl Glycidyl Ether | | | | T |
| 364 | Butyl Mercaptan | F | | | |
| 365 | Butyl Methyl Ether | F | | | |
| 366 | Butyl Nitrites | F | | | |

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|-----|---|---|-----|---|
| 367 | Butyl Peroxy Isolpropyl Carbonate, Tert | | R | |
| 368 | Butyl Peroxyacetate, Tert | | R | |
| 369 | Butyl Peroxyisobutyrate, Tert | | R | |
| 370 | Butyl Peroxymaleate, Tert | | R | |
| 371 | Butyl Peroxymaleme Tert | O | | |
| 372 | Butyl Peroxypivalate Tert | | C | |
| 373 | Butyl Propionates | F | | |
| 374 | Butyl Vinyl Ether | | C | |
| 375 | Butyl Vinyl Ether, Stabilized | F | | |
| 376 | Butylamine | | R C | |
| 377 | Butylbenzenes | F | | |
| 378 | Butylene | | | G |
| 379 | Butylglycidal Ether | | | T |
| 380 | Butyl-N-Mercaptan | | | T |
| 381 | Butyltoluenes | | | T |
| 382 | Butyltrichlorosilane | | C | |
| 383 | Butyraldoxime | F | | |
| 384 | Butyric Acid | | C | |
| 385 | Butyric Anhydride | | C | |
| 386 | Butyronitrile | F | | |
| 387 | Butyryl Chloride | F | | |
| 388 | C. I. Basic Green | | | T |
| 389 | C9 Aromatic Hydrocarbon Fraction | | | T |
| 390 | Cadmium and Compounds | | | T |
| 391 | Cadmium Carbide | | | T |
| 392 | Cadmium Compound | | | T |
| 393 | Cadmium Cyanide | | | T |
| 394 | Cadmium Oxide | O | | |
| 395 | Cadmium Oxide (Fumes) | | | T |
| 396 | Cadmium Stearate | | | T |
| 397 | Caesium Hydroxide | | C | |
| 398 | Caesium Nitrate | O | | |
| 399 | Calcium Arsenate | | | T |
| 400 | Calcium Carbide | F | | |
| 401 | Calcium Chlorate, Aqueous Solution | O | | |
| 402 | Calcium Cyanamide | F | | |
| 403 | Calcium Cyanide | | | T |

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|-----|--|-----|---|-----|
| 404 | Calcium Dithionite (Calcium Hydrosulphite) | F | | |
| 405 | Calcium Hydride | F | | |
| 406 | Calcium Hypochloride, Dry or Calcium Hypochloride Mixture, Dry | | O | |
| 407 | Calcium Hypochlorite Mixture | | O | |
| 408 | Calcium Hypochlorite, Hydrated or Calcium Hypochlorite, Hydrated Mixture | | O | |
| 409 | Calcium Manganese Silicon | F | | |
| 410 | Calcium Oxide | | | C |
| 411 | Calcium Perchlorate | | O | |
| 412 | Calcium Permanganate | | O | |
| 413 | Calcium Peroxide | | O | |
| 414 | Calcium Resinate | F | | |
| 415 | Calcium Silicide | F | | |
| 416 | Calcium, Pyrophoric or Calcium Alloys, Pyrophoric | F | | |
| 417 | Camphor | F | | |
| 418 | Camphor Oil | F | | |
| 419 | Caprioc Acid | | | C |
| 420 | Carbamate Pesticide, Liquid, Toxic | | | T |
| 421 | Carbamate Pesticide, Liquid, Toxic | F | | |
| 422 | Carbamate Pesticide, Liquid, Toxic, Flammable | | | T |
| 423 | Carbamate Pesticide, Solid, Toxic | | | T |
| 424 | Carbaryl (Sevin) | | | T |
| 425 | Carbofuran | | | T |
| 426 | Carbofuran (Furadan) | | | T |
| 427 | Carbon Dioxide Refrigerated Liquid | | | G |
| 428 | Carbon Disulphide | F | | T |
| 429 | Carbon Monoxide | F | | T |
| 430 | Carbon Monoxide and Hydrogen Mixture, Compressed | | | T G |
| 431 | Carbon Tetrabromide | | | T |
| 432 | Carbon Tetrachloride | | | T |
| 433 | Carbon, Activated | F | | |
| 434 | Carbonyl Fluoride, Compressed | | | G |
| 435 | Carbonyl Sulphide | | | T |
| 436 | Carbophenothion | | | T |
| 437 | Cartridges | E | | |
| 438 | Caustic Alkali Liquid, N.O.S. | | | C |
| 439 | Celulose Nitrate | E F | | |

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|------|--|-----|---|-----|
| 440 | Celluloid | F | | |
| 441 | Celluloid, Scrap | F | | |
| 442 | Cellulose Nitrate | E F | | |
| 443 | Cerium | F | | |
| 444 | Chemical Sample, Toxic | | | T |
| 445 | Chloral, Anhydrous, Stabilized | | | T |
| 446 | Chlorates(Used in Explosives) | E | | |
| 447 | Chlorates, Inorganic, Aqueous Solution, N.O.S. | O | | |
| 448 | Chlorfenvinphos | | | T |
| 449 | Chloic Acid, Aqueous | O | | |
| 450 | Chlorinated Benzenes | | | T |
| 451 | Chlorine | | | T G |
| 452 | Chlorine Dioxide | | | T |
| 453 | Chlorine Oxide | | | T |
| 454 | Chlorine Pentafluoride | | | G |
| 455 | Chlorine Trifluoride | | | G |
| 456 | Chlorite Solution | | C \| |  |
| 457 | Chlorites, Inorganic, N.O.S. | O | | |
| 458 | Chlorites, Inorganic, N.O.S. | O | | |
| 459 | Chlormephos | | | T |
| 460 | Chlormequat Chloride | | | T |
| 461 | Chloroacetal Chloride | | C | T |
| 462 | Chloroacetaldehyde | | | T |
| 463 | Chloroacetic Acid | | | T |
| 464 | Chloroacetic Acid Solution | O | | |
| 465 | Chloroacetic Acid, Molten | | | T |
| 466 | Chloroacetic Acid, Solid | | | T |
| 467 | Chloroacetone, Stabilized | | | T |
| 468 | Chloroacetonitrile | | | T |
| 469 | Chloroacetophenone | | | T |
| 470 | Chloroacetyl Chloride | | C | T |
| -471 | Chloroaniline,-2 | | | T |
| 472 | Chloroaniline,-4 - | | | T |
| 473 | Chloroaniline-2 | | | T |
| 474 | Chloroaniline-4 | | | T |
| 475 | Chloroanilines, Liquid | | | T |
| 476 | Chloroanilines, Solid | | | T |

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|------|--|---|---|---|
| 477- | Chloroanisidines | | T | |
| 478 | Chlorobenzene | F | T | |
| 479 | Chlorobenzotrifluorides | F | | |
| 480 | Chlorobenzyl Chlorides | | T | |
| 481 | Chlorobutanes | F | | |
| 482 | Chlorocresols | | T | |
| 483 | Chlorodifluorobromomethane(Refrigerant GasR 12B1) | | | G |
| 484 | Chlorodifluoromethane andChloropentafluoroethane Mixture | | | G |
| 485 | Chlorodifluoromethane | | | G |
| 486 | Chlorodinitrobenzenes, Liquid | | T | |
| 487 | Chlorodinitrobenzenes, Solid | | T | |
| 488 | Chlorodiphenyl | | T | |
| 489 | Chloroepoxypropane | | T | |
| 490 | Chloroethanol | | T | |
| 491 | Chloroethyl Chloroformate | | T | |
| 492 | Chlorofenvinphos | | T | |
| 493 | Chlorofluorocarbons | | T | |
| 494 | Chloroform | | T | |
| 495 | Chloroformates, Toxic, Corrosive, N.O.S. | | T | |
| 496 | Chloroformyl Morploline | | T | |
| 497 | Chloroformyl,-4 Morpholine | | T | |
| 498 | Chloromethane | | T | |
| 499 | Chloromethyl Chloroformate | | T | |
| 500 | Chloromethyl Ether | | T | |
| 501 | Chloromethyl Ethyl Ether | F | | |
| 502 | Chloromethyl Methyl Ether | | T | |
| 503 | Chloromormates, Toxic, Corrosive, Flammable,N.O.S. | | T | |
| 504 | Chloronitroanilines | | T | |
| 505 | Chloronitrobenzene | E | T | |
| 506 | Chloronitrobenzenes | | T | |
| 507 | Chloronitrotoluenes, Liquid/Solid | | T | |
| 508 | Chloropentafluoroethane | | | G |
| 509 | Chlorophacinone | | T | |
| 510 | Chlorophenolates, Liquid or Phenolates, Liquid | | C | |
| 511 | Chlorophenolates, Solid or Phenolates, Solid | | C | |
| 512 | Chlorophenols, Liquid | | T | |
| 513 | Chlorophenyltrichloro-Silane | | C | |

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|-----|--|---|----------|---|---|
| 514 | Chloropicrin | | | | T |
| 515 | Chloropicrin Mixture, N.O.S. | | | | T |
| 516 | Chloroplatinic Acid, Solid | | | C | |
| 517 | Chloroprene | F | | | T |
| 518 | Chloroprene, Stabilized | F | | | |
| 519 | Chlorosilanes, Corrosive, Flammable, N.O.S. | | | C | |
| 520 | Chlorosilanes, Corrosive, N.O.S. | | | C | |
| 521 | Chlorosilanes, Flammable, Corrosive, N.O.S. | F | | | |
| 522 | Chlorosulphonic Acid | | | C | |
| 523 | Chlorothiophos | | | | T |
| 524 | Chlorotoluenes | F | | | |
| 525 | Chlorotoluidines | | | | T |
| 526 | Chlorotrifluoromethane | | | | G |
| 527 | Chlorotrifluoromethane and Trifluoromethane Azeotropic Mixture | | | | G |
| 528 | Chlorotrinitrobenzene | E | | | T |
| 529 | Chloroxuron | | | | T |
| 530 | Chlorophenols, Solid | | | | T |
| 531 | Chloroethyl Chloroformate | | | | T |
| 532 | Chromic Acid |  | \| \| O C | T | |
| 533 | Chromic Acid Solution | | | C | |
| 534 | Chromic Chloride | | O \| C | T | |
| 535 | Chromic Fluoride Solution | | | C | |
| 536 | Chromic Fluoride, Solid | | | C | |
| 537 | Chromium and Compounds | | | | T |
| 538 | Chromium Nitrate | | O | | |
| 539 | Chromium Oxychloride | | | C | |
| 540 | Chromium Powder | | | | T |
| 541 | Chromium Trioxide, Anhydrous | | O | | |
| 542 | Chromosulphuric Acid | | | C | |
| 543 | Clinical Waste, Unspecified, N.O.S. or (bio)Medical Waste, N.O.S. or Regulated Medical Waste, N.O.S. | | | | T |
| 544 | Chlorine | | | | T |
| 545 | Coal Tar Distillates, Flammable | F | | | |
| 546 | Cobalt & Compounds | | | | T |
| 547 | Cobalt (Powder) | | | | T |
| 548 | Cobalt Carbonyl | | | | T |

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|------|---|---|---|---|---|
| 549 | Cobalt Naphthenates, Powder | F | | | |
| 550 | Cobalt Nitrilmethylidyne Compound | | | | T |
| 551 | Cobalt Resinate, Precipitated | F | | | |
| 552 | Coloured Fire | E | | | |
| 553 | Compressed Gas, Flammable, N.O.S. | | | | G |
| 554 | Compressed Gas, Toxic, Flammable Corrosive, N.O.S. | F | C | T | |
| 555 | Copper Acetoarsenite | | | T | |
| 556 | Copper and Compounds | | | T | |
| 557 | Copper Arsenite | | | T | |
| 558. | Copper Based Pesticide, Liquid, Flammable, Toxic | F | | | |
| 559 | Copper Based Pesticide, Liquid, Toxic | | | T | |
| 560 | Copper Based Pesticide, Liquid, Toxic, Flammable | | | T | |
| 561 | Copper Based Pesticide, Solid, Toxic | | | T | |
| 562 | Copper Chlorate | | O | | |
| 563 | Copper Chloride | | | C | |
| 564 | Copper Cyanide Copperoxychloride | | | | T |
| 565 | Coroformyl,-4 Niorpholine | | | | T |
| 566 | Corrosive Liquid, Acidic, Inorganic, N.O.S. | | | C | |
| 567 | Corrosive Liquid, Acidic, Organic, N.O.S. | | | C | |
| 568 | Corrosive Liquid, Basic, Inorganic, N.O.S. | | | C | |
| 569 | Corrosive Liquid, Basic, Organic, N.O.S. | | | C | |
| 570 | Corrosive Liquid, Flammable, N.O.S. | | | C | |
| 571 | Corrosive Liquid, Oxidizing, N.O.S. | | | C | |
| 572 | Corrosive Liquid, Self-Heating, N.O.S. | | | C | |
| 573 | Corrosive Liquid, Toxic, N.O.S. | | | C | |
| 574 | Corrosive Liquid, Water-Reactive, N.O.S. | | | C | |
| 575 | Corrosive Solid, Acidic, Inorganic, N.O.S. | | | C | |
| 576 | Corrosive Solid, Acidic, Organic, N.O.S. | | | C | |
| 577 | Corrosive Solid, Basic, Inorganic, N.O.S. | | | C | |
| 578 | Corrosive Solid, Basic, Organic, N.O.S. | | | C | |
| 579 | Corrosive Solid, Oxidizing, N.O.S. | | | C | |
| 580 | Corrosive Solid, Toxic, N.O.S. | | | C | |
| 581 | Corrosive Solid, Water-Reactive, N.O.S. | | | C | |
| 582 | Coumarin Derivative Pesticide, Liquid, Flammable, Toxic | F | | | |
| 583 | Coumarin Derivative Pesticide, Liquid, Toxic | | | | T |
| 584 | Coumarin Derivative Pesticide, Liquid, Toxic, Flammable | | | | T |
| 585 | Coumarin Derivative Pesticide, Solid, Toxic | | | | T |

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|-----|------------------------------------|---|---|---|---|
| 586 | Coumatertraly | | | T | |
| 587 | Cresols | | | T | |
| 588 | Cresols, Liquid/Liquid | | | T | |
| 589 | Cresylic Acid | | | T | |
| 590 | Crimidine | | | T | |
| 591 | Crotonaldehyde | F | | T | |
| 592 | Crotonic Acid | | C | | |
| 593 | Cumene | | | T | |
| 594 | Cupriethylenediamine Solution | | C | | |
| 595 | Cyanide Solution, N.O.S. | | | T | |
| 596 | Cyanides, Inorganic, Solid, N.O.S. | | | T | |
| 597 | Cyanogen | | | | G |
| 598 | Cyanogen Bromide | | | T | |
| 599 | Cyanogen Chloride, Stabilized | | | T | G |
| 600 | Cyanogen Iodide | | | T | |
| 601 | Cyanothoate | | | T | |
| 602 | Cyanuric Chloride | | C | | |
| 603 | Cyanuric Fluoride | | | T | |
| 604 | Cyclobutane | | | | G |
| 605 | Cyclobutyl Chloroformate | | | T | |
| 606 | Cycloheptane | F | | | |
| 607 | Cycloheptene | F | | | |
| 608 | Cyclohetatriene | F | | | |
| 609 | Cyclohexane | F | | | |
| 610 | Cyclohexanone | F | | T | |
| 611 | Cyclohexene | F | | | |
| 612 | Cyclohexenyltrichlorosilane | | C | | |
| 613 | Cycloheximide | | | T | |
| 614 | Cyclohexyl Acetate | F | | | |
| 615 | Cyclohexyl Isocyanate | | | T | |
| 616 | Cyclohexyl Mercaptan | F | | | |
| 617 | Cydohexylamine | | C | | |
| 618 | Cyclohexyltrichlorosi lane | | C | | |
| 619 | Cyclooctadienes | F | | | |
| 620 | Cyclooctatetraene | F | | | |
| 621 | Cydclopentadicne | F | | T | |
| 622 | Cyclopentane | F | | | |

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|-----|--|-----|---|---|
| 623 | Cyclopentanol | F | | |
| 624 | Cyclopentanone | F | | |
| 625 | Cyclopentene | F | | |
| 626 | Cyclopropane | | | G |
| 627 | CyclotetramethyleneTetranitramine | E | | |
| 628 | Cyclotetramethylenetetranitramine(HMX,Octogen), Wetted | E | | |
| 629 | Cyclotrimethylenetrinitramine&CyclotetramethylenetetranitramineMixture Wetted or Cydotrimethyle | E | | |
| 630 | Cymens | F | | |
| 631 | DDT | | | T |
| 632 | Decaborane | | | T |
| 633 | Decaboraneo | F | | |
| 634 | Decabromodiphenyl Oxide | | | T |
| 635 | Decahydronaphthalene | F | | |
| 636 | Deglragrating Metal Salts of AromaticNitroderivatives, N.O.S. | E | | |
| 637 | Demeton | | | T |
| 638 | Demeton S-Methyl | | | T |
| 639 | Detonators | E | | |
| 640 | Deuterium, Compressed | | | G |
| 641 | Devices, Small, Hydrocarbon Gas Powered orHydrocarbon Gas Refills for small Devices | | | G |
| 642 | Dhsobutylarnine | F \| \| |  |  |
| 643 | Diacetone Alcohol | F | | |
| 644 | Dialifos | | | T |
| 645 | Diallyl Ether | F | | |
| 646 | Diallylamine | F | | |
| 647 | Diazodinitrophenol | E | | |
| 648 | Diazodinitrophenol, Wetted | E F | | |
| 649 | Diazomethane | | | T |
| 650 | Dibenzyl Peroxydicarbonate | | R | |
| 651 | Dibenzyl Peroxydicarbonate (CONC> =90%) | | | T |
| 652 | Dibenzylchlorosilane | | C | |
| 653 | Diborane | | | T |
| 654 | Diborane, Compressed | | | G |
| 655 | Dibromochloropropanes | | | T |
| 656 | Dibromodifluoromethane | | | T |
| 657 | Dibromomethane | | | T |

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|-----|--|---|---|---|
| 658 | Dibutyl Ethers | F | | |
| 659 | Dibutylaminoethanol | | | T |
| 660 | Dichloro Obenzene-O | | | T |
| 661 | Dichloroacetic Acid | | C | |
| 662 | Dichloroacetyl Chloride | | C | |
| 663 | Dichloroacetylene | | | T |
| 664 | Dichloroacetylene-O | | | T |
| 665 | Dichloroanilines, Liquid | | | T |
| 666 | Dichlorobenzalkonium Chloride | | | T |
| 667 | Dichlorobenzene-P | | | T |
| 668 | Dichlorodifluoromethane | | | G |
| 669 | Dichlorodifluoromethane and DifluroethaneAzeotropic Mixture | | | G |
| 670 | Dichlorodimethyl Ether, Symmetrical | | | T |
| 671 | Dichloroethane | | | T |
| 672 | Dichloroethyl Ether | | | T |
| 673 | Dichloroisocyanuric Acid, Dry orDichloroisocyanuric Acid Salts | O | | |
| 674 | Dichloroisopropyl Ether | | | T |
| 675 | Dichloromethane | | | T |
| 676 | Dichloromethyl Phenylsilane | | | T |
| 677 | Dichloropentanes | F | | |
| 678 | Dichlorophenol,-2,4 & -2.6 | | | T |
| 679 | Dichlorophenoxy Acetic Acid | | | T |
| 680 | Dichlorophenoxy Acetic Acid, -2,4 (2, 4-D) | | | T |
| 681 | Dichlorophenyl Isocyanates | | | T |
| 682 | Dichlorophenyl Trichlorosilane | | C | |
| 683 | Dichloropropane 2, 2 | | | T |
| 684 | Dichloropropane,-1, 2 | | | T |
| 685 | Dichloropropens | F | | |
| 686 | Dichlorosalicylic Acid-3,5 | | | T |
| 687 | Dichlorosalicylic Acid-3,5 | | | T |
| 688 | Dichlorosilane | | | G |
| 689 | Dichlorvos(DDVP) | | | T |
| 690 | Dicrotophos | | | T |
| 691 | Dicyclohexylamine | | C | T |
| 692 | Dicyclohexylammonium Nitrite | F | | |
| 693 | Dicyclopentadiene | F | | |
| 694 | Didymium Nitrate | O | | |

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|-----|--|---|---|---|
| 695 | Diepoxy Butane | | | T |
| 696 | Diepoxy Butane | | | T |
| 697 | Diethleneglycol Butyl Ether | | | T |
| 698 | Diethoxymethane | F | | |
| 699 | Diethye Peroxijdicarbonate | | R | |
| 700 | Diethyl Carbamazaine Citrate | | R | |
| 701 | Diethyl Carbamazine Citrate | | R | |
| 702 | Diethyl Carbonate | F | | |
| 703 | Diethyl Chlorophosphate | | | T |
| 704 | Diethyl Ethanolamine | | | T |
| 705 | Diethyl Ether (Ethyl Ether) | F | | |
| 706 | Diethyl Glycol Dinitrate | | | T |
| 707 | Diethyl Ketone | F | | |
| 708 | Diethyl Peroxydicarbonate | | | T |
| 709 | Diethyl Peroxydicarbonate (CONC=30%) | | | T |
| 710 | Diethyl Phenylene Diamine | | | T |
| 711 | Diethyl Sulphate | | | T |
| 712 | Diethyl Sulphide | F | | |
| 713 | Diethylamine | | R | |
| 714 | Diethylamine Ethanol | | | T |
| 715 | Diethylaminopropylamine | F | | |
| 716 | Diethylbenzene | F | | |
| 717 | Diethyldichlorosilance | | C | |
| 718 | Diethylene Glycol | | | T |
| 719 | Diethylene Glycol Butyl Ether | | | T |
| 720 | Diethylene Glycol Dinitrate | | | T |
| 721 | Diethylene Triamine | | | T |
| 722 | Diethyleneglycol Butyl Ether/DiethyleneglycolButyl Acetate | | | T |
| 723 | Diethyleneglycol, Dinitrate, Desensitized | E | C | |
| 724 | Diethylenetriamine | | C | |
| 725 | Diethylenetriamine(DETA) | | C | |
| 726 | Diethylthiophosphoryl Chloride | | C | |
| 727 | Difluoromethane(Refrigerant Gas R 32) | | | G |
| 728 | Difluorophosphoric Acid, Anhydrous | | C | |
| 729 | Digitoxin | | C | |
| 730 | Diglycidyl Ether | | | T |
| 731 | Dihlorofluoromethane | | | G |

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|-----|--|---|---|---|---|
| 732 | Dihydroperoxypropane(CONC>=30%) | | | | T |
| 733 | Dihydroperoxypropane,-2,2 | E | | | |
| 734 | Diisobutyl Ketone | F | | | |
| 735 | Diisobutyl Peroxide | | R | | |
| 736 | Di-isobutyl Peroxide | | | | T |
| 737 | Diisobutylene, Isomeric Compounds | F | | | |
| 738 | Di-isobutyryl Peroxide | | | | T |
| 739 | Diisooctyl Acid Phosphate | | | C | |
| 740 | Diisopropyl Ether | F | | | |
| 741 | Diisopropylamine | | R | | |
| 742 | Diketene, Stabilized | | | | T |
| 743 | Dimefox | F | | C | |
| 744 | Dimethcaebonyl Chloride | | | | T |
| 745 | Dimethylcarbonyl Chloride | | | | T |
| 746 | Dimethoate | | | | T |
| 747 | Dimethyl Carbonate | F | | | T |
| 748 | Dimethyl Dichlorosilane | | | | T |
| 749 | Dimethyl Disulphide | F | | | |
| 750 | Dimethyl Ether | | | | G |
| 751 | Dimethyl Hydrazine | | | C | |
| 752 | Dimethyl Nitrosoamine | | | C | |
| 753 | Dimethyl P Phenylene Diarnine | | | | T |
| 754 | Dimethyl Phosphoramidi Cyanidic Acid (Tabum) | | | | T |
| 755 | Dimethyl Phosphoramidocyanidic Acid | | | | T |
| 756 | Dimethyl Phosphorochloridothioate | | | | T |
| 757 | Dimethyl Phthalate | | | | T |
| 758 | Dimethyl Sufolane (DMS) | | | | T |
| 759 | Dimethyl Sulphate | | | | T |
| 760 | Dimethyl Sulphide | F | | | |
| 761 | Dimethyl Thiophosphoryl Chloride | | | | T |
| 762 | Dimethylamine | | | | T |
| 763 | Dimethylamine Aqueous Solution | F | | | |
| 764 | Dimethylamine, Anhydrous | | | | T |
| 765 | Dimethylaniline | | | | T |
| 766 | Dimethylcarbamoyl Chloride | | | C | T |
| 767 | Dimethylcarbomyl | | | | T |
| 768 | Dimethylcarbonyl Chloride | | | | T |

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|-----|--|---|---|---|---|
| 769 | Dimethylcyclohexanes | F | | | |
| 770 | Dimethylcyclohexylamine | | | C | |
| 771 | Dimethyldichlorosilane | F | | | |
| 772 | Dimethyldiethoxysilane | F | | | |
| 773 | Dimethyldioxanes | F | | | |
| 774 | Dimethyl Formamide | | | | T |
| 775 | Dimethylhydrazine, Symmetrical | | | | T |
| 776 | Dimethylhydrazine, Unsymmetrical | | | | T |
| 777 | Dimethylnitrosamine | | | | T |
| 778 | Dimethyl-N-Propylamine | F | | | |
| 779 | Dimetilan | | | | T |
| 780 | Di-n-Amylamine | F | | | |
| 781 | Di-n-Butylamine | | | C | |
| 782 | Dinitro O-Cresol | | | | T |
| 783 | Dinitrobenzene | | | | T |
| 784 | Dinitrobenzenes, Liquid | | | | T |
| 785 | Dinitrobenzenes, Solid | | | | T |
| 786 | Dinitrogen Tetroxide (Nitrogen Dioxide) | | | | G |
| 787 | Dinitro-O-Cresol | | | | T |
| 788 | Dinitrophenol | E | O | C | |
| 789 | Dinitrophenol Solution | | | | T |
| 790 | Dinitrophenol, Salts | E | | | T |
| 791 | Dinitrophenol, Wetted | F | | | |
| 792 | Dinitrophenolates, Wetted | F | | | |
| 793 | Dinitroresorcinol | E | | | |
| 794 | Dinitroresorcinol, Wetted | F | | | |
| 795 | Dinitrosobenzene | E | | | |
| 796 | Dinitrotoluene | | | | T |
| 797 | Dinitrotoluenes, Liquid/Solid | | | | T |
| 798 | Dinitrotoluenes, Molten | E | | | T |
| 799 | Di-N-Propyl Ether | F | | | |
| 800 | Di-n-Propyl Peroxidicarbonate | | | R | |
| 801 | Di-n-Propyl Peroxydicarbonate (CONC=80%) | | | R | |
| 802 | Dioxane | F | | | T |
| 803 | Dioxane-P | | | | T |
| 804 | Dioxathion | | | | T |
| 805 | Dioxine N | | | | T |

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|-----|---|---|---|---|
| 806 | Dioxolane | F | | |
| 807 | Dipentene | F | | |
| 808 | Diphacinone | | | T |
| 809 | Diphenyl Methane Di-Isocyanate (MDI) | | | T |
| 810 | Diphenylamine Chloroarsine | | | T |
| 811 | Diphenylchloroarsine, Liquid/Solid | | | T |
| 812 | Diphenyldichlorosilane | | C | |
| 813 | Diphenylmethyl Bromide | | C | |
| 814 | Diphosphoramidate Octamethyl | | | T |
| 815 | Dipicryl Sulphide | E | | |
| 816 | Dipicryl Sulphide, Wetted | F | | |
| 817 | Dipropyl Ketone | F | | |
| 818 | Dipropylamine | F | | |
| 819 | Dipropylene Glycol Butyl Ether | F | | |
| 820 | Dipropylene Glycolmethylether | F | | |
| 821 | Dischlorophenoxy Acetic Acid | F | | |
| 822 | Discrotophos | F | | |
| 823 | Di-sec-Butyl Peroxidicarbonate | | R | |
| 824 | Disec-Butyl Peroxydicarbonate (CONC>80%) | | R | T |
| 825 | Disinfectant, Liquid, Corrosive, N.O.S. | | C | |
| 826 | Disinfectant, Liquid, Toxic, N.O.S. | | | T |
| 827 | Disinfectant, Solid, Toxic, N.O.S. | | | T |
| 828 | Disobutyl Peroxide | | | T |
| 829 | Disodium Trioxosilicate | | C | |
| 830 | Disulfoton | | | T |
| 831 | Dithiazamine Iodide | | | T |
| 832 | Dithiobiurate | | | T |
| 833 | Dithydroperoxypropane,-2,2 | | | T |
| 834 | Divinyl Ether, Stabilized | | | T |
| 835 | Dodecyltrichlorosilane | | C | |
| 836 | Dye, Liquid, Corrosive, N.O.S. or Dye IntermediateLiquid, Corrosive, N.O.S. | | C | |
| 837 | Dye, Solid, Corrosive, N.O.S. or Dye Intermediate,Solid, Corrosive, N.O.S. | | C | |
| 838 | Dye, Solid, Toxic, N.O.S. or Dye Intermediate,Solid, Toxic, N.O.S. | | | T |
| 839 | Ear Gas Substance, Liquid/Solid, N.O.S. | | | T |
| 840 | Elevated Temperature Liquid, Flammable | F | | |

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|-----|--|---|---|--|-----|
| 841 | Epibromohydrin | | | | T |
| 842 | Epichlorohydrin | F | | | T |
| 843 | EPN | | | | T |
| 844 | Epoxypropane,1, 2 | | | | T |
| 845 | Ergocalciferol | | | | T. |
| 846 | Ergotamine Tartarate | | | | T |
| 847 | Esters, N.O.S. | F | | | |
| 848 | Ethane | | | | G |
| 849 | Ethane, Refrigerated Liquid | | | | G |
| 850 | Ethanesulfenyl Chloride, 2 Chloro | | | | G |
| 851 | Ethanol 1-2 Dichloracetate | | | | T |
| 852 | Ethanol or Ethanol Solution | F | | | |
| 853 | Ethanolamine or Ethanolamine Solution | | C | | |
| 854 | Ethers, N.O.S. | F | | | |
| 855 | Ethion | | | | T |
| 856 | Ethoprophos | | | | T |
| 857 | Ethyl2-Chloropropionate | F | | | |
| 858 | Ethyl Acetate | F | | | |
| 859 | Ethyl Acrylate, Stabilized | F | | | |
| 860 | Ethyl Alcohol | F | | | |
| 861 | Ethyl Amine | | | | T G |
| 862 | Ethyl Amyl.Ketone | F | | | |
| 863 | Ethyl Benzene | | | | T G |
| 864 | Ethyl Bis Amine | | | | T G |
| 865 | Ethyl Borate | F | | | |
| 866 | Ethyl Bromide | | | | T |
| 867 | Ethyl Bromoacetate | | | | T |
| 868 | Ethyl Butyl Ether | F | | | |
| 869 | Ethyl Butyrate | F | | | |
| 870 | Ethyl Carbamate | | | | T |
| 871 | Ethyl Chloride | | | | T G |
| 872 | Ethyl Chloroacetate | | | | T |
| 873 | Ethyl Chloroformate | | | | T |
| 874 | Ethyl Chlorothioformate | | C | | |
| 875 | Ethyl Crotonate | F | | | |
| 876 | Ethyl Ether | F | | | |
| 877 | Ethyl Fluoride (Refrigerant Gas R 161) | | | | G |

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|-----|---|---|---|---|---|
| 878 | Ethyl Isobutyrate | F | | | |
| 879 | Ethyl Isocyanate | F | | | |
| 880 | Ethyl Lactate | F | | | |
| 881 | Ethyl Mercaptan | F | | T | |
| 882 | Ethyl Mercuric Phosphate | | | T | |
| 883 | Ethyl Methacrylate | F | | | |
| 884 | Ethyl Methyl Ether | | | | G |
| 885 | Ethyl Methyl Ketone (Methyl Ethyl Ketone) | F | | | |
| 886 | Ethyl Nitrate | E | R | T | |
| 887 | Ethyl Orthoformate | F | | | |
| 888 | Ethyl Oxalate | | | T | |
| 889 | Ethyl Propionate | F | | | |
| 890 | Ethyl Propyl Ether | F | | | |
| 891 | Ethyl Thiocyanate | | | T | |
| 892 | Ethylacetylene, Stabilized | | | | G |
| 893 | Ethylamine | | | | G |
| 894 | Ethylamine, Aqueous Solution | F | | | |
| 895 | Ethylbenzene | F | | | |
| 896 | Ethyldichloroarsine | | | T | |
| 897 | Ethyldichlorosilane | F | | | |
| 898 | Ethylene | | | | G |
| 899 | Ethylene Chlorohydrin | | | T | |
| 900 | Ethylene Chlorohydrine | | | T | |
| 901 | Ethylene Di Chloride | | | T | |
| 902 | Ethylene Diamine | F | C | | |
| 903 | Ethylene Diamine Hydrochloride | | | T | |
| 904 | Ethylene Dibromide | | | T | |
| 905 | Ethylene Dibromide (1, 2-Dibromomethane) | | | T | |
| 906 | Ethylene Dichloride | F | | | |
| 907 | Ethylene Flourohydrine | | | T | |
| 908 | Ethylene Glycol | | | T | |
| 909 | Ethylene Glycol Dinitrate | E | | T | |
| 910 | Ethylene Glycol Monoethyl Ether | F | | | |
| 911 | Ethylene Glycol Monoethyl Ether Acetate | F | | | |
| 912 | Ethylene Glycol Monomethyl Ether | F | | | |
| 913 | Ethylene Glycol Diethyl Ether | F | | | |
| 914 | Ethylene Oxide | E | R | T | |

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|-----|---|---|---|------|---|---|
| 915 | Ethylene Oxide and Carbon Dioxide Mixture | | | | | G |
| 916 | Ethylene Oxide and Carbon Dioxide Mixture | | | | | G |
| 917 | Ethylene Oxide and ChlorotetrafluoroethaneMixture | | | | | G |
| 918 | Ethylene Oxide and DichlorodifluoromethaneMixture | | | | | G |
| 919 | Ethylene Oxide and Pentrafluoroethane Mixture | | | | | G |
| 920 | Ethylene Oxide and Propylene Oxide Mixture | F | | | | |
| 921 | Ethylene Oxide and Tetrafluoroethane Mixture | | | | | G |
| 922 | Ethylene Oxide or Tehylene Oxide with Nitrogen | | | | | G |
| 923 | Ethylene, Acetylene and Propylene Mixture,Refrigerated Liquid | | | | | G |
| 924 | Ethylene, Compressed | | | | | G |
| 925 | Ethylene, Refrigerated Liquid | | | | | G |
| 926 | Ethyleneamine | F | | | T | |
| 927 | Ethylenediamine | | | C | | |
| 928 | Ethylphenyldichlorosilane | | | C | | |
| 929 | Ethylthiocyanate | | | | T | |
| 930 | Ethyltrichlorosilane | F | | | | |
| 931 | Explosive, Blasting, Type E | E | | | | |
| 932 | Explosive, Blasting, Type A | E | O | | | |
| 933 | Explosive, Blasting, Type B | E | | C Ra | | |
| 934 | Ferric Arsenate | | | | T | |
| 935 | Ferric Arsenite | | | | T | |
| 936 | Ferric Chloride Solution | | | C | | |
| 937 | Ferric Chloride, Anhydrous | | | C | | |
| 938 | Ferric Nitrate | | O | | | |
| 939 | Ferrous Arsenate | | | | T | |
| 940 | Ferrous Metal Borings, Shavings, Turnings or Cuttings | F | | | | |
| 941 | Fire Extinguisher Charges | | R | | T | |
| 942 | Firelighters, Solid | F | | | | |
| 943 | Fireworks | E | | | | |
| 944 | Flammable Liquid, Corrosive, N.O.S. | F | | | | |
| 945 | Flammable Liquid, Corrosive, Organic, N.O.S. | | | | T | |
| 946 | Flammable Liquid, Toxic, Corrosive, N.O.S. | F | | | | |
| 947 | Flammable Solid, Corrosive, Inorganic, N.O.S. | F | | | | |
| 948 | Flammable Solid, Corrosive, Organic, N.O.S. | F | | | | |
| 949 | Flammable Solid, Inorganic,N.O.S. ' | F | | | | |
| 950 | Flammable Solid, Organic, N.O.S. | F | | | | |
| 951 | Flammable Solid, Oxidizing, N.O.S. | F | | | | |

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| 952 | Flammable Solid, Toxic, Inorganic, N.O.S. | F | | |
| 953 | Flammable Solid, Toxic, Organic, N.O.S. | F | | |
| 954 | Fluometil | | | T |
| 955 | Fluoride | | | T |
| 956 | Fluorine | | | T |
| 957 | Fluorine, Compressed | | | G |
| 958 | Fluoro 2-Hydroxy Butyric Acid Amid Salt Ester | | | T |
| 959 | Fluoro,-4, -2-Hydroxybutyric Acid & Salts Esters,Amides | | | T |
| 960 | Fluoroacetic Acid | | | T |
| 961 | Fluoroanilines | | | T |
| 962 | Fluorobenzene | F | | |
| 963 | Fluoroboric Acid | | C | |
| 964 | Fluorocobutyric Acid & Salts, Esters, Amides | | | T |
| 965 | Fluorophosphoric Acid, Anhydrous | | C | |
| 966 | Fluorosilic Acid | | C | |
| 967 | Fluorosilicates, N.O.S. | | | T |
| 968 | Fluorosulphonic Acid | | C | |
| 969 | Fluorotoluenes | F | | |
| 970 | Fluoroacetic Acid and Salts, Esters and Amides | | | T |
| 971 | Fluorobutyric Acid, -4 and Salts, Esters and Amides | | | T |
| 972 | Fluorocrotonic Acid, -4 and Salts, Esters and Amides | | | T |
| 973 | Fog-Signals | E | | |
| 974 | Formaldehyde | | | T |
| 975 | Formaldehyde Solution | | C | |
| 976 | Formaldehyde Solution, Flammable | F | | |
| 977 | Formate Hydrochloride | | | T |
| 978 | Fuel, Aviation, Turbine Engine | F | | |
| 979 | Fumaryl Chloride | | C | |
| 980 | Furaldehydes | | | T |
| 981 | Furan | F | | |
| 982 | Furfural | | | T |
| 983 | Furfuryl Alcohol | | | T |
| 984 | Furfurylamine | F | | |
| 985 | Fusel Oil | F | | |
| 986 | Fuses | E | | |
| 987 | Gallium | | C | |
| 988 | Gallium Trichloride | | | T |

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|------|---|---|---|---|
| 989 | Gas Oil or Diesel Fuel or Heating Oil Light | F | | |
| 990 | Gas, Refrigerated Liquid, Flammable, N.O.S. | | | G |
| 991 | Gas, Refrigerated Liquid, N.O.S. | | | G |
| 992 | Gas, Refrigerated Liquid, Oxidizing, N.O.S. | | | G |
| 993 | Glycerol alpha-Monochlorohydrin | | T | |
| 994 | Glycidaldehyde | F | | |
| 995 | Glyconitrile(Hydroxyacetonitrile) | | T | |
| 996 | Guanidine Nitrate | | O | |
| 997 | Guanyl Nitrosaminoguanylidene Hydrazine,Wetted | E | | |
| 998 | Guanyl Nitrosaminoguanyltetrazene (Tetrazene)Wetted | E | | |
| 999 | Guanyl,-1, -4 Nitrosaminogunyl-l-Tetrazene | E | | |
| 1000 | Gun-Cotton | E | | |
| 1001 | Gunpowder | E | | |
| 1002 | Hafnium Power, Dry | F | | |
| 1003 | Helium, Refrigerated Liquid | | | G |
| 1004 | Heptachlor | E | T | |
| 1005 | Heptafluoropropane(Refrigerant Gas R 227) | | | G |
| 1006 | Heptanes | F | | |
| 1007 | Hexa Methyl Terta-Oxyacyclononate (CONC 75%) | | T | |
| 1008 | Hexabutrodiphenylamine | E | | |
| 1009 | Hexachloro Cyclopentadiene | | T | |
| 1010 | Hexachloroacetone | | T | |
| 1011 | Hexachlorobenzene | | T | |
| 1012 | Hexachlorobutadiene | | T | |
| 1013 | Hexachlorodibenzo-P-Dioxin,-1,2,3,7,8,9,Hexamethylphosphoramide | | T | |
| 1014 | Hexachlorophene | | T | |
| 1015 | Hexadecyltrichlorosilane | | C | |
| 1016 | Hexadiene | F | | |
| 1017 | Hexaethyl Tetraphosphate | | T | |
| 1018 | Hexafluoropropylene | | | G |
| 1019 | Hexamethyl Phosphoroarmide | | T | |
| 1020 | Hexamethyl,-3,3,6,6,9,9,-1,2,4,5,-Tetroxacyclononane | | R | |
| 1021 | Hexamethylene Diisocyanate | | T | |
| 1022 | Hexamethylenediamine Solution | | C | |
| 1023 | Hexamethylenediamine, Solid | | C | |
| 1024 | Hexamethyleneimine | F | | |
| 1025 | Hexamethylenetetramine | F | | |

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|------|--|---|---|--|--------|
| 1026 | Hexamethylphosphoramide | | | | T |
| 1027 | Hexanes | F | | | |
| 1028 | Hexanitrostilbene | E | | | |
| 1029 | Hexanitrostilbene-2,2, 4, 6, 6 | E | | | |
| 1030 | Hexanols | F | | | |
| 1031 | Hexavalent Chromium | | | | T |
| 1032 | Hexene | F | | | |
| 1033 | Hexotonal | E | | | |
| 1034 | Hexyltrichlorosilane | | C | | |
| 1035 | Hydrazine | F | | | T |
| 1036 | Hydrazine Nitrate | E | | | |
| 1037 | Hydrazine, Anhydrous | | C | | |
| 1038 | Hydrazine, Aqueous Solution | | | | T |
| 1039 | Hydrazine, Hydrate or Hydrazine, AqueousSolution | | C | | |
| 1040 | Hydriodic Acid | | C | | |
| 1041 | Hydrobromic Acid | | C | | |
| 1042 | Hydrocarbon Gas Mixture, Compressed, N.O.S. | | | | G |
| 1043 | Hydrocarbon Gas Mixture, Liquefied, N.O.S. | | | | G |
| 1044 | Hydrocarbons, Liquid, N.O.S. | F | | | |
| 1045 | Hydrochloric Acid | | C | | |
| 1046 | Hydrochloric Acid (Gas) | | | | T |
| 1047 | Hydrocyanic Acid, Aqueous Solution (HydrogenCyanide, Aqueous Solution) | | | | T |
| 1048 | Hydrofluoric Acid | | C | | T |
| 1049 | Hydrofluoric Acid and Sulphuric Acid Mixture | | C | | |
| 1050 | Hydrogen | F | R | | |
| 1051 | Hydrogen Bromide, Anhydrous | | | | G |
| 1052 | Hydrogen and Methane Mixture, Compressed | | | | G |
| 1053 | Hydrogen Bromide | | | | T |
| 1054 | Hydrogen Bromide (Hydrobromic Acid) | | C | | T |
| 1055 | Hydrogen Chloride (Liquified Gas) | | C | | T |
| 1056 | Hydrogen Chloride, Anhydrous | | | | G |
| 1057 | Hydrogen Chloride, Refrigerated Liquid | | | | G |
| 1058 | Hydrogen Cyanide | | | | T |
| 1059 | Hydrogen Cyanide, Solution in Alcohol | | | | T |
| 1060 | Hydrogen Cyanide, Stabilized | | | | T - |

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|------|---|---|---|---|---|
| 1062 | Hydrogen Fluoride, Anhydrous | | C | | |
| 1063 | Hydrogen Iodide, Anhydrous | | | G | |
| 1064 | Hydrogen Peroxide | | O | | |
| 1065 | Hydrogen Peroxide and Peroxyacetic Acid Mixture | | O | | |
| 1066 | Hydrogen Peroxide, Adeous Solution | | O | | |
| 1067 | Hydrogen Peroxide, Aqueous Solution | | O | | |
| 1068 | Hydrogen Peroxide, Stabilized or Hydrogen Peroxide, Adeous Solution, Stabilized | | O | | |
| 1069 | Hydrogen Selenide | | | T | |
| 1070 | Hydrogen Selenide, Anhydrous | | | | G |
| 1071 | Hydrogen Sulphide | F | | T | G |
| 1072 | Hydrogen, Refrigerated Liquid | | | | G |
| 1073 | Hydrogen difluorides, N.O.S. | | C | | |
| 1074 | Hydroquinone | | | T | |
| 1075 | Hydroxylamine Sulphate | | C | | |
| 1076 | Hypochlorite Solution | | C | | |
| 1077 | Hypochlorites, Inorganic, N.O.S. | | O | | |
| 1078 | Indene | | | T | |
| 1079 | Infectious Substance, Affecting Animals | | | T | |
| 1080 | Infectious Substance, Affecting Humans | | | T | |
| 1081 | Insecticide Gas, Flammable, N.O.S. | | | | G |
| 1082 | Insecticide Gas, N.O.S. | | | | G |
| 1083 | Insecticide Gas, Toxic, Flammable, N.O.S. | | | | G |
| 1084 | Insecticide Gas, Toxic, N.O.S. | | | | G |
| 1085 | Iodine | | | T | |
| 1086 | Iodine Monochloride | | C | | |
| 1087 | Iodine Pentafluoride | | O | | |
| 1088 | Iodomethylpropanes | F | | | |
| 1089 | Iodopropanes | F | | | |
| 1090 | Iridium Tetrachloride | | | T | |
| 1091 | Iron Pentacarbonyl | | | T | |
| 1092 | Isobenzan | | | T | |
| 1093 | Isobutane | | | | G |
| 1094 | Isobutanol (Isobutyl Alcohol) | F | | | |
| 1095 | Isobutyl Chloride | F | | | |
| 1096 | Isobutyl Acetate | F | | | |
| 1097 | Isobutyl Acrylate, Stabilized | F | | | |

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|------|--|---|---|---|
| 1098 | Isobutyl Alcohol | | | T |
| 1099 | Isobutyl Formate | F | | |
| 1100 | Isobutyl Isobutyrate | F | | |
| 1101 | Isobutyl Isocyanate | F | | |
| 1102 | Isobutyl Methacrylate, Stabilized | F | | |
| 1103 | Isobutyl Propane | F | | |
| 1104 | Isobutylene | | | G |
| 1105 | Isobutyraldehyde(Isobutyl Aldehyde) | F | | |
| 1106 | Isobutyric Acid | F | | |
| 1107 | Isobutyro Nitrile | | | T |
| 1108 | Isobutyro Nitrile | F | | |
| 1109 | Isocyanates, Flammable, Toxic, N.O.S. or Isocyanate Solution, Flammable, Toxic, N.O.S. | F | | |
| 1110 | Isocyanates, Toxic, Flammable, N.O.S. or Isocyanate Solution, Toxic, Flammable, N.O.S. | | | T |
| 1111 | Isocyanates, Toxic, N.O.S. or Isocyanate Solution, Toxic, N.O.S. | | | T |
| 1112 | Isocyanatobenzotrifluorides | | | T |
| 1113 | Isocyanic Acid 3 4-Dichlorophenyl Ester | | | T |
| 1114 | Isodrin | | | T |
| 1115 | Isofluorophosphate | | | T |
| 1116 | Isoheptene | F | | |
| 1117 | Isohexene | F | | |
| 1118 | Isooctene | F | | |
| 1119 | Isopentenes | F | | |
| 1120 | Isophorone Diisocyanate | | | T |
| 1121 | Isophorone Disocyanate | | | T |
| 1122 | Isophoronediamine | | C | |
| 1123 | Isopropenyl Acetate | F | | |
| 1124 | Isopropenyl Benzene | F | | |
| 1125 | Isopropyl Formate | | | T |
| 1126 | Isopropyl 2-Chloropropionate | F | | |
| 1127 | Isopropyl Acetate | F | | |
| 1128 | Isopropyl Acid Phosphate | | C | |
| 1129 | Isopropyl Alcohol | F | | |
| 1130 | Isopropyl Butyrate | F | | |
| 1131 | Isopropyl Chloroacetate | F | | |
| 1132 | Isopropyl Chlorocarbonate | | C | |

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|------|--|---|---|---|
| 1133 | Isopropyl Chloroformate | | | T |
| 1134 | Isopropyl Ether | F | | |
| 1135 | Isopropyl Isobutyrate | F | | |
| 1136 | Isopropyl Isocyanate | F | | |
| 1137 | Isopropyl Methyl Pyrazolyl Dimethyl Carbonate | | | T |
| 1138 | Isopropyl Propionate | F | | |
| 1139 | Isopropylarnine | F | C | |
| 1140 | Isopropylbenzene | F | | |
| 1141 | Isoprpanle(Isopropyl Alcohol) | F | | |
| 1142 | Isosorbide Dinitrate Mixture | F | | |
| 1143 | Isosorbide-5-Mononitrate | F | | |
| 1144 | Juglone(5-I-Hydroxynaphthalene-1,4-Dione) | | | T |
| 1145 | Juglone(5-Hydroxy Napthalene-Dione) | | | T |
| 1146 | Kerosene | F | | |
| 1147 | Ketene | | | T |
| 1148 | Ketones, Liquid, N.O.S. | F | | |
| 1149 | Krypton, Refrigerated Liquid | | | G |
| 1150 | Lactonitrile | | | T |
| 1151 | Lead(Inorganic Fumes & Dusts) | | | T |
| 1152 | Lead 2,4, 6-Trinitroresorcinoxide (Lead Styphnate) | E | | |
| 1153 | Lead Acetate | | | T |
| 1154 | Lead Arsenates | | | T |
| 1155 | Lead Arsenite | | | T |
| 1156 | Lead Arsenites | | | T |
| 1157 | Lead Azide | | | T |
| 1158 | Lead Azide, Wetted | E | | |
| 1159 | Lead Compound, Soluble, N.O.S. | | | T |
| 1160 | Lead Cyanide | | | T |
| 1161 | Lead Dioxide | | O | |
| 1162 | Lead Nitrate | | O | |
| 1163 | Lead Perchlorate | | O | |
| 1164 | Lead Phosphite, Dibasic | F | | |
| 1165 | Lead Styphnate (Lead Trinitroresorcinate), Wetted | E | | |
| 1166 | Lead Sulphate | | C | |
| 1167 | Lindane | | | T |
| 1168 | Liquefied Gas, Flammable, N.O.S. | | | G |
| 1169 | Liquefied Gas, N.O.S. | | | G |

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|------|---|---|---|---|
| 1170 | Liquefied Gas, Oxidizing, N.O.S. | | | G |
| 1171 | Liquefied Gas, Toxic, Flammable, N.O.S. | | | G |
| 1172 | Liquefied Gas, Toxic, N.O.S. | | | G |
| 1173 | Liquefied Petroleum Gas | F | | |
| 1174 | Liquified Gas, Toxic, Corrosive, N.O.S. | | | G |
| 1175 | Liquefied Gas, Toxic, Flammable, Corrosive, N.O.S. | | | G |
| 1176 | Liquefied Gas, Toxic, Oxidizing, Corrosive, N.O.S. | | | G |
| 1177 | Liquefied Gas, Toxic, Oxidizing, N.O.S. | | | G |
| 1178 | Lithium | F | | |
| 1179 | Lithium Alkyls | F | | |
| 1180 | Lithium Aluminium Hydride | F | | |
| 1181 | Lithium Aluminium Hydride, Ethereal | F | | |
| 1182 | Lithium Borohydride | F | | |
| 1183 | Lithium Ferrosilicon | F | | |
| 1184 | Lithium Hydride | F | | |
| 1185 | Lithium Hydride, Fused Solid | F | | |
| 1186 | Lithium Hydroxide Monohydrate | | C | |
| 1187 | Lithium Hydroxide Solution | | C | |
| 1188 | Lithium Hypochlorite, Dry or Lithium Hypochlorite Mixture | | O | |
| 1189 | Lithium Nitrate | | O | |
| 1190 | Lithium Nitride | F | | |
| 1191 | Lithium Peroxide | | O | |
| 1192 | Lithium Silicon | F | | |
| 1193 | London Purple | | | T |
| 1194 | Magnesium Alkyls | F | | |
| 1195 | Magnesium Aluminium Phosphide | F | | |
| 1196 | Magnesium Arsenate | | | T |
| 1197 | Magnesium Bromate | | O | |
| 1198 | Magnesium Chlorate | | O | |
| 1199 | Magnesium Diamide | F | | |
| 1200 | Magnesium Diphenyl | F | | |
| 1201 | Magnesium Fluorosilicate | | | T |
| 1202 | Magnesium Granules, Coated | F | | |
| 1203 | Magnesium Hydride | F | | |
| 1204 | Magnesium Nitrate | | O | |
| 1205 | Magnesium or Magnesium Alloys | F | | |
| 1206 | Magnesium Perchlorate | | O | |

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|------|---|-------|---|---|
| 1207 | Magnesium Peroxide | | O | |
| 1208 | Magnesium Phosphide | F | | |
| 1209 | Magnesium Powder or Magnesium Alloys Powder | F | | |
| 1210 | Magnesium Powder or Ribbon | \| \| O \| |  |  |
| 1211 | Magnesium Silicide | F | | |
| 1212 | Maleic Anhydride | | C | |
| 1213 | Maleit Anhydride | | | T |
| 1214 | Malononitrile | | | T |
| 1215 | Maltel Anhydride | | | T |
| 1216 | Manganese and Compounds | | | T |
| 1217 | Maneb or Maneb Preparation | F | | |
| 1218 | Maneb, Stabilized or Maneb Preparation, Stabilized | F | | |
| 1219 | Manganese Nitrate | | O | |
| 1220 | Manganese Resinate | F | | |
| 1221 | Manganese Tricarbonyl Cyclopentadiene | | C | |
| 1222 | Mannitol Hexanitrate (Nitromannite) Wetted | E | | |
| 1223 | Matches, Fusee | F | | |
| 1224 | Matches, Safety | F | | |
| 1225 | Matches, Strike Anywhere | F | | |
| 1226 | Matches, Was 'Vesta' | F | | |
| 1227 | Mechlor Ethamine | | | T |
| 1228 | Medicine, Liquid, Flammable, Toxic, N.O.S. | F | | |
| 1229 | Medicine, Liquid, Toxic, N.O.S. | | | T |
| 1230 | Medicine, Solid, Toxic, N.O.S. | | | T |
| 1231 | Mephospholan | | | T |
| 1232 | Mercaptans, Liquid, Flammable, N.O.S. orMercaptan Mixture, Liquid, Flammable, N.O.S. | F | | |
| 1233 | Mercaptans, Liquid, Flammable, Toxic, N.O.S. orMercaptan Mixture | F | | |
| 1234 | Mercaptans, Liquid, Toxic, Flammable, N.O.S.or Mercaptan, Mixture, Liquid, Toxic,Flammable, N.O.S. | | | T |
| 1235 | Mercapto Benzothiazole | | | T |
| 1236 | Mercuric Acetate | | | T |
| 1237 | Mercuric Arsenate | | | T |
| 1238 | Mercuric Chloride | | | T |
| 1239 | Mercuric Nitrate | | | T |
| 1240 | Mercuric Oxide | | | T |
| 1241 | Mercuric Potassium Cyanide | | | T |

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|------|--|---|---|
| 1242 | Mercurous Nitrate | | T |
| 1243 | Mercury | C | |
| 1244 | Mercury Acetate | | T |
| 1245 | Mercury Alkyl | O | T |
| 1246 | Mercury Ammonium Chloride | | T |
| 1247 | Mercury Based Pesticide, Liquid, Flammable, Toxic | F | |
| 1248 | Mercury Based Pesticide, Liquid, Toxic | | T |
| 1249 | Mercury Based Pesticide, Liquid, Toxic, Flammable | | T |
| 1250 | Mercury Based Pesticide, Solid, Toxic | | T |
| 1251 | Mercury Benzoate- | | T |
| 1252 | Mercury Bromides | | T |
| 1253 | Mercury Compound, Liquid, N.O.S. | | T |
| 1254 | Mercury Compound, Solid, N.O.S. | | T |
| 1255 | Mercury Cyanide | | T |
| 1256 | Mercury Fulminate | E | |
| 1257 | Mercury Gluconate | | T |
| 1258 | Mercury Iodide | | T |
| 1259 | Mercury Methyl | | T |
| 1260 | Mercury Methyl Chloride | | T |
| 1261 | Mercury Nucleate | | T |
| 1262 | Mercury Oleate | | T |
| 1263 | Mercury Oxide | | T |
| 1264 | Mercury Oxycyanide, Desensitized | | T |
| 1265 | Mercury Potassium Iodide | | T |
| 1266 | Mercury Salicylate | | T |
| 1267 | Mercury Sulphate | | T |
| 1268 | Mercury Thiocyanate | | T |
| 1269 | Metal Alkyl Haldies, Water-Reactive, N.O.S.or Metal Aryl Haldies, Water-Reactive, N.O.S. | F | |
| 1270 | Metal Alkyl Hydrides, Water-Reactive, N.O.S.or Metal Aryl Hydrides, Water-Reactive, N.O.S. | F | |
| 1271 | Metal Alkyls, Water-Reactive, N.O.S. or MetalAryls, Water-Reactive, N.O.S. | F | |
| 1272 | Metal Carbonyls, N.O.S. | | T |
| 1273 | Metal Catalyst, Dry | F | |
| 1274 | Metal Catalyst, Wetted | F | |
| 1275 | Metal Hydrides, Flammable, N.O.S. | F | |
| 1276 | Metal Hydrides, Water-Reactive, N.O.S. | F | |

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|------|--|---|---|---|
| 1277 | Metal Powder, Flammable, N.O.S. | F | | |
| 1278 | Metal Powder, Self-Heating, N.O.S. | F | | |
| 1279 | Metal Salts of Organic Compounds, Flammable, N.O.S. | F | | |
| 1280 | Metaldehyde | F | | |
| 1281 | Metallic Substance, Water-Reactive, N.O.S. | F | | |
| 1282 | Methacrolein Diacetate | F | | |
| 1283 | Methacrylaldehyde, Stabilized | F | | |
| 1284 | Methacrylic Acid, Stabilized | | C | |
| 1285 | Methacrylic Anhydride | | C | |
| 1286 | Methacrylonitrile | | C | |
| 1287 | Methacrylonitrile, Stabilized | F | | |
| 1288 | Methacryloyl Chloride | | | T |
| 1289 | Methacryloyl Oxyethyl Isocyanate | | | T |
| 1290 | Methallyl Alcohol | F | | |
| 1291 | Methamidophos | | | T |
| 1292 | Methane | | | G |
| 1293 | Methane, Compressed or Natural Gas, Compressed | | | G |
| 1294 | Methane, Refrigerated Liquid or Natural Gas, Refrigerated Liquid | | | G |
| 1295 | Methanesulphonyl Chloride | | | T |
| 1296 | Methanesulphonyl Fluoride | | | T |
| 1297 | Methanidophos | | | T |
| 1298 | Methanol | F | | |
| 1299 | Methanthiol | | | T |
| 1300 | Methidathion | | | T |
| 1301 | Methiocarb | | | T |
| 1302 | Methonyl | | | T |
| 1303 | Methoxy Ethanol | | | T |
| 1304 | Methoxy Ethanol (2-Methyl Cellosolve) | | | T |
| 1305 | Methoxyethyl Mercuric Acetate | | | T |
| 1306 | Methoxymethyl Isocyanate | F | | |
| 1307 | Methyaryl Chloride | | | T |
| 1308 | Methyl 2-Chloroacrylate | | | T |
| 1309 | Methyl 2-Chloropropionate | F | | |
| 1310 | Methyl Acetate | F | | |
| 1311 | Methyl Acrylate | F | | T |
| 1312 | Methyl Acrylate, Stabilized | F | | |
| 1313 | Methyl Alcohol | F | | |

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|------|---|---|---|-----|
| 1314 | Methyl Amine | F | | |
| 1315 | Methyl Amylketone | | C | |
| 1316 | Methyl Bromide | | | G; |
| 1317 | Methyl Bromide (Bromomethane) | | | T |
| 1318 | Methyl Bromide and Ethylene Dibromide Mixture, Liquid | | | T |
| 1319 | Methyl Bromoacetate | F | | |
| 1320 | Methyl Butyrate | F | | |
| 1321 | Methyl Chloride | | | T G |
| 1322 | Methyl Chloride and Methylene Chloride Mixture | | | G |
| 1323 | Methyl Chloroacetate | | | T |
| 1324 | Methyl Chloroform | F | | T |
| 1325 | Methyl Chloroformate | | | T |
| 1326 | Methyl Chloromethyl Ether | | | T |
| 1327 | Methyl Cyclohexane | F | | |
| 1328 | Methyl Cyclohexene | F | | |
| 1329 | Methyl Dichloroacetate | | | T |
| 1330 | Methyl Disulphide | | | T |
| 1331 | Methyl Ethyl Ketone Peroxide | | R | |
| 1332 | Methyl Ethyl Ketone Peroxide (CONC. 60%) | | | T |
| 1333 | Methyl Formate | F | | |
| 1334 | Methyl Fluoride (Refrigerant Gas R 41) | | | G |
| 1335 | Methyl Hydrazine | | O | |
| 1336 | Methyl Iodide | | | T |
| 1337 | Methyl Isobutyl Carbinol | F | | |
| 1338 | Methyl Isobutyl Ketone | F | | |
| 1339 | Methyl Isobutyl Ketone Peroxide | | R | |
| 1340 | Methyl Isocyanate | F | | T |
| 1341 | Methyl Isopropenyl Ketone, Stabilized | F | | |
| 1342 | Methyl Isothiocyanate | | | T |
| 1343 | Methyl Isovalerate | F | | |
| 1344 | Methyl Magnesium Bromide in Ethyl Ether | F | | |
| 1345 | Methyl Mercuric Dicyanamide | | | T |
| 1346 | Methyl Mercaptan | | | G |
| 1347 | Methyl Methacrylate | F | | |
| 1348 | Methyl Methacrylate Monomer, Stabilized | F | | |
| 1349 | Methyl-N,2, 4, 6, 6-Tetranitroaniline | | | T |
| 1350 | Methyl Nitrite | | | G |

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|------|---------------------------------------|---|---|---|
| 1351 | Methyl Orthosilicate | | | T |
| 1352 | Methyl Parathion | | | T |
| 1353 | Methyl Phencapton | | | T |
| 1354 | Methyl Phoshonic Dichloride | | | T |
| 1355 | Methyl Phosphonic Dichloride | | | T |
| 1356 | Methyl Propionate | F | | |
| 1357 | Methyl Propyl Ether | F | | |
| 1358 | Methyl Propyl Ketone | F | | |
| 1359 | Methyl Styrene | F | | T |
| 1360 | Methyl tert-Butyl Ether | F | | |
| 1361 | Methyl Thiocyanate | | | T |
| 1362 | Methyl Trichloroacetate | | | T |
| 1363 | Methyl Trichlorosilane | | | T |
| 1364 | Methyl Vinyl Ketone | | | T |
| 1365 | Methyl Vinyl Ketone, Stabilized | | | T |
| 1366 | Metylally Chloride | F | | |
| 1367 | Methylamine, Anhydrous | | | G |
| 1368 | Methylamyl Acetate | F | | |
| 1369 | Methylchlorosilane | | | G |
| 1370 | Methylcyclohexane | F | | |
| 1371 | Methylcylohexano,S | F | | |
| 1372 | Methylcyclohexanone | F | | |
| 1373 | Methylcyclopentane | F | | |
| 1374 | Methyldichlorosilane | F | | |
| 1375 | Methylene Bis (2-Chloroaniline) | | | T |
| 1376 | Methylene Chloride | | | T |
| 1377 | Methylenebis,-4,4,(2, -Chloroaniline) | | | T |
| 1378 | Methylhydrazine | | | T |
| 1379 | Methylisobutyl Ketone | | | T |
| 1380 | Methylpentadiene | F | | |
| 1381 | Methylphenyldichlorosilane | | C | |
| 1382 | Methyl Tetrahydrofuran | F | | |
| 1383 | Methyltrichlorosilane | F | | |
| 1384 | Methyol Isodyanate | F | | T |
| 1385 | Mevinphos | | | T |
| 1386 | Molybdenum and Compounds | | | T |
| 1387 | Molybdenum Pentachloride | | C | |

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|------|--|-----|------------|---|---|
| 1388 | Molybdenum Powder | | | T | |
| 1389 | Monocrotophos | | | T | |
| 1390 | Morpholine | F | C | | |
| 1391 | Motor Fuel Anti-Knock Mixture | | | T | |
| 1392 | Motor Spirit or Gasoline or Petrol | F | | | |
| 1393 | Mustard Gas | | | T | |
| 1394 | N, N-Diethylethylenediamine |  | \| \| C | | |
| 1395 | N, N-Dimethylformamide | F | | | |
| 1396 | N, N-Dimethylaniline | | | T | |
| 1397 | N-Aminoethylpiperazine | | C | | |
| 1398 | Naphtha | E F | | | |
| 1399 | Naphtha Solvent | E F | | | |
| 1400 | Naphthalene, Crude or Naphthalene, Refined | F | | | |
| 1401 | Naphthalene, Molten | F | | | |
| 1402 | Naphthyl Amine | | | T | |
| 1403 | Naphthylurea | | | T | |
| 1404 | Naptha(Coal Tar) | F | | | |
| 1405 | Napthalene | | | T | |
| 1406 | Napthylamine,-2 | | | T | |
| 1407 | N-Butyl Acetate | | | T | |
| 1408 | N-Butyl Alcohol | F | | T | |
| 1409 | N-Butyl Chloroformate | | | T | |
| 1410 | N-Butyl Formate | F | | | |
| 1411 | N-Butyl Isocyanate | | | T | |
| 1412 | N-Butyl Methacrylate, Stabilized | F | | | |
| 1413 | N-Butylaniline | | | T | |
| 1414 | N-Butylimidazole | | | T | |
| 1415 | N-Decane | F | | | |
| 1416 | N-Diethylaniline | | | T | |
| 1417 | N-Dinitrobenzene | | | T | |
| 1418 | Neon, Refrigerated Liquid | | | | G |
| 1419 | N-Ethylaniline | | | T | |
| 1420 | N-Ethylbenzyltoluidines, Liquid/Solid | | | T | |
| 1421 | N-Ethyl-N-Benzylaniline | | | T | |
| 1422 | N-Ethyltoluidines | | | T | |

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|------|---|---|--------|-------------------------|
| 1423 | N-Heptaldehyde | F | | |
| 1424 | N-Heptene | F | | |
| 1425 | N-Hexane | F | | |
| 1426 | Nickel and Compounds | | | T |
| 1427 | Nickel Carbonyl/Nickel Tetracarbonyl | | | T |
| 1428 | Nickel Cyanide | | | T |
| 1429 | Nickel Nitrate | O | | |
| 1430 | Nickel Nitrite | O | | |
| 1431 | Nickel Powder | | | T |
| 1432 | Nickel Tetracarbonyl | F | | T |
| 1433 | Nicotine | | | T |
| 1434 | Nicotine Compound, Liquid, N.O.S. or Nicotine Preparation, Liquid, N.O.S. | | | T |
| 1435 | Nicotine Compound, Solid, N.O.S. or Nicotine Preparation, Solid, N.O.S. | | | T |
| 1436 | Nicotine Hydrochloride, Liquid or Nicotine Hydrochloride Solution | | | T |
| 1437 | Nicotine Hydrochloride, solid | | | T |
| 1438 | Nicotine Salicylate | | | T |
| 1439 | Nicotine Sulphate | | | T |
| 1440 | Nicotine Sulphate, Solid | | | T |
| 1441 | Nicotine Sulphate, Solution | | | T |
| 1442 | Nicotine Tartrate | | | T |
| 1443 | Niric Oxide, Compressed | | | G |
| 1444 | Nitrates, Inorganic, Aqueous Solution, N.O.S. | O | \|\| \|- | 1445 Nitrates N.O.S. |
| 1446 | Nitrating Acid Mixture | | C | |
| 1447 | Nitrating Acid Mixture, Spent | | C | |
| 1448 | Nitric Acid | | C | |
| 1449 | Nitric Acid and Dinitrogen Tetraoxide Mixture (Nitric Oxide and Nitrogen Dioxide Mixture) | | | G |
| 1450 | Nitric Acid, Red Fuming | | C | |
| 1451 | Nitric Oxide | | | T |
| 1452 | Nitriles, Flammable, Toxic, N.O.S. | F | | |
| 1453 | Nitriles, Toxic, Flammable, N.O.S. | | | T |
| 1454 | Nitriles, Toxic, N.O.S. | | | T |
| 1455 | Nitrites, Inorganic, Aqueous Solution, N.O.S. | O | | |
| 1456 | Nitrites, Inorganic, N.O.S. | O | | |
| 1457 | Nitro Urea | E | | |

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|------|---|---|---|---|---|
| 1458 | Nitroaniline-O | | | T | |
| 1459 | Nitroaniline-P | | | T | |
| 1460 | Nitroanilines | | | T | G |
| 1461 | Nitroanisoles, Liquid/Solid | | | T | |
| 1462 | Nitrobenzene | | | T | |
| 1463 | Nitrobenzenesulphonic Acid | | C | | |
| 1464 | Nitrobenzotrifluorides | | | T | |
| 1465 | Nitrobromobenzenes, Liquid | | | T | |
| 1466 | Nitrocellulose | E | | | |
| 1467 | Nitrocellulose Membrane Filters | F | | | |
| 1468 | Nitrocellulose Mixture with or without plasticizer, with or without pigment | F | | | |
| 1469 | Nitrocellulose Solution, Flammable | F | | | |
| 1470 | Nitrocellulose with Alcohol | F | | | |
| 1471 | Nitrocellulose with Water | F | | | |
| 1472 | Nitrocellulose(Dry) | E | | | |
| 1473 | Nitrochlorobenzene | | | T | |
| 1474 | Nitrochlorobenzene-P | | | T | |
| 1475 | Nitrocresols | | | T | |
| 1476 | Nitrocyclohexane | | | T | |
| 1477 | Nitroethane | F | | T | |
| 1478 | Nitrogen | | | | G |
| 1479 | Nitrogen Dioxide | | | T | |
| 1480 | Nitrogen Oxide | | | T | G |
| 1481 | Nitrogen Oxides | | | T | |
| 1482 | Nitrogen Trifluoride | | | T | G |
| 1483 | Nitrogen Trifluoride, Compressed | | | | G |
| 1484 | Nitrogen Trioxide | | | | G |
| 1485 | Nitrogen, Refrigerated Liquid | | | | G |
| 1486 | Nitroglycerin Mixture, Desensitized Solid, N.O.S. | F | | | |
| 1487 | Nitroglycerin Mixture, Desensitized Liquid, Flammable, N.O.S. | F | | | |
| 1488 | Nitroglycerin Mixture, Desensitized, Liquid, N.O.S. | F | | | |
| 1489 | Nitroglycerin Solution in Alcohol | E | | | |
| 1490 | Nitroglycerin Solution in Alcohol | F | | | |
| 1491 | Nitroglycerin | E | | T | |
| 1492 | Nitroguanidine(Picrite) | F | | | |
| 1493 | Nitroglycerin Solution in Alcohol | F | | | |

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|------|---|---|---|---|
| 1494 | Nitrohydrochloric Acid | | C | |
| 1495 | Nitromethane | F | | |
| 1496 | Nitronaphthalene | F | | |
| 1497 | Nitrophenol-P | | | T |
| 1498 | Nitrophenols | | | T |
| 1499 | Nitropropane-1 | F | | |
| 1500 | Nitropropane-2 | F | | |
| 1501 | Nitropropanes | F | | |
| 1502 | Nitroso Dimethyl Amine | | | T |
| 1503 | Nitrostarch | E | | |
| 1504 | Nitrostarch, Wetted | F | | |
| 1505 | Nitrosyl Chloride | | | G |
| 1506 | Nitrosylsulphuric Acid, Liquid/Solid | | C | |
| 1507 | Nitrotoluene | | | T |
| 1508 | Nitrotoluenes, Liquid | | | T |
| 1509 | Nitrotoluidines(Mono) | | | T |
| 1510 | Nitrous Oxide | | | G |
| 1511 | Nitrous Oxide, Refrigerated Liquid | | | G |
| 1512 | Nitroxylenes, Liquid | | | T |
| 1513 | N-Methylaniline | | | T |
| 1514 | N-Methylbutylamine | F | | |
| 1515 | N-Methyl-N,2, 4, 6-Tetranitroaniline | E | | |
| 1516 | Nonanes | F | | |
| 1517 | Nonyltrichlorosilane | | C | |
| 1518 | n-Propanol(Propyl Alcohol, Normal) | F | | |
| 1519 | n-Propyl Acetate | F | | |
| 1520 | n-Propyl Chloroformate | | | T |
| 1521 | n-Propyl Isocyanate | | | T |
| 1522 | n-Propylnitrate | F | | |
| 1523 | n-Propylbenzene | F | | |
| 1524 | Octadecyltrichlorosilane | | C | |
| 1525 | Octadiene | F | | |
| 1526 | Octafluorobut(Refrigerant Gas R218) | | | G |
| 1527 | Octafluorobut-2-Ene(Refrigerant Gas R 1318) | | | G |
| 1528 | Octafluorocyclobutane(Refrigerant Gas RC 318) | | | G |
| 1529 | Octanes | F | | |
| 1530 | Octyl Aldehydes | F | | |

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|------|---|---|---|---|
| 1531 | Octyltrichlorosilane | | C | |
| 1532 | o-Dichlorobenzene | | | T |
| 1533 | Oleum | | C | |
| 1534 | O-Nitro Toluene | E | | |
| 1535 | oo Diethyl S Ethyl Suph. Methyl Phos | | | T |
| 1536 | oo Diethyl S Ethylsulphinylmethylphosphorothioate | | | T |
| 1537 | OO Diethyl S Ethylthiomethyl Phosphorothioate | | | T |
| 1538 | OO-Diethyl S-IsopropylthiomethylPhosphorothioate | | | T |
| 1539 | Organic Peroxide Type B, Liquid | | O | |
| 1540 | Organic Peroxide Type B, Liquid, TemperatureControlled | | O | |
| 1541 | Organic Peroxide Type B, Solid | | O | |
| 1542 | Organic Peroxide Type B, Solid, TemperatureControlled | | O | |
| 1543 | Organic Peroxide Type C, Liquid | | O | |
| 1544 | Organic Peroxide Type C, Liquid, TemperatureControlled | | O | |
| 1545 | Organic Peroxide Type C, Solid | | O | |
| 1546 | Organic Peroxide Type C, Solid, TemperatureConrolled | | O | |
| 1547 | Organic Peroxide Type D, Liquid | | O | |
| 1548 | Organic Peroxide Type D, Liquid, TemperatureControlled | | O | |
| 1549 | Organic Peroxide Type D, Solid | | O | |
| 1550 | Organic Peroxide Type D, Solid, Temperature,Controlled | | O | |
| 1551 | Organic Peroxide Type E, Liquid | | O | |
| 1552 | Organic Peroxide Type E, Liquid, Temperature,Controlled | | O | |
| 1553 | Organic Peroxide Type E, Solid | | O | |
| 1554 | Organic Peroxide Type E, Solid, TemperatureControlled | | O | |
| 1555 | Organic Peroxide Type F, Liquid | | O | \| |
| 1556 | Organic Peroxide Type F, Liquid, TemperatureControlled | | O | |
| 1557 | Organic Peroxide Type F, Solid | | O | |
| 1558 | Organic Peroxide Type F, Solid, TemperatureControlled | | O | |
| 1559 | Organic Pigments, Self-Heating | F | | |
| 1560 | Organo Rhodium Complex | | | T |
| 1561 | Organoarsenic Compound, N.O.S. | | | T |
| 1562 | Organochlorine Pesticide, Liquid, Flammable, Toxic | F | | |
| 1563 | Organochlorine Pesticide, Liquid, Toxic | | | T |
| 1564 | Organochlorine Pesticide, Liquid, Toxic, Flammable | | | T |
| 1565 | Organochlorine Pesticide, Solid, Toxic | | | T |
| 1566 | Organometallic Compound or CompoundSolution or Compound | F | | |

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| Dispersion, Water-Reactive, Flammable, N.O.S. | | | | |
| 1567 | Organometallic Compound, Toxic, N.O.S. | | | T |
| 1568 | Organophosphorus Compound, Toxic, Flammable, N.O.S. | | | T |
| 1569 | Organophosphorus Compound, Toxic, N.O.S. | | | T |
| 1570 | Organophosphorus pesticide Liquid, Flammable, Toxic | F | | |
| 1571 | Organophosphorus Pesticide Solid, Toxic | | | T |
| 1572 | Organophosphorus Pesticide Liquid, Toxic | | | T |
| 1573 | Organophosphorus Pesticide, Liquid, Toxic, Flammable | | | T |
| 1574 | Organotin Compound Liquid, N.O.S. | | | T |
| 1575 | Organotin Compound, Solid, N.O.S. | | | T |
| 1576 | Organotin Pesticide, Liquid, Flammable, Toxic | F | | |
| 1577 | Organotin Pesticide, Liquid, Toxic | | | T |
| 1578 | Organotin Pesticide, Liquid, Toxic, Flammable | | | T |
| 1579 | Organotin Pesticide, Solid, Toxic | | | T |
| 1580 | Orotic Acid | | | T |
| 1581 | Osmium Tetroxide | | | T |
| 1582 | O-Toludine | | | T |
| 1583 | Oxetane, 3, 3-Bis (Chloromethyl) | | | T |
| 1584 | Oxidiphenoxarsine | | | T |
| 1585 | Oxidizing Liquid, Corrosive, N.O.S. | O | | |
| 1586 | Oxidizing Liquid, N.O.S. | O | | |
| 1587 | Oxidizing Liquid, Toxic, N.O.S._ | O | | |
| 1588 | Oxidizing Solid, Corrosive, N.O.S. | O | | |
| 1589 | Oxidizing Solid, Flammable, N.O.S. | O | | |
| 1590 | Oxidizing Solid, N.O.S. | O | | |
| 1591 | Oxidizing Solid, Self Heating, N.O.S. | O | | |
| 1592 | Oxidizing Solid, Toxic, N.O.S. | O | | |
| 1593 | Oxidizing Solid, Water Reactive, N.O.S. | O | | |
| 1594 | Oxdisulfoton | | | T |
| 1595 | Oxygen (Liquid) | O | | G |
| 1596 | Oxygen Difluoride | | | T |
| 1597 | Oxygen Difluoride, Compressed | | | G |
| 1598 | Oxygen Generator, Chemical | O | | |
| 1599 | Oxygen (Liquid) | O | | |
| 1600 | O-Xylene | F | C | |
| 1601 | Ozone | O R | | T |
| 1602 | Paint or Paint Related Material | | C | |

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|------|--|---|-----|---|
| 1603 | Paraffin | F | | |
| 1604 | Paraformaldehyde | F | | T |
| 1605 | Paraoxon(Diethyl 4 Nitrophenyl Phosphate) | | | T |
| 1606 | Paraquate Methosulphate | | | T |
| 1607 | Parathion | | | T |
| 1608 | Parathion Methyl | | | T |
| 1609 | Paris Green | | | T |
| 1610 | Paroxon(Diethyl 4-Nitrophenyl Phosphate) | | | T |
| 1611 | Pensulfothion | | | T |
| 1612 | Penta Borgne | F | | T |
| 1613 | Penta Chloro Ethane | | | T |
| 1614 | Penta Chloro Phenol | | | T |
| 1615 | Pentaborane | | | T |
| 1616 | Pentabromodiphenyl Oxide | | | T |
| 1617 | Pentabromophenol | | | T |
| 1618 | Pentachloro Naphthalene | | | T |
| 1619 | Pentachloro Napthalene | | | T |
| 1620 | Pentachloroethane | | | T |
| 1621 | Pentachlorophenol | | | T |
| 1622 | Pentadecyl-Amine | | C | |
| 1623 | Pentaerythaiotol Tetranitrate | | | T |
| 1624 | Pentaerythrite Tetranitrate (PentaerythritolTetranitrate; Petn) Wetted | E | | |
| 1625 | Pentaerythrite Tetranitrate Mixture, Desensitized,Solid, N.O.S. | F | | |
| 1626 | Pentaerythritol Tetranitrate | E | | T |
| 1627 | Pentafluoroethane(Refrigerant Gas R 125) | | | G |
| 1628 | Pentaghlorophenol | | | T |
| 1629 | Pentamethylheptane | F | | |
| 1630 | Pentane | | | T |
| 1631 | Pentane-2,4-Dion | F | | |
| 1632 | Pentanes, liquid | F | | |
| 1633 | Pentanone,2,4-Methyl | | | T |
| 1634 | Peracetic Acid | | R C | |
| 1635 | Peradetic Acid | | | T |
| 1636 | Perchlorates, Inorganic, Aqueous Solution, N.O.S. | O | | |
| 1637 | Perchlorates, Inorganic, N.O.S. | O | | |
| 1638 | Perchloric Acid | | C | |

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|------|---|---|---|---|
| 1639 | Perchloroethylene | | | T |
| 1640 | Perchloromethyl Mercaptan | | | T |
| 1641 | Perchloryl Fluoride | | | G |
| 1642 | Percussion Caps | E | | |
| 1643 | Perfluoro(Ethyl Vinyl Ether) | | | G |
| 1644 | Perfluoro(Methyl Vinyl Ether) | | | G |
| 1645 | Permanganates, Inorganic, Aqueous Solution, N.O.S. | O | | |
| 1646 | Permanganates, Inorganic, N.O.S. | O | | |
| 1647 | Peroxides, Inorganic, N.O.S. | O | | |
| 1648 | Peroxyacetic Acid | | | T |
| 1649 | Persulphates, Inorganic, Aqueous Solution, N.O.S. | O | | |
| 1650 | Persulphates, Inorganic, N.O.S. | O | | |
| 1651 | Pesticide, Liquid, Toxic, Flammable, N.O.S. | | | T |
| 1652 | Pesticide, Liquid, Toxic, Flammable, N.O.S. | F | | |
| 1653 | Pesticide, Liquid, Toxic, N.O.S. | | | T |
| 1654 | Pesticide, Solid, Toxic, N.O.S. | | | T |
| 1655 | Petanone,2, -4, -Methyl | F | | T |
| 1656 | Petroleum Crude Oil | F | | |
| 1657 | Petroleum Gases, Liquefied | | | G |
| 1658 | Phenacyl Bromide | | | T |
| 1659 | Phenetidines | | | T |
| 1660 | Phenol | | | T |
| 1661 | Phenol Solution | | | T |
| 1662 | Phenol, Molten | | | T |
| 1663 | Phenol, Solid | | | T |
| 1664 | Phenol,2, 2-Thiobis (4 Chloro 6 Methyl Phenol) | | | T |
| 1665 | Phenol,2, 2-Thiobis (4, 6-Dichloro) | | | T |
| 1666 | Phenol,3-(1-Metnol Ethyl)-Methyl carbonate | | | T |
| 1667 | Phenolsulphonic Acid, Liquid | | C | |
| 1668 | Phenoxyacetic Acid Deriavative Pesticide, Liquid,Flammable, Toxic | F | | |
| 1669 | Phenoxyacetic Acid Deriavative Pesticide,Liquid, Toxic | | | T |
| 1670 | Phenoxyacetic Acid Deriavative Pesticide,Liquid, Toxic, Flammable | | | T |
| 1671 | Phenoxyacetic Acid Deriavative Pesticide,Solid, Toxic | | | T |
| 1672 | Phenyl Chloroformate | | | T |
| 1673 | Phenyl Glycidial Ether | F | | T |
| 1674 | Phenyl Hydrazine Hydrochloride | | | T |
| 1675 | Phenyl Isocyanate | | | T |

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|------|---|---|---|---|---|
| 1676 | Phenyl Mercury Acetate | | | T | |
| 1677 | Phenyl Silatrane | | | T | |
| 1678 | Phenyl Thiourea | | | T | |
| 1679 | Phenylacetonitrile, Liquid | | | T | |
| 1680 | Phenylacetyl Chloride | | C | | |
| 1681 | Phenylcarbylamine Chloride | | | T | |
| 1682 | Phenylene P-Diamine | | | T | |
| 1683 | Phenylenediamines | | | T | |
| 1684 | Phenylhydrazine | | | T | |
| 1685 | Phenylmercuric Acetate | | | T | |
| 1686 | Phenylmercuric Compound, N.O.S. | | | T | |
| 1687 | Phenylmercuric Hydroxide | | | T | |
| 1688 | Phenylmercuric Nitrate | | | T | |
| 1689 | Phenylmercury Acetate | | | T | |
| 1690 | Phenylphosphorus Dichloride | | C | | |
| 1691 | Phenylphosphorus Thiodichloride | | C | | |
| 1692 | Phenyl Trichlorosilane | | C | | |
| 1693 | Phorate | | | T | |
| 1694 | Phorothioc Acid, oo Dimethyl S-(2-Methyl) | | | T | |
| 1695 | Phosacetim | | | T | |
| 1696 | Phosalone | | | T | |
| 1697 | Phosaoetin | | | T | |
| 1698 | Phosazetin | | | T | |
| 1699 | Phosfolan | | | T | |
| 1700 | Phosgene | | | | G |
| 1701 | Phosgene(Carbonyl Chloride) | F | | T | |
| 1702 | Phosmet | | | T | |
| 1703 | Phosphamidon | | | T | |
| 1704 | Phosphine |  | \| \| | G | |
| 1705 | Phosphine(Hydrogen Phosphide) | F \| |  | T | |
| 1706 | Phosphoric Acid | O | C | | |
| 1707 | Phosphoric Acid & Esters | | C | T | |
| 1708 | Phosphoric Acid Dimethyl (4-Methyl Thio) Phenyl | | | T | |
| 1709 | Phosphoric Acid, Bromoethyl Bromo (2,2-Dimethylpropyl) Bromoethyl Ester | | | T | |
| 1710 | Phosphoric Acid, Liquid/Solid | | C | | |
| 1711 | Phosphorothioc Ethyl-Methyl Ester | | C | | |

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|------|---|---|------|---|--------|
| 1712 | Phosphorothioic Acid, Methyl-Ethyl Ester | | | C | |
| 1713 | Phosphorothioic Acid Methyl (Ester) | | | C | |
| 1714 | Phosphorous | F | | | |
| 1715 | Phosphorous Pentaoxide | F | O | | |
| 1716 | Phosphorous and Compounds | F | | | T |
| 1717 | Phosphorous Oxychloride | | | | T |
| 1718 | Phosphorous Penta Chloride | | | | T \|- |
| 1720 | Phosphorus Acid | | | C | |
| 1721 | Phosphorus Heptasulphide | F | | | |
| 1722 | Phosphorus Oxybromide | | | C | |
| 1723 | Phosphorus Oxybromide, Molten | | | C | |
| 1724 | Phosphorus Oxychloride | | | C | |
| 1725 | Phosphorus Pentabromide | | | C | |
| 1726 | Phosphorus Pentachloride | | | C | |
| 1727 | Phosphorus Pentafluoride, Compressed | | | | G |
| 1728 | Phosphorus Pentasulphide | F | | | |
| 1729 | Phosphorus Pentaoxide | | | C | |
| 1730 | Phosphorus Sesquisulphide | F | | | |
| 1731 | Phosphorus Tribromide | | | C | |
| 1732 | Phosphorus Trichloride | | | | T |
| 1733 | Phosphorus Trioxide | | | C | |
| 1734 | Phosphorus Trisulphide | F | | | |
| 1735 | Phosphorus, Amosphous | F | | | |
| 1736 | Phosphorus, White or Yellow, Dry or UnderWater or in Solution | F | | | |
| 1737 | Phosphorus, White, Molten | F | | | |
| 1738 | Phthalic Anhydride | | | C | T |
| 1739 | Phylloquinone | | | | T |
| 1740 | Physostigine | | | | T |
| 1741 | Physostigine Salicylate (1:1) |  | \|\| \| | T | |
| 1742 | Picolines | F | | | |
| 1743 | Picric Acid (2, 4, 6-Trinitrophenol) | E | | | T |
| 1744 | Pine Oil | F | | | |
| 1745 | Piperazine | | | C | |
| 1746 | Piperdine | | | | T |
| 1747 | Piperidine | | | C | |

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|------|---|---|---|---|
| 1748 | Plastics, Nitrocellulose-Based, Self-Heating, N.O.S. | F | | |
| 1749 | Platinous Chloride | | | T |
| 1750 | Platinum Tetrachloride | | | T |
| 1751 | P-Nitrophenol | | | T |
| 1752 | p-Nitrosodimethylaniline | F | | |
| 1753 | Polybrominated Biphenyls | | | T |
| 1754 | Polychlorinated Biphenyls | | | T |
| 1755 | Polyester Resin Kit | F | | |
| 1756 | Polyhalogenated Biphenyls, Liquid or Polyhalogenated Terphenyls, Liquid | | | T |
| 1757 | Polymeric Beads, Expandable | F | | |
| 1758 | Potassium | F | | |
| 1759 | Potassium Nitride | | C | |
| 1760 | Potassium Peroxide | F | C | |
| 1761 | Potassium Silver Cyanide | | | T |
| 1762 | Potassium Arsenate | | | T |
| 1763 | Potassium Arsenite | | | T |
| 1764 | Potassium Bromate | O | | |
| 1765 | Potassium Chlorate | O | | |
| 1766 | Potassium Chlorate, Aqueous Solution | O | | |
| 1767 | Potassium Cuprocyanide | | | T |
| 1768 | Potassium Cyanide | | | T |
| 1769 | Potassium Dithionite (Potassium Hydrosulphite) | F | | |
| 1770 | Potassium Fluoride | | | T |
| 1771 | Potassium Fluoroacetate | | | T |
| 1772 | Potassium Fluorosilicate | | | T |
| 1773 | Potassium Hydrogen Sulphate | | C | |
| 1774 | Potassium Hydrogendifluoride | | C | |
| 1775 | Potassium Hydroxide | | C | |
| 1776 | Potassium Hydroxide, Solid | | C | |
| 1777 | Potassium Hydroxide, Solution | | C | |
| 1778 | Potassium Metavanadate | | | T |
| 1779 | Potassium Monoxide | | C | |
| 1780 | Potassium Nitrate | O | | |
| 1781 | Potassium Nitrate and Sodium Nitrite Mixture | O | | |
| 1782 | Potassium Nitride | O | C | |
| 1783 | Potassium Nitrite | O | | |

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|------|---|---|---|---|
| 1784 | Potassium Perchlorate | O | | |
| 1785 | PotassiumPermanganate | O | | |
| 1786 | Potassium Peroxide | O | | |
| 1787 | Potassium Persulphate | O | | |
| 1788 | Potassium Phosphide | F | | |
| 1789 | Potassium Sulphide, Anhydrous or PotassiumSulphide | F | | |
| 1790 | Potassium Sulphide, Hydrated | | C | |
| 1791 | Potassium Superoxide | O | | |
| 1792 | Potassium Arsenite | | | T |
| 1793 | Powdered Metals and Mixtures | | | T |
| 1794 | Promurit(1-(3,4-Dichlorophenyl)-3Triazenethiocarboxamide) | | | T |
| 1795 | Propadiene, Stabilized | | | G |
| 1796 | Propane | | | G |
| 1797 | Propanesultone-1,3 | | | T |
| 1798 | Propanethiols | F | | |
| 1799 | Propargyl Alcohol | | | T |
| 1800 | Propargyl Bromide | | | T |
| 1801 | Propen-1,-2-Chloro-1, 3, Diol-Diacetate | | | T |
| 1802 | Propen-2-Chloro 1, 3-Diou Diacetate | | | T |
| 1803 | Prophyl Alcohol | F | | |
| 1804 | Prophylene Oxide | | R | |
| 1805 | Propiolactone Beta | | R | |
| 1806 | Propionic Acid | | C | |
| 1807 | Propionic Anhydride | | C | |
| 1808 | Propionitrile | F | | T |
| 1809 | Propionitrile,3-Chloro | | | T |
| 1810 | Propionyl Chloride | F | | |
| 1811 | Propiophenone,4-Amino | | | T |
| 1812 | Propyl Acetate-N | F | | |
| 1813 | Propyl Chloride | F | | |
| 1814 | Propyl Chloroformate | | | T |
| 1815 | Propyl Formates | F | | |
| 1816 | Propylamine | F | | |
| 1817 | Propylene | | | G |
| 1818 | Propylene Chlorohydrin | | | T |
| 1819 | Propylene Dichloride | | | T |
| 1820 | Propylene Glycol, Allyether | | | T |

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|------|--|---|---|----|---|
| 1821 | Propylene Oxide | F | | | |
| 1822 | Propylene Tetramer | F | | | |
| 1823 | Propyleneamine | | | T | |
| 1824 | Propyleneimine, Stabilized | F | | | |
| 1825 | Propyltrichlorosilane | | C | | |
| 1826 | Potassium Borohydride | F | | | |
| 1827 | Puinone | | | T | |
| 1828 | Pyrazoxon | | | T | |
| 1829 | Pyrene | | | T | |
| 1830 | Pyrethroid Pesticide, Liquid, Flammable, Toxic | F | | | |
| 1831 | Pyrethroid Pesticide, Liquid, Toxic | | | T | |
| 1832 | Pyrethroid Pesticide, Liquid, Toxic, Flammable | | | T | |
| 1833 | Pyrethroid Pesticide, Solid, Toxic | | | T | |
| 1834 | Pyridine | F | | F | |
| 1835 | Pyridine,2-Methyl-3-Vinyl | | | T | |
| 1836 | Pyridine,4-Nitro,1-Oxide | | O | T | \|- |
| 1838 | Pyrophoric Liquid, Inorganic, N.O.S. | F | | | |
| 1839 | Pyrophoric Liquid, Organic, N.O.S. | F | | | |
| 1840 | Pyrophoric Metal, N.O.S. or Pyrophoric Alloy, N.O.S. | F | | | |
| 1841 | Pyrophoric Organometallic Compound, Water-Reactive, N.O.S., Liquid | F | | | |
| 1842 | Pyrophoric Solid, Inorganic, N.O.S. | F | | | |
| 1843 | Pyrophoric Solid, Organic, N.O.S. | F | | | |
| 1844 | Pyrosulphuryl Chloride | | C | | |
| 1845 | Pyrrolidine | | | T | |
| 1846 | Quinaliphos | | | T | |
| 1847 | Quinoline | | | T | |
| 1848 | Quinone | | | T | |
| 1849 | Radioactive Material, Uranium Hexafluoride | | | Ra | |
| 1850 | Radioactive Material, Uranium Hexafluoride, Fissile | | | Ra | |
| 1851 | Rare Gases and Nitrogen Mixture, Compressed | | | | G |
| 1852 | Rare Gases and Oxygen Mixture, Compressed | | | | G |
| 1853 | Rare gases Mixture, Compressed | | | | G |
| 1854 | Receptacles, Small, Containing Gas(Gas Cartridges) | | | | G |
| 1855 | Refrigerant Gas R 404A | | | | G |
| 1856 | Refrigerant Gas R 407A | | | | G |
| 1857 | Refrigerant Gas R 407B | | | | G |

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|------|---|---|---|---|---|
| 1858 | Refrigerant Gas R 407C | | | | G |
| 1859 | Refrigerating Machines | | | | G |
| 1860 | Resin Solution | F | | | |
| 1861 | Resorcinol | | | T | |
| 1862 | Rhodium Trichloride | | | T | |
| 1863 | Rockets | E | | | |
| 1864 | Rubidium Hydroxide | | C | | |
| 1865 | Rubidium Hydroxide Solution | | C | | |
| 1866 | Salcomine | | | T | |
| 1867 | Sarin | | | T | |
| 1868 | Seed Cake | F | | | |
| 1869 | Selenates or Selenites | | | T | |
| 1870 | Selenic Acid | | C | | |
| 1871 | Selenious Acid | | | T | |
| 1872 | Selenium Compound, N.O.S. | | | T | |
| 1873 | Selenium Disulphide | | | T | |
| 1874 | Selenium Hexafluoride | | | T | G |
| 1875 | Selenium Oxychloride | | C | | |
| 1876 | Self-Heating Liquid, Corrosive Inorganic, N.O.S. | F | | | |
| 1877 | Self-Heating Liquid, Corrosive, Organic, N.O.S. | F | | | |
| 1878 | Self-Heating Liquid, Inorganic, N.O.S. | F | | | |
| 1879 | Self-Heating Liquid, Organic, N.O.S. | F | | | |
| 1880 | Self-Heating Liquid, Toxic, Inorganic, N.O.S. | F | | | |
| 1881 | Self-Heating Liquid, Toxic, Organic, N.O.S. | F | | | |
| 1882 | Self-Heating Solid, Corrosive, Organic, N.O.S. | F | | | |
| 1883 | Self-Heating Solid, Corrosive, Inorganic, N.O.S. | F | | | |
| 1884 | Self-Heating Solid, Inorgarc, N.O.S. | F | | | |
| 1885 | Self-Heating Solid, Organic, N.O.S. | F | | | |
| 1886 | Self-Heating Solid, Oxidizing, N.O.S. | F | | | |
| 1887 | Self-Heating Solid, Toxic, Inorganic, N.O.S. | F | | | |
| 1888 | Self-Heating Solid, Toxic, Organic, N.O.S. | F | | | |
| 1889 | Self-Reactive Liquid Type B | F | | | |
| 1890 | Self-Reactive Liquid Type B, TemperatureControlled | F | | | |
| 1891 | Self-Reactive Liquid Type C | F | | | |
| 1892 | Self-Reactive Liquid. Type C, TemperatureControlled | F | | | |
| 1893 | Self-Reactive Liquid Type D | F | | | |
| 1894 | Self-Reactive Liquid Type D, TemperatureControlled | F | | | |

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|-------|--|---|---|--------|
| 1895 | Self-Reactive Liquid Type E | F | | |
| 1896 | Self-Reactive Liquid Type E, TemperatureControlled | F | | |
| 1897 | Self-Reactive Liquid Type F | F | | |
| 1898 | Self-Reactive Liquid Type F, TemperatureControlled | F | | |
| 1899 | Self-Reactive Solid Type B | F | | |
| 1900 | Self-Reactive Solid Type B, TemperatureControlled | F | | |
| 1901 | Self-Reactive Solid Type C | F | | |
| 1902 | Self-Reactive Solid Type C, TemperatureControlled | F | | |
| 1903 | Self-Reactive Solid Type D | F | | |
| 1904 | Self-Reactive Solid Type D, TemperatureControlled | F | | |
| 1905 | Self-Reactive Solid Type E | F | | |
| 1906 | Self-Reactive Solid Type E, TemperatureControlled | F | | |
| 1907 | Self-Reactive Solid Type F | F | | |
| 1908 | Self-Reactive Solid Type F, TemperatureControlled | F | | |
| 1909 | Semicarbazide Hydrochloride | | | T \|- |
| 1911 | Silane, Compressed | | | G |
| 1912 | Silicon Tetrachloride | | C | |
| 1913 | Silicon Tetrafluoride, Compressed | | | G |
| 1914 | Silver Arsenite | | | T |
| 1915 | Silver Cyanide | | | T |
| 1916 | Silver Nitrate | | O | |
| 1917 | Silver Picrate, Wetted | F | | |
| 1918 | Sludge Acid | | C | |
| 1919 | Soda Lime | | C | |
| 1920 | Sodium | F | | |
| 1921 | Sodium Hydrosulphide | | C | |
| 1922 | Sodium Acetoxy Triphenyl | | | T |
| 1923 | Sodium Aluminate Solution | | C | |
| 1924 | Sodium Aluminate, Solid | | C | |
| 1925 | Sodium Aluminium Hydride | F | | |
| 1926 | Sodium Ammonium Vanadate | | | T |
| 1927 | Sodium Anthra-Quinone-l-Sulphonate | | | T |
| 1928. | Sodium Arsanilate | | | T |
| 1929 | Sodium Arsenate | | | T |
| 1930 | Sodium Arsenite | | | T |

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|------|--|---|-----|----|
| 1931 | Sodium Arsenite, Aqueous Solution | | | T- |
| 1932 | Sodium Arsenite, Solid | | | T |
| 1933 | Sodium Azide | | | T |
| 1934 | Sodium Borohydride and Sodium Hydroxide Solution | | C | |
| 1935 | Sodium Bromate | | O | |
| 1936 | Sodium Cacodylate | | | T |
| 1937 | Sodium Chlorate | E | O R | |
| 1938 | Sodium Chlorate, Aqueous Solution | | O | |
| 1939 | Sodium Chlorite | | O | |
| 1940 | Sodium Chloroacetate | | | T |
| 1941 | Sodium Cuprocyanide, Solid | | | T |
| 1942 | Sodium Cuprocyanide, Solution | | | T |
| 1943 | Sodium Cyanide | | | T |
| 1944 | Sodium Dinitro-O-Cresolate | E | | |
| 1945 | Sodium Dinitro-O-Cresolate Wetted | F | | |
| 1946 | Sodium Dithionite (Sodium Hydrosulphite) | F | | |
| 1947 | Sodium Fluoride | | | T |
| 1948 | Sodium Fluoroacetate | | | T |
| 1949 | Sodium Fluoro-Acetate | | | T |
| 1950 | Sodium Fluorosilicate | | | T |
| 1951 | Sodium Hydride | F | | |
| 1952 | Sodium Hydrogendifluoride | | C | |
| 1953 | Sodium Hydrosulphide | F | | |
| 1954 | Sodium Hydroxide | | C | |
| 1955 | Sodium Hydroxide, Solution | | C | |
| 1956 | Sodium Hydroxide, Solid | | C | |
| 1957 | Sodium Methylate | F | | T |
| 1958 | Sodium Monoxide | | C | |
| 1959 | Sodium Nitrate | | O | T |
| 1960 | Sodium Nitrate and Potassium Nitrate Mixture | | O | |
| 1961 | Sodium Nitrite | | O | |
| 1962 | Sodium Pentachlorophenate | | | T |
| 1963 | Sodium Pentachloro-Phenate | | | T |
| 1964 | Sodium Perchlorate | | O | |
| 1965 | Sodium Permanganate | | O | |
| 1966 | Sodium Peroxide | | O | |
| 1967 | Sodium Peroxoborate, Anhydrous | | O | |

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|------|--|---|---|---|
| 1968 | Sodium Persulphate | | O | |
| 1969 | Sodium Phosphide | F | | |
| 1970 | Sodium Picramate | E | | T |
| 1971 | Sodium Picramate, Wetted | F | | |
| 1972 | Sodium Selenate | | | T |
| 1973 | Sodium Selenite | | | T |
| 1974 | Sodium Sulphide | | O | C |
| 1975 | Sodium Sulphide, Anhydrous or Sodium Sulphide | F | | |
| 1976 | Sodium Sulphide, Hydrated | | | C |
| 1977 | Sodium Superoxide | | O | |
| 1978 | Sodium Tellorite | | | C |
| 1979 | Sodiumanthra-Qunone-l-Sulphonate | | | C |
| 1980 | Solids containing Corrosive Liquid, N.O.S. | | | C |
| 1981 | Solids containing Flammable Liquid, N.O.S. | F | | |
| 1982 | Solids containing Toxic Liquid, N.O.S. | | | T |
| 1983 | Sopropyl | | | T |
| 1984 | Stannane Acetoxy Triphenyl | | | T |
| 1985 | Stannic Chloride Pentahydrate | | | C |
| 1986 | Stannic Chloride, Anhydrous | | | C |
| 1987 | Starnnic Phosphides | F | | |
| 1988 | Stibine | | | G |
| 1989 | Stibine(Antimony Hydride) | | | T |
| 1990 | Strontium Arsenite | | | T |
| 1991 | Strontium Chlorate | | O | |
| 1992 | Strontium Nitrate | | O | |
| 1993 | Strontium Perchlorate | | O | |
| 1994 | Strontium Peroxide | | O | |
| 1995 | Strontium Phosphide | F | | |
| 1996 | Strychnine or Strychnine Salts | | | T |
| 1997 | Strychnine Sulphate | | | T |
| 1998 | Styphinic Acid (2,4, 6-Trinitroresorcinol) | | | T |
| 1999 | Styrene | F | | |
| 2000 | Styrene Monomer, Stabilized | F | | |
| 2001 | Styrene,1, 1, 2, 2-Tetrachloroethane | F | | T |
| 2002 | Substituted Nitrophenol Pesticide, Liquid,Flammable | F | | |
| 2003 | Substituted Nitrophenol Pesticide, Liquid, Toxic | | | T |
| 2004 | Substituted Nitrophenol Pesticide, Liquid,Toxic, Flammable | | | T |

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|------|---|---|---|---|---|
| 2005 | Substituted Nitrophenol Pesticide, Solid, Toxic | | | T | |
| 2006 | Sulfotep | | | T | |
| 2007 | Sulotep | | | T | |
| 2008 | Sulphamic Acid | | C | | |
| 2009 | Sulphotec | | C | | |
| 2010 | Sulphoxide,3-Chloropropyl Octyl | | | T | |
| 2011 | Sulphur Chlorides | | C | | |
| 2012 | Sulphur Dichloride | | | T | |
| 2013 | Sulphur Dioxide | | | T | G |
| 2014 | Sulphur Hexafluoride | | | | G |
| 2015 | Sulphur Monochloride | | | T | |
| 2016 | Sulphur Tetrafluoride | | | | G |
| 2017 | Sulphur Trioxide | | C | | |
| 2018 | Sulphur Trioxide, Stabilized | | C | | |
| 2019 | Sulphur, Molten | F | | | |
| 2020 | Sulphuric Acid | | C | | |
| 2021 | Sulphuric Acid or Battery Fluid, Acid | | C | | |
| 2022 | Sulphuric Acid, Fuming | | C | | |
| 2023 | Sulphuric Acid, Spent | | C | | |
| 2024 | Sulphurous Acid | | C | | |
| 2025 | Sulphuryl Chloride | | C | | |
| 2026 | Sulphuryl Fluoride | | | | G |
| 2027 | Suphuric Acid | | C | T | |
| 2028 | Tars, Liquid | F | | | |
| 2029 | T-Chloro 1, 2,2,2- | | | | G |
| 2030 | Tear Gas Candles | | | T | |
| 2031 | Tellurium Compound, N.O.S. | | | T | |
| 2032 | Tellurium Hexafluoride | | | T | G |
| 2033 | Tellurium Hexafluoride | | | T | |
| 2034 | Tellurium(Powder) | | | T | |
| 2035 | Tepp(Tetraethyl Pyrophosphate) | | | T | |
| 2036 | Terbufos | | | T | |
| 2037 | Terpene Hydrocarbons, N.O.S. | F | | | |
| 2038 | Terpinolene | F | | | |
| 2039 | Tert Buty Peroxyiso-Butyrate | | | T | |
| 2040 | Tert Butyl Peroxy Carbonate | | | T | |
| 2041 | Tert Butyl Peroxy Isopropyl | | | T | |

| | | | | |
|------|---|---|---|---|
| 2042 | Tert Butyl Peroxyacetate (Conc>-70%) | | | T |
| 2043 | Tert-Butyl Alcohol | | | T |
| 2044 | Tert-Butyl Anate | | | T |
| 2045 | Tert-Butyl Hypochlorite | F | | |
| 2046 | Tert-Butylcyclohexyl Chloroformate | | | T |
| 2047 | Tetra Hydrofuran | F | | |
| 2048 | Tetra Methyl Lead | | | T |
| 2049 | Tetra Nitromethane | | | T |
| 2050 | Tetrabromobisphenol-A | | | T |
| 2051 | Tetrabromoethane | | | T |
| 2052 | Tetrachloro 2,2, 5, 6, 2, 5-Cyclohexadiene-1, 4-Dion | | | T |
| 2053 | Tetrachlorodibenzo-P-Dioxin,-2,3,7,8 (TCDD) | | | T |
| 2054 | Tetrachloroethane | | | T |
| 2055 | Tetrachoroethylene | | | T |
| 2056 | Tetractyle Lead | | | T |
| 2057 | Tetraethyl Dithiopyrophosphate | | | T |
| 2058 | Tetraethyl Lead | | | T |
| 2059 | Tetraethyl Silicate | F | | |
| 2060 | Tetraethylenepentamine | | C | |
| 2061 | Tetrafluoroethane | | | T |
| 2062 | Tetrafluoroethylene, Stabilized | | | G |
| 2063 | Tetrafluoromethane Compressed (RefrigerantGas R 14, Compressed) | | | G |
| 2064 | Tetrafluriethyne | | | T |
| 2065 | Tetrahydrofuran | F | | T |
| 2066 | Tetrahydrofurfurylamine | F | | |
| 2067 | Tetrahydrophthalic Anhydrides | | C | |
| 2068 | Tetrahydrothiophene | F | | |
| 2069 | Tetramethyl Lead | | | T |
| 2070 | Tetramethylammonium Hydroxide | | C | |
| 2071 | Tetramethylene Disulphotetramine | | | T |
| 2072 | Tetramethylsilane | F | | |
| 2073 | Tetranitroaniline | E | | |
| 2074 | Tetranitromethane | | O | T |
| 2075 | Tetrapropyl Orthotitanate | F | | |
| 2076 | Tetrazol-1-Acetic Acid | E | | |
| 2077 | Thallium and Compounds | | | T |
| 2078 | Thallium Carbonate | | | T |

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|------|---|---|---|
| 2079 | Thallium Chlorate | O | |
| 2080 | Thallium Compound, N.O.S. | | T |
| 2081 | Thallium Nitrate | | T |
| 2082 | Thallic Oxide | | T |
| 2083 | Thallium Sulphate | | T |
| 2084 | Thallos Chloride | | T |
| 2085 | Thallos Malonate | | T |
| 2086 | Thallos Sulphate | | T |
| 2087 | Thinoyl Chloride | | T |
| 2088 | Thioacetic Acid | F | |
| 2089 | Thioactic Acid | | T |
| 2090 | Thiocarbamate Pesticide, Liquid, Flammable Toxic | F | |
| 2091 | Thiocarbamate Pesticide, Liquid, Toxic | | T |
| 2092 | Thiocarbamate Pesticide, Liquid, Toxic, Flammable | | T |
| 2093 | Thiocarbamate Pesticide, Solid, Toxic | | T |
| 2094 | Thiocarbazide | | T |
| 2095 | Thiocynamic acid, 2-(Benzothiazolyethio) Methyl | | T |
| 2096 | Thiofamox | | T |
| 2097 | Thioglycol | | T |
| 2098 | Thioglycolic Acid | | C |
| 2099 | Thiometon | | T |
| 2100 | Thionazin | | T |
| 2101 | Thionyl Chloride | | C |
| 2102 | Thiophene | F | |
| 2103 | Thiophenol | | T |
| 2104 | Thiophosgene | | T |
| 2105 | Thiophosphoryl Chloride | | C |
| 2106 | Thiosemicarbazide | | T |
| 2107 | Thiourea(2-Methyl Phenyl) | | C |
| 2108 | Thiourea Dioxide | F | |
| 2109 | Thiourea(2-Chloro-Phenyl) | | C |
| 2110 | Thiourea(2-Methyl-1-3-Dithiolane) | | C |
| 2111 | Thiram | | T |
| 2112 | Tirpate | | T |
| 2113 | Tirpate(2,4-Dimethyl-1-3-Dithiolane) | | T |
| 2114 | Titanium Disulphide | F | |
| 2115 | Titanium Hydride | F | |

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|------|--|---|---|---|
| 2116 | Titanium Powder | | | T |
| 2117 | Titanium Powder, Dry | F | | |
| 2118 | Titanium Sponge Granules or Titanium Sponge Powders | F | | |
| 2119 | Titanium Tetrachloride | | C | |
| 2120 | Titanium Tetra-Chloride | | | T |
| 2121 | Titanium Trichloride, Pyrophoric or Titanium Trichloride Mixture, Pyrophoric | F | | |
| 2122 | Titanium Trichloride Mixture | | C | |
| 2123 | Toluene | F | | T |
| 2124 | Toluene 2, 6-Diisocyanate | | | T |
| 2125 | Toluene 2, 4-Diisocyanate | | | T |
| 2126 | Toluene Diisocyanate | | | T |
| 2127 | Toluene-2,4-Diisocyanate | | | T |
| 2128 | Toluene-2,4-Diisocyanate | | | T |
| 2129 | Toluidine-O | | | T |
| 2130 | Toluidines, Liquid/Solid | | | T |
| 2131 | Toxic Liquid, Corrosive, Inorganic, N.O.S. | | | T |
| 2132 | Toxic Liquid, Flammable, Organic, N.O.S. | | | T |
| 2133 | Toxic Liquid, Inorganic, N.O.S. | | | T |
| 2134 | Toxic Liquid, Organic, N.O.S. | | | T |
| 2135 | Toxic Liquid, Oxidizing, N.O.S. | | | T |
| 2136 | Toxic Liquid, Water-Reactive, N.O.S. | | | T |
| 2137 | Toxic Solid, Corrosive, Inorganic, N.O.S. | | | T |
| 2138 | Toxic Solid, Corrosive, Organic, N.O.S. | | | T |
| 2139 | Toxic Solid, Flammable, Organic, N.O.S. | | | T |
| 2140 | Toxic Solid, Inorganic, N.O.S. | | | T |
| 2141 | Toxic Solid, Organic, N.O.S. | | | T |
| 2142 | Toxic Solid, Oxidizing, N.O.S. | | | T |
| 2143 | Toxic Solid, Self-Heating, N.O.S. | | | T |
| 2144 | Toxic Solid, Water Reactive, N.O.S. | | | T |
| 2145 | Toxins, Extracted From Living Sources, Liquid/Solid N.O.S. | | | T |
| 2146 | Trans-1,4-Di Chloro-Butene | | | T |
| 2147 | Tri Nitro Anisole | | | T |
| 2148 | Tri Orthocresyl Phosphate | | | T |
| 2149 | Tri(Cyclohexyl) Methylstannyl 1, 2,4 Triazole | | | T |
| 2150 | Tri-I(cyclohexyl) Stannyl-1-H-1, 2, 4-Triazole | | | T |
| 2151 | Triallyl Borate | | | T |

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|------|--|---|---|
| 2152 | Triallylamine | F | |
| 2153 | Triamino,-1, 3, 5, 2, 4, 6-Trinitro-Benzene | E | T |
| 2154 | Triaminotrinitrobenzene | | T |
| 2155 | Triazine Pesticide, Liquid, Flammable, Toxic | F | |
| 2156 | Triazine Pesticide, Liquid, Toxic | | T |
| 2157 | Triazine Pesticide, Liquid, Toxic, Flammable | | T |
| 2158 | Triazine Pesticide, Solid, Toxic | | T |
| 2159 | Tribromophenol 2,4,6 | | T |
| 2160 | Tributylamine | | T |
| 2161 | Tributylphosphane | F | |
| 2162 | Trichloro(Chloromethyl) Silane | | T |
| 2163 | Trichloro Acetyl Chloride | | T |
| 2164 | Trichloro Chloromethyl Silane | | T |
| 2165 | Trichloro Ethane | | T |
| 2166 | Trichloro Napthalene | | T |
| 2167 | Trichloroacetic Acid | | C |
| 2168 | Trichloroacetic Acid Solution | | C |
| 2169 | Trichloroacetyl Chloride | | C |
| 2170 | Trichlorobenzenes, Liquid | | T |
| 2171 | Trichlorobutene | | T |
| 2172 | Trichlorodethylene | | T |
| 2173 | Trichlorodichlorophenylsilane | | T |
| 2174 | Trichloroethane,1, 1,-1 | | T |
| 2175 | Trichloroethyl Silane | | T |
| 2176 | Trichloroethylene | | T |
| 2177 | Trichloroisocy Anuric Acid, Dry | O | |
| 2178 | Trichloromethane Sulphenyl Chloride | | T |
| 2179 | Trichloronate | | T |
| 2180 | Trichlorophenol 2,3,6 | | T |
| 2181 | Trichlorophenol 2, 4, 5 | | T |
| 2182 | Trichlorophenol 2,2,6 | | T |
| 2183 | Trichlorophenol,2,4,5 | | T |
| 2184 | Trichlorophenyl Silane | | T |
| 2185 | Trichlorophon | | T |
| 2186 | Trichlorosilane | F | |
| 2187 | Tricresyl Phosphate | O | T |
| 2188 | Triethoxy Silane | | T |

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|------|--|---|---|---|------|
| 2189 | Triethyl Phosphite | F | | | |
| 2190 | Triethylamine | F | C | | |
| 2191 | Triethylene Melamine | | | T | |
| 2192 | Triethylenetetramine | | C | | |
| 2193 | Trifluoroacetic Acid | | C | | |
| 2194 | Trifluoroacetyl Chloride | | | | G |
| 2195 | Trifluoromethane(Refrigerant Gas R 23) | | | | G |
| 2196 | Trifluoromethane, Refrigerated Liquid | | | | G |
| 2197 | Trisobutylene | F | | | |
| 2198 | Trimethyl Borate | F | | | |
| 2199 | Trirnethyl Chlorosilane |  |  | \| T | |
| 2200 | Trimethyl Phosphite | F |  | \| \|- | 2201 |
| 2202 | Trimethyl Tin Chloride | | | T | |
| 2203 | Trimethylacetyl Chloride | | | T | |
| 2204 | Trimethylarnine, Anhydrous | | | | G |
| 2205 | Trimethylamine, Aqueous | F | | | |
| 2206 | Trimethylchlorosilane | F | | | |
| 2207 | Trimethylcyclohexylamine | | C | | |
| 2208 | Trimethylhexamethylene Diisocyanate | | | T | |
| 2209 | Trimethylhexarnethylene-Diamines | | C | | |
| 2210 | Trimethylpropane Phosphite | | | T | |
| 2211 | Trinitro Aniline | E | | T | |
| 2212 | Trinitro Benzene. | E | | | |
| 2213 | Trinitro Benzoic Acid | | C | | |
| 2214 | Trinitro-in-cresol | | C | | |
| 2215 | Trinitro Phenetole | | C | | |
| 2216 | Trinitroaniline | | | T | |
| 2217 | Trinitroaniline(Picramide) | E | | | |
| 2218 | Trinitroanisoie,-2,4,6 | E | | T | |
| 2219 | Trinitroanisoie | E | | | |
| 2220 | Trinitroanisoie,2, 2, 4, 6 | | | T | |
| 2221 | Trinitrobenzene | E | | T | |
| 2222 | Trinitrobenzene, Wetted | F | | | |
| 2223 | Trinitrobenzenesulphonic Acid | E | | | |
| 2224 | Trinitrobenzoic Acid | E | | T | |

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|------|--|---|---|
| 2225 | Trinitrobenzoic Acid, Wetted | F | |
| 2226 | Trinitrochlorobenzene(Picryl Chloride) | E | |
| 2227 | Trinitrochlorobenzene(Picryl Chloride) | E | |
| 2228 | Trinitrocresol | E | T |
| 2229 | Trinitroresoreinol,2, 4, 6 (Styphnic Acid) | | T |
| 2230 | Trinitrofluorenone | E | |
| 2231 | Trinitro-M-Cresol | E | |
| 2232 | Trinitronaphthalene | E | |
| 2233 | Trinitrophenetole | E | |
| 2234 | Trinitrophenetole,2,4,6 | E | T |
| 2235 | Trinitrophenol, Wetted | F | |
| 2236 | Trinitrophenylmethylnitramine(Tetryl) | E | |
| 2237 | Trinitroresorcinol(Styphnic Acid) | E | |
| 2238 | Trinitroresorcinol,-2,4,6 (Styphnic Acid) | E | T |
| 2239 | Trinitrotoluene | E | |
| 2240 | Trinitrotoluene(TNT) | E | |
| 2241 | Trinitrotoluene, Wetted | F | |
| 2242 | Triorthocresyl Phosphate | | T |
| 2243 | Triplate(2,4-Dimethyl-1, 3-Dithiolance) | | T |
| 2244 | Triphenyl Tin Chloride | | T |
| 2245 | Tripropylarnine | F | |
| 2246 | Tripropylene | F | |
| 2247 | Tris(1-Aziridiny) Phosphine Oxide Solution | | T |
| 2248 | Tris(2-Chloroethyl) Amine | | T |
| 2249 | Trisopropyl Borate | F | |
| 2250 | Tungsten Hexafluoride | | G |
| 2251 | Turpentine | F | |
| 2252 | Uranium and Compounds | | T |
| 2253 | Urea Hydrogen Peroxide | O | |
| 2254 | Urea Nitrate | E | |
| 2255 | Urea Nitrate, Wetted | F | |
| 2256 | Valeraldehyde | F | |
| 2257 | Valeryl Chloride | | C |
| 2258 | Valino Mycin | | T |
| 2259 | Vanadium and Compounds | | T |
| 2260 | Vanadium Compound, N.O.S. | | T |
| 2261 | Vanadium Oxytrichloride | | C |

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|------|----------------------------------|-----------|--|---|---|
| 2262 | Vanadium Pentaoxide | | | | T |
| 2263 | Vanadium Pentoxide | | | | T |
| 2264 | Vanadium Tetrachloride | | | C | |
| 2265 | Vanadium Trichloride | | | C | |
| 2266 | Vanadyl Sulphate | | | | T |
| 2267 | Vinyl Acetate Monomer | | | | T |
| 2268 | Vinyl Bromide | | | | T |
| 2269 | Vinyl Bromide, Stabilized | | | | G |
| 2270 | Vinyl Butyrate, Stabilized | F | | | |
| 2271 | Vinyl Chloride | E | | | T |
| 2272 | Vinyl Chloride, Stabilized | | | | G |
| 2273 | Vinyl Chloroacetate | | | | T |
| 2274 | Vinyl Fluoride | | | | T |
| 2275 | Vinyl Isobutyl Ether, Stabilized | F | | | |
| 2276 | Vinyl Methyl Ether, Stabilized | | | | G |
| 2277 | Vinyl Norbornene | | | | T |
| 2278 | Vinyl Toluene | E | | | T |
| 2279 | Vinylcyclohexene Dioxide |  |  | \| T | |
| 2280 | Vinylidene Chloride | | | | T |
| 2281 | Vinylidene Chloride, Stabilized | F | | | |
| 2282 | Vinylpyridines, Stabilized | | | | T |
| 2283 | Vinyltoluenes, Stabilized | F | | | |
| 2284 | Vinyltrichlorosilane, Stabilized | F | | | |
| 2285 | Vinylamine Tert | | | | T |
| 2286 | Warfarin | | | | T |
| 2287 | Warfarin Sodium | | | | T |
| 2288 | Water-Reactive Liquid, N.O.S. | E F O R C | | | T |
| 2289 | Water-Reactive Solid, N.O.S. | E F O R C | | | T |
| 2290 | White Asbestos | | | | T |
| 2291 | Xanthates | F | | | |
| 2292 | Xenon, Compressed | | | | G |
| 2293 | Xenon, Refrigerated Liquid | | | | G |
| 2294 | Xylene | F | | | T |
| 2295 | Xylene Dichloride | | | | T |
| 2296 | Xylenes | F | | | |
| 2297 | Xylenols | | | | T |
| 2298 | Xylidine | | | | T |

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|------|---|--|---|----|
| 2299 | Xylidines, Liquid/Solid | | | T |
| 2300 | Xylol Bromide | | | T |
| 2301 | Zinc Ammonium Nitrite | | O | |
| 2302 | Zinc and Compounds | | | T |
| 2303 | Zinc Arsenate, Zinc Arsenite or Zinc Arsenate And Zinc Arsenite Mixture | | | T |
| 2304 | Zinc Bromate | | O | |
| 2305 | Zinc Chlorate | | O | |
| 2306 | Zinc Chloride Solution | | | C |
| 2307 | Zinc Cyanide | | | T |
| 2308 | Zinc Dichloropentanitrile | | | T |
| 2309 | Zinc Dithionite (Zinc Hydrosulphite) | | | T |
| 2310 | Zinc Fluorosilicate | | | T |
| 2311 | Zinc Phosphide | | F | |
| 2312 | Zinc Resinate | | F | |
| 2313 | Zirconium and Compounds | | F | |
| 2314 | Zirconium Nitrate | | | O |
| 2315 | Zirconium Picramate | | E | |
| 2316 | Zirconium Powder, Dry | | F | |
| 2317 | Zirconium Scrap | | F | |
| 2318 | Zirconium Tetrachloride | | | C |
| 2319 | Zirconium, Dry | | F | T] |

Chapter VI

Control Of Traffic

138. Signals and additional safety measures for [motor vehicle] [Substituted by GSR 214(E), dated 18.3.1999, for 'motor cycle'(w.e.f. 18.3.1999).].

(1)The driver of a [motor vehicle] [Substituted by GSR 214(E), dated 18.3.1999, for 'motor cycle'(w.e.f. 18.3.1999).] shall make such signals and on such occasions as are specified in the regulations made under section 118.(2)The driver of a motor cycle shall, in addition to the safety measures mentioned in sub-section (1) of section 128, comply with the requirements of rule 123.[(3) In a motor vehicle, in which seat-belts have been provided under sub-rule (1) or sub-rule(1-A) of rule 125 or rule 125-A, as the case may be, it shall be ensured that the driver, and the person seated in the front seat or the persons occupying front facing rear seats, as the case may be, wear the seat belts while the vehicle is in motion.] [Inserted by GSR 214(E), dated 18.3.1999 (w.e.f. 18.3.1999).](4)On and after expiry of one year from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1999, the driver of every vehicle shall ensure that the following items are carried in the vehicle, namely:(a)[In case of vehicles other than motorcycles, a set of spare

bulbs for head lamps and fuses, and a ready-for-use spare wheel: [Substituted by Notification No. G.S.R. 625 (E) dated 8.8.2012 (w.e.f. 2.6.1989)] Provided that in case of M1 and N1 categories of vehicles, use of temporary use spare wheel shall be permitted and the provision of ready to use spare wheel shall not be mandatory, if such vehicles are fitted with Run Flat Tyres as standard.](b)tool kit as prescribed by the manufacturer;(c)triangles of size 150 mm with a red reflecting surface as per IS: 83391993 specified by the Bureau of Indian Standards, for keeping in front and rear of the vehicle in case the vehicle is stranded on the road (applicable to vehicles other than two and three-wheelers); as specified below, namely:one triangle in case of four-wheelers with GVW not exceeding 7.5 tons;two triangles in case of four-wheelers with GVW exceeding 7.5 tons:[Provided that in case of vehicles manufactured on and after 1st January, 2003, the triangles of size and specification shall conform to AIS : 022-2001, as maybe amended from time to time, till such time as corresponding Bureau of Indian Standards specifications are notified:] [Inserted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).][Provided further that in addition, [M3] [Proviso inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.3.2006).] category of vehicles shall also be required to install retro-reflective triangle complying to AIS:022:2001 as amended from time to time, excluding the requirements specified in clauses 7.2, 7.3, 7.4, 7.7, 8.1.2and 5.0, 6.0, 11.0 of Annexure 4 of the said standard. The colour of the triangle fitted in the front of the vehicle shall be white and that of rear shall be red. The location of both the triangles shall be at least one meter above the ground level at the front and rear, preferably at the centre of the vehicle. For the purposes of white colour warning triangle, the word red shall be substituted by word white, wherever applicable in AIS:022:2001. The colour requirements of white retro-reflective portion shall be as per clause8.5 of AIS:057 and white fluorescent material shall be as per clause 7.1 of ISO:7591-82(E);](d)first-aid kit containing a tube of antiseptic cream containing 0.5% of Centrimide B.P. in a non-greasy base, sterilise addressing, sterilised elastic plaster, waterproof plaster, gauze and elastic bandage for wounds and burns;(e)number of chock blocks for four-wheelers as specified below, namely:one chock block in case of four-wheelers with GVW exceeding 4 tons and less than 7.5 tons;two chock blocks in case of 4-wheelers with GVW exceeding 7.5 tons;The vehicle manufacturer shall ensure that the above items are supplied at the time of first sale of vehicle;(f)[at the time of purchase of the two wheeler, the manufacturer of the two wheeler shall supply a protective headgear conforming to specifications prescribed by the Bureau of Indian Standards under the Bureau of Indian Standards Act, 1986 (63of 1986): [Clause (f) inserted by GSR 589(E), dated 16.9.2005 (w.e.f. 16.3.2006).] Provided that these conditions shall not apply to category of persons exempted in terms of section129 and the rules made thereunder by the concerned State Government.](5)Halogen bulbs with P45t cap shall not be used for headlights on all vehicles. Wattage of halogen bulbs shall not exceed 70/75watts for 24 volts and 60/65 for 12 volts systems.](6)[On and after 1st April 2016, the driver of motor vehicle of M1 category, manufactured on and after 1st October 2014, excluding transport vehicles and special purpose vehicles shall ensure that a child, up to age of twelve years, carried in the vehicle is seated in an appropriate child restraint system conforming to AIS:072-2009.] [Inserted by Notification No. G.S.R. 291 (E) dated 24.4.2014][138A. Fitment of Radio frequency Identification Tag. [Inserted by Notification No. G.S.R. 207 (E) dated 8.4.2013 (w.e.f. 2.6.1989)]- Categories M and N motor vehicles manufactured on or after six months from the date of commencement of the Central Motor Vehicles (First Amendment) Rules, 2013 shall be fitted with Radio Frequency Identification Tag having such specifications as may be determined by the Central Government:Provided that Radio Frequency Identification Tag in case of vehicles which are sold in the form of drive-away-chassis,

shall be installed at the top centre of the windshield of the vehicle by the builder of the body on the drive-away chassis at the time of providing the windshield.]

139. [Production of license and certificate of registration. [Substituted by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000). Earlier Rule 138 was substituted by GSR 684(E), dated 5.10.1999 (w.e.f. 22.10.1999).]

- The driver or conductor of a motor vehicle shall produce certificate of registration, insurance, fitness and permit, the driving license and any other relevant documents on demand by any police officer in uniform or any other officer authorized by the State Government in this behalf, and if any or all of the documents are not in his possession, he shall produce in person an extract or extracts of the documents duly attested by any police officer or by any other officer or send it to the officer who demanded the documents by registered post within 15 days from the date of demand.]

Chapter VII

Insurance Of Motor Vehicles Against Third Party Risks

140. Definitions.

- In this Chapter, unless the context otherwise requires, (i) accounting year means the year commencing on the first day of April, and ending with the 31st day of March of the following year; (ii) approved list means the list of foreign insurers and their guarantors maintained by the Central Government under these rules; (iii) Authority means the Central Government or a State Government or any local authority or any State Transport Undertaking, motor vehicles owned by whom have been exempted from the compulsory insurance under sub-section (2) of section 146; (iv) bank means a company which accepts, for the purpose of lending or investment, deposits of money from the public repayable on demand or otherwise, and withdrawal by cheque, draft, order or otherwise; Explanation. - Any company which is engaged in the manufacture of goods or carries on any trade and which accepts deposits of money from the public merely for the purpose of financing its business as such manufacturer or trader shall not be deemed to be a bank within the meaning of this clause; (v) certificate of foreign insurance means a certificate issued by a foreign insurer in Form 57 in compliance with these rules; (vi) foreign insurer means a person or firm carrying on the business of insurance incorporated or domiciled outside India and not registered under the Insurance Act, 1938 (4 of 1938); (vii) fund means the fund established under rule 151; (viii) Government security means a Government security as defined in the Public Debt Act, 1944 (18 of 1944); (ix) guarantor means an insurer who has guaranteed a foreign insurer in pursuance of these rules, and guarantee, guaranteed and guaranteeing have corresponding meanings; (x) visitor means a person bringing a motor vehicle into India and making only a temporary stay therein not extending to a continuous period of more than one year. Inland insurance

141. Certificate of insurance.

- An authorized insurer shall issue to every holder of a policy of insurance, a certificate of insurance in Form 51 in respect of each such vehicle.

142. Cover notes.

(1) Every cover note issued by an authorized insurer shall be in Form 52. (2) A cover note referred to in sub-rule (1) shall be valid for a period of sixty days from the date of its issue and the insurer shall issue a policy of insurance before the date of expiry of the cover note.

143. Issue of certificates and cover notes.

- Every certificate of insurance or cover note issued by an insurer in compliance with the provisions of this Chapter shall be duly authenticated by such person as may be authorized by the insurer.

144. Transfer of certificate of insurance.

- When the ownership of a motor vehicle covered by a valid insurance certificate is transferred to another person together with the policy of insurance relating thereto the policy of insurance of such vehicle shall automatically stand transferred to that other person from the date of transfer of ownership of the vehicle and the said person shall within fourteen days of the date of transfer intimate to the authorized insurer who has insured the vehicle, the details of the registration of the vehicle, the date of transfer of the vehicle, the previous owner of the vehicle and the number and date of the insurance policy so that the authorized insurer may make the necessary changes in his record.

145. Exclusion of advertising matter.

- No certificate of the insurance or cover note issued in pursuance of Chapter XI of the Act and of this Chapter shall contain any advertising matter either on the face or on the back thereof.

146. Certificates or cover notes lost, destroyed, torn, soiled, defaced or mutilated.

(1) Where the holder of a policy (a) lodges with an authorized insurer a declaration in which he declares that a certificate of insurance or cover note issued to him by such insurer has been lost, destroyed, torn, soiled, defaced or mutilated and sets out full particulars of the circumstances connected with the loss or destruction of the certificate or cover note and the efforts made to find it; or (b) returns to the authorized insurer the certificate of insurance or cover note issued to him by such insurer in a torn, soiled, defaced or mutilated condition; and (c) pays to the insurer a fee of rupees twenty in respect of each such certificate or cover note, the authorized insurer shall, if satisfied that such certificate or cover note has been lost or destroyed and that all reasonable efforts

have been made to find it, or that it has been destroyed or is soiled, defaced or mutilated, as the case may be, issue in lieu thereof a duplicate certificate of insurance or cover note with the word Duplicate prominently endorsed to the effect. (2) When a duplicate certificate or cover note has been issued in accordance with the provisions of sub-rule (1) on representation that a certificate or cover note has been lost, and the original certificate or cover note is afterwards found by the holder, the original certificate or cover note, as the case may be, shall be surrendered to the insurer.

147. Records to be maintained by authorized insurers.

- Every authorized insurer shall keep a record of the following particulars in respect of every policy of insurance issued by him for a period of five years, namely: (i) full name and address of the person to whom the policy is issued; (ii) in the case of a policy relating to a specified motor vehicle, the registration mark and the number of such vehicle and in other cases, description of the vehicle covered; (iii) the date on which the policy of insurance comes into force and the date of its expiry; (iv) the conditions subject to which the persons or classes of persons specified in the policy of insurance will be indemnified; (v) the number and date of issue of every certificate of insurance or cover note issued in connection with the policy of insurance; (vi) the date, if any, on which any duplicate certificate of insurance or cover note was issued; (vii) whether, after the issue of duplicate, the original certificate of insurance was found and subsequently surrendered to the insurer and if so, on which date.

148. Records of exempted vehicles.

(1) In the case of a motor vehicle owned by any of the authorities specified in sub-section (2) of section 146 as also in the case of motor vehicles exempted under sub-section (3) of section 146, a certificate in Form 53 signed by a person authorized in that behalf by such authorities may be produced in evidence that the motor vehicle is not being driven in contravention of section 146. (2) The authority referred to in sub-section (2) or exempted under sub-section (3) of section 146 shall keep a record of the motor vehicles owned by it in respect of which a policy of insurance has not been obtained and of any certificates issued by it under these provisions in respect of such vehicles, and of the names and addresses of the persons to whom such certificates have been issued and of the cancellation of any such certificates.

149. Supply of information.

- Any person, authority or authorized insurer required under the provisions of this Chapter to keep records of documents shall furnish on request without any charge any particulars thereof to the Central Government or a State Government or to any police officer authorized in this behalf by the State Government.

150. Furnishing of copies of reports to Claims Tribunal.

(1) The police report referred to in sub-section (6) of section 158 shall be in Form 54. (3) A registering

authority or a police officer who is required to furnish the required information to the person eligible to claim compensation under section 160, shall furnish the information in Form 54, within seven days from the date of receipt of the request and on payment of a fee of rupees ten.

151. Establishment of fund.

(1) Each of the authorities referred to in sub-section (3) of section 146 shall establish a fund for meeting any liability arising out of the use of any motor vehicle of that authority or any person in its employment may incur to third parties including liability arising under the Workmen's Compensation Act, 1923 (8 of 1923).

152. Amount of the fund.

(1) The fund shall be established with an initial amount of not less than rupees five lakhs and the said amount shall be kept in deposit with a bank or the Government. (2) Subject to the provisions of sub-rule (3), the authority shall pay into the fund at the beginning of each accounting year in respect of its vehicles in running condition a sum of not less than rupees two hundred per vehicle. Explanation. - In this sub-rule vehicles in running condition means all the vehicles of the authority which are expected to be in operation at any time during the accounting year. (3) When the fund exceeds rupees twenty lakh or rupees two thousand and five hundred per vehicle for the entire fleet of vehicle, whichever is less, annual payment referred in sub-rule (2) shall cease provided that if thereafter the amount at the credit of the fund falls below rupees twenty lakhs or rupees two thousand and five hundred per vehicle for the entire fleet of vehicles, whichever is less, such annual payment shall again be resumed: Provided that if any authority other than the Central Government is of opinion that the amount of rupees twenty lakhs or rupees two thousand and five hundred per vehicle for the entire fleet of vehicles, whichever is less, is not adequate, it may, with the previous approval of the Central Government continue the annual payment beyond rupees twenty lakhs or rupees two thousand and five hundred per vehicle, as the case may be.

153. Investment of the fund.

- From the amount at the credit of the fund the authority shall keep and maintain a cash deposit of not less than rupees fifty thousand in the bank and the rest of the amount at the credit of the fund shall be invested in Government securities.

154. Securities held as a deposit in the fund.

(1) All Government securities in which the fund is invested shall be transferred to the bank by the authority. (2) It shall be competent for the authority at any time to exchange the Government securities for cash or for other Government securities of equal or greater market value, or both, and the bank shall carry out the instructions issued by the authority for such exchange after charging the usual commission to the authority. The securities so exchanged shall also be transferred to the bank.

155. Deposit procedure.

(1) As soon as the fund is established, the bank shall send to the authority a statement specifying the assets held by it on behalf of the authority and shall also send a copy thereof to the Central Government in the Ministry of Surface Transport or the State Government concerned, as the case may be. (2) The statement referred to in sub-rule (1) shall be sent in the same manner and to the same authorities whenever there is a change in the assets of the authorities held by the bank.

156. Interest on deposits.

- Interest realised on each deposit or the securities held in the fund shall be paid by the bank to the authority.

157. Withdrawal.

(1) No amount shall be withdrawn from the fund except for the purpose of meeting any liability arising out of the use of any motor vehicle of the authority which the authority or any person in the employment of the authority may incur to third parties including liability arising under the Workmen's Compensation Act, 1923 (8 of 1923). (2) The authority shall, subject to such conditions and restrictions as it may impose in this behalf, authorise one of its officers to draw money from the fund for the purpose mentioned in sub-rule (1). (3) A copy of the authorisation referred to in sub-rule (2) duly authenticated by a competent officer of the authority shall be sent to the bank which shall permit withdrawal only by the officer named in such authorisation subject to the conditions and restrictions contained therein.

158. Settlement of claims.

- The authority shall comply with such directions as the Central Government or the State Government, as the case may be, may, from time to time issue, with respect to the procedure to be followed for settlement of claims which are to be met out of the funds. Foreign insurance

159. List of foreign insurers.

(1) The Central Government shall publish in the Official Gazette a list (hereinafter referred to as the approved list) of foreign insurers who have been guaranteed in accordance with the provisions of this Chapter, together with the name of the guarantor or guarantors in each case and shall also publish from time to time any addition to or removal from the approved list. (2) No foreign insurer's name shall be added to the approved list until such foreign insurer has been guaranteed by at least one insurer and the name of the foreign insurer who ceases to have at least one guarantor shall be removed from the list.

160. Guarantor of foreign insurer.

(1)An insurer who desires to guarantee a foreign insurer shall make application therefor to the Central Government in Form 55.(2)The Central Government may, if it is satisfied that the application referred to in sub-rule (1) is in order and that it is expedient that the foreign insurer be placed in the approved list or, where the name of the foreign insurer is already included in the approved list, that the insurer should be added to the approved list as guarantor of the foreign insurer, and the name of the foreign insurer to the approved list if it is not already included, and include the insurer as a guarantor of such foreign insurer.(3)A guarantor desiring to cease guaranteeing a foreign insurer shall give notice of not less than two months to the Central Government in Form 56, and where such notice has been given, the guarantor shall be deemed to have ceased to guarantee the foreign insurer from the date specified in the notice:Provided that the insurer shall be deemed, in respect of all certificates of foreign insurance endorsed or renewed in accordance with the provisions of sub-rule (2) of rule 161 before the date of such cessation, to continue as the guarantor of the foreign insurer who has issued the certificate as if the guarantor had not ceased to be his guarantor.(4)If at any time a guarantor ceases to be an insurer, the Central Government may, after giving such notice as may appear to it to be necessary, remove from the approved list the name of such guarantor wherever it appears:Provided that the guarantor who ceases to be an insurer shall be deemed, in respect of all certificates of foreign insurance endorsed in pursuance of the provisions of sub-rule (2) of rule 161 before the date of removal of the name of the guarantor from the approved list, to continue as the guarantor of the foreign insurers as if the guarantor had not ceased to be an insurer and as if his name had not been removed from the list.

161. Endorsement of certificate of foreign insurance.

(1)A visitor wishing to have a certificate of foreign insurance endorsed or re-endorsed shall produce such certificate in Form 57 before the Customs Collector at a port of entry or land customs post or to such other officer as the Central Government may, by notification in the Official Gazette appoint, for the purpose of endorsement in accordance with the provisions of this Chapter or for the purpose of the renewal of any endorsement already made on the certificate in accordance with this Chapter.(2)Such officer shall, if satisfied that the certificate of foreign insurance complies with the requirements of the provisions of this chapter, that the period of validity of such certificate in India has not expired, that the certificate has been issued by a foreign insurer in the approved list and that the guarantor specified in the certificate is shown In the approved list as a guarantor of the foreign insurer, make an endorsement thereon in Form 58.(3)The period of validity of an endorsement or of the renewal of an endorsement made as aforesaid shall not in any case extend beyond the date on which the certificate of foreign insurance ceases to be effective in India :Provided that when a visitor obtains a fresh certificate of foreign insurance during the period of his stay in India, the period of validity of an endorsement made upon it added to the period of validity of an endorsement or endorsements that may have been made upon the original certificate, shall not exceed one year in all.

162. Validity of certificate of foreign insurance.

- A certificate of foreign insurance carrying an endorsement in accordance with the provisions of rule 161 shall have effect as if it were a certificate of insurance issued by the guarantor specified in it and shall be deemed to comply with the requirements of Chapter XI of the Act; and the policy to which it relates shall also be deemed to have been issued by such guarantor and to comply with the requirements of Chapter XI of the Act.

163. Maintenance of records by the guarantor.

- Every guarantor shall in respect of certificates of foreign insurance issued under his guarantee by the foreign insurer whom he has guaranteed and every person who has ceased to be a guarantor shall, in respect of the certificate of foreign insurance issued under his guarantee by the foreign insurer whom he had guaranteed at any time in the preceding five years, keep a record of such particulars relating to the policies in connection with which the certificates of foreign insurance were issued as are required to be kept by insurers under the provisions of rule 147 in respect of policies, and the necessary additions to those records required to make them up to date shall be made as soon as is reasonably possible in the circumstances.

Chapter VIII

Offences, Penalties And Procedure

164. Offences for the purpose of section 208.

- The offences for the purpose of sub-section (1) of section 208 shall be (a) Driving during the period of disqualification (section 23); (b) Failure to stop the vehicle when it is involved in an accident (section 132); (c) Obtaining or applying for a driving license without giving particulars of endorsement (section 182); (d) Driving dangerously (section 184); (e) Driving while under the influence of drinks or drugs (section 185); (f) Abetment of an offence under section 184 or section 185 or section 188; (g) Taking part in unauthorized race or trial of speed of any kind (section 189); (h) Altering a driving license or using an altered license; (i) Any other offence punishable with imprisonment in the commission of which a motor vehicle was used. [FORM 1] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] [See rule 5(2)] APPLICATION-CUM-DECLARATION AS TO PHYSICAL FITNESS

- | | | |
|----|---------------------------|-------|
| 1. | Name of the applicant | ..... |
| 2. | Son/wife/daughter of | ..... |
| 3. | Permanent address | ..... |
| 4. | Temporary address | ..... |
| | Official address (if any) | ..... |
| 5. | (a) Date of birth | ..... |

- (b) Age on date of application
6. Identification marks (1).....
- (2).....

Declaration

- (a) Do you suffer from epilepsy, or from sudden attacks of loss of consciousness or giddlenes from any cause? Yes/No
- (b) Are you able to distinguish with each eye (or if you have held a driving license to drive a motor vehicle for a period of not less than five years and if you have lost, the sight of one eye after the said period of five years and if the application is for driving a light motor vehicle other than a transport vehicle fitted with an outside mirror on the steering wheel side) or with one eye, at a distance of 25 metres in good day light (with glasses, if worn) a motor car number plate? Yes/No
- (c) Have you lost either hand or foot or are you suffering from any defect of muscular power of either arm or leg? Yes/No
- (d) Can you readily distinguish the pigmentary colours, red and green? Yes/No
- (e) Do you suffer from night blindness? Yes/No
- (f) Are you so deaf as to be unable to hear (and if the application is for driving a light motor vehicle, with or without hearing aid) the ordinary sound signal? Yes/No
- (g) Do you suffer from any other disease or disability likely to cause your driving of a motor vehicle to be a source of danger to the public, if so, give details Yes/No

I hereby declare that, to the best of my knowledge and belief, the particulars given above and the declaration made therein are true.(Signature or thumb-impression of the applicant)Notes:-(1) An applicant who answers "Yes" to any of the questions (a), (c), (e), (f) and (g) or "No" to either of the questions (b) and (d) should amplify his answers with full particulars, and may be required to give further information relating thereto.(2)This declaration is to be submitted invariably with medical certificate in Form 1-A.FORM 1-A[See rules 5(1),(3),7, 10(a), 14(d and 18(d)]Medical Certificate(To be filled in by a registered medical practitioner appointed for the purpose by the State Government or person authorized in this behalf by the State Government referred to under sub-section (3) of section 8).

9[Space for passport size photograph of the applicant] [Inserted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).]

1. Name of the applicant
2. Identification marks (1).....
- (2).....
3. (a) Does the applicant, to the best of your judgment, suffer from any defect of vision? If so, has it been Yes/No

corrected by suitable spectacles?

(b) Can the applicant, to the best of your judgment, readily distinguish the pig-mentary colours, red and green? Yes/No

(c) In your opinion, is he able to distinguish with his eye sight at a distance of 25 metres in good day light a motor car number plate? Yes/No

(d) In your opinion, does the applicant suffer from a degree of deafness which would prevent his hearing the ordinary sound signals Yes/No

(e) In your opinion, does the applicant suffer from night blindness? Yes/No

(f) Has the applicant any defect or deformity or loss of member which would interfere with the efficient performance of his duties as a driver? If so, give your reasons in details Yes/No

(g) Optional

(a)Blood group of the applicant (if the applicant so desires that the information may be noted in his driving license.)(b)RH factor of the applicant (if the applicant so desires that the information may be noted in his driving license).

Declaration made by the applicant in Form 1 as to his physical fitness is attached.[Certificate of Medical FitnessI certify that:-(i)I have personally examined the applicant Shri/Smt./Kum.....(ii)that while examining the applicant I have directed special attention to his/her distant vision;(iii)while examining the applicant, I have directed special attention to his/her hearing ability, the condition of the arms, legs, hands and joints of both extremities of the applicant; and(iv)I have personally examined the applicant for reaction time, side vision and glare recovery (applicable in case of persons applying for a license to drive goods carriage carrying goods of dangerous or hazardous nature to human life.)And, therefore, I certify that, to the best of my judgment, he is medically fit/not fit to hold a driving license] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).].The applicant is not medically fit to hold a license for the following reasons:Signature:

1. Name and designation of the Medical

Officer/Practitionerseal)

2. Registration number of Medical Officer.

Date:..... Signature or thumb-impression of the candidate.Notes.-[1.] [Note shall be renumbered as '(1)'thereof and Note (2) inserted by GSR 111(E), dated 10.2.2004 (w.e.f.

10.8.2004).] The Medical Officer shall affix his signature over the photograph affixed in such a manner that part of his signature is upon the photograph and part on the certificate.]

2. [Dumb persons without deafness maybe granted a valid certificate of driving license for non-transport vehicle.] [Note shall be renumbered as '(1)'thereof and Note (2) inserted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).]

[FORM 2] [Substituted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).][See rule 101Form Of Applicant For The Grant Of Learner's License

Space for passport size photograph

ToThe Licensing Authority,.....I hereby apply for a license authorising me to drive as a learner, the following motor vehicle(s):-(a)Motor cycle without gear(b)Motor cycle with gear(c)Invalid carriage(d)Light motor vehicle(e)Transport vehicle(f)Road roller(g)Motor vehicle of a specified description, namely(h)[E-rickshaw [Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)](i)E-carts.]Particulars To Be Furnished By Applicant

1. Full name
2. Son/wife/daughter of
3. Permanent address
(Electoral Roll/Life Insurance Policy/Passport/Pay slip issued by any office of the Central Government/State Government or a local body/Any other document or documents as may be prescribed by the State Government/Affidavit sworn before an Executive Magistrate or a First class Judicial Magistrate or a Notary Public to be enclosed)
4. Temporary address/Official address (if any)
5. Duration of stay at the present address
6. Date of birth
(Birth certificate/school certificated/affidavit sworn before an Executive Magistrate or a First Class Judicial Magistrate or a Notary Public to be enclosed)
7. Place of birth
8. If Place of birth out side India, when migrated to Indian
9. Educational Qualification
10. Identification mark (s) (1).....
(2).....
11. Declaration of citizenship status

(i) [if deemed Citizen of Citizen by Birth, [Substituted by
GSR 148(E), dated 4.3.2009 (w.e.f. 4.3.2009).]

(Any one of the following in support of Citizenship as Indian to be enclosed):-(a)Proof of birth in India from municipality or Registrar of births and deaths;(b)School leaving certificate/secondary school certificate showing nationality/place of birth;(c)Passport showing place of birth/citizenship/nationality;(d)Certificate of nationality/citizenship issued by District Magistrate or any other Administrative Officer;(e)Residency permit/domicile certificate issued by the State Government;(f)Grant of patta/lease of property by the Central/State Government;(g)Refugee Registration Card pertaining to the period 1947-1950;(h)Certificate of SC/ST/OBC]

(ii) If Citizenship is acquired by Descent/Registration

(In case Citizenship acquired by Descent, Birth Certificate, land/property document of parent/in case of Citizenship acquired by Registration, certificate to be enclosed)

(iii) If Citizenship of Naturalisation

(Certificate of Naturalisation and Certificate of Registration to be enclosed)

(iv) If non-Indian Citizen

(Valid passport or other travel documents and such other document or authority as may be prescribed by law to be enclosed)

12. Blood group

RH (Rhesus) factor

13. I hold an effective driving license to drive:Motor cycle/light motor vehicle/transport vehicle with effect from

14. Particulars of any driving license previously held by applicant

Whether it was cancelled and if so, for what reason

Particular's of any learner's license previously held by

15. applicant in respect of the description of vehicle to which the applicant has applied

16. Have you been disqualified for holding or obtaining driving license or learner's license.If so, for what reasons

17. I enclose three copies of my recent photograph (passport size photograph)

**18. I enclose medical fitness certificate dated.....issued by
.....(doctor)**

19. I have submitted along with my earlier application for learner's license/I enclose the written consent of parent/guardian (in the case of applicant being a minor).

**20. I enclose driving certificate dated.....issued
by.....(Name and address of the driving school).**

21. I have paid the fee of

Rs.....

22. I am exempted from the medical test under rule 6 of the Central Motor Vehicles Rules, 1989.

23. I am exempted from the preliminary test under rule 11(2) of the Central Motor Vehicles Rules, 1989.

*Strike out whichever is inapplicable. Date.....Signature of thumb-impression of applicant. Specimen signature or thumb-impression of applicant

1.

2.

Declaration under sub-section (2) of section 7 of the Motor Vehicles Act, 1988 Shri/Smt./Kumari.....son/daughter ofwho is a minor is under my care and I accept responsibility for his/her driving. If at a later date I decide not to accept responsibility his/her driving I shall intimate the licensing authority in writing for the cancellation of the license. I give my consent for his/her obtaining learner's license. Signature Name and full address of the parent/guardian.....Relationship..... be signed in the presence of the licensing authority or person authorized in this behalf by the licensing authority). FOR OFFICE USE The applicant is exempted from the medical test under rule 6 and the preliminary test under rule 11(2) of the Central Motor Vehicles Rules, 1989. Learner's license may be issued. The applicant was tested with reference to rule 11(1) of the Central Motor Vehicles Rules, 1989. He has passed the test. Learner's license may be issued. Learner's license may be refused. Signature of licensing authority or other person authorized in his behalf *Strike out whichever is inapplicable. Note:- The application along with the scanned copies of the required documents may also be sent to the concerned Licensing Authority through Electronic Mail, if allowed by the concerned State Government/Union Territory Administration. In such cases, the Licensing Authority shall scrutinize the application and intimate the applicant about the acceptance/any discrepancy. In case the application is accepted, the applicant shall be intimated through Electronic Mail to report to the Authority concerned on an appointed date along with the documents for further verification, submission of application fee and examination of the applicant.] FORM 3 [See rules 3(a), 13] Learner's License

Space for 13[passport size photograph] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]

License No.....Date.....Name to be written across the photographSpecimen signature/thumb-impression of theholder of the license.Signature and seal of the licensing authority

- | | | |
|--|---|---|
| 1. | Full name | ..... |
| 2. | Son/wife/daughter of | ..... |
| 3. | Date of birth | ..... |
| 4. [[Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] | Optional [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] | [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] |
| [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] | Blood group [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] | [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] |
| [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] | RH factor] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989). ] | ..... |
| 5. | Present/permanent address | ..... |
| | Temporary/Official(if any) | ..... |
| 6. | Mark(s) of identification | (1)..... |
| | | (2)..... |

[is licensed to drive a motor vehicle of the following description throughout India and, in case of E-rickshaw or E-cart, in specified areas or routes, as a learner, subject to the provisions of rule 3 of the Central Motor Vehicles Rules, 1989] [Substituted for the words 'is licensed to drive throughout India as a learner subject to the provisions of rule 3 of the Central Motor Vehicles Rules, 1989, a motor vehicle of the following description:-'Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)]The holder of the license has passed the medical test under rule 5 and the preliminary test referred to in rule 11(1) of the Central Motor Vehicles Rules, 1989.The holder of the license is exempted from the medical test under rule 6 and from preliminary test under rule 11(2) of the Central Motor Vehicles Rules, 1989.This license is valid

from.....to.....*Strike out whichever is inapplicableSignature and designation of thelicensing authorityWarning:The attention of the holder of this license is drawn to rule 3 of the Central Motor Vehicles Rules, 1989, which prohibits him from driving any motor vehicle unless he has besides him a person duly licensed to drive the vehicle and in every case, the vehicle carries "L" plates both in the front and in the rear of the vehicle.[FORM 4] [Substituted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).][See rule 14(1)]Form Of Application For License To Drive A Motor VehicleTo

Space for passport size photograph

The Licensing Authority,.....I apply for a license to enable me to drive vehicles of the following description:-(a)Motor cycle without gear(b)Motor cycle with gear(c)Invalid carriage(d)Light motor vehicle(e)Transport vehicle(f)Road roller(g)Motor vehicles of the following description, namely.....(h)[E-rickshaw(i)E-carts.]Particulars To

Be Furnished By The Applicant

1. Full name
 2. Son/wife/daughter of
 3. Permanent address
(Electoral Roll/Life Insurance Policy/Passport/Pay slip issued by any office of the Central Government/State Government or a local body/Any other document or documents as may be prescribed by the State Government/Affidavit sworn before an Executive Magistrate or a First class Judicial Magistrate or a Notary Public to be enclosed)
 4. Temporary address/Official address (if any)
 5. Duration of stay at the present address
 6. Date of birth
(Birth certificate/school certificated/affidavit sworn before an Executive Magistrate or a First Class Judicial Magistrate or a Notary Public to be enclosed)
 7. Place of birth
 8. If Place of birth out side India, when migrated to Indian
 9. Educational Qualification
 10. Identification mark (s) (1).....
(2).....
 11. Declaration of citizenship status
(i) [if deemed Citizen of Citizen by Birth,] [Substituted by GSR 148(E), dated 4.3.2009 (w.e.f. 4.3.2009).]
- [(Any one of the following in support of Citizenship as Indian to be enclosed):-
(a)Proof of birth in India from municipality or Registrar of births and deaths;
(b)School leaving certificate/secondary school certificate showing nationality/place of birth;
(c)Passport showing place of birth/citizenship/nationality;
(d)Certificate of nationality/citizenship issued by District Magistrate or any other Administrative Officer;
(e)Residency permit/domicile certificate issued by the State Government;
(f)Grant of patta/lease of property by the Central/State Government;
(g)Refugee Registration Card pertaining to the period 1947-1950;
(h)Certificate of SC/ST/OBC]
- (ii) If Citizenship is acquired by Descent/Registration
(In case Citizenship acquired by Descent, Birth Certificate, land/property document of parent/in case of Citizenship acquired by Registration, certificate to be enclosed)
 - (iii) If Citizenship of Naturalisation
(Certificate of Naturalisation and Certificate of Registration to be enclosed)

- (iv) If non-Indian Citizen
(Valid passport or other travel documents and such other document or authority as may be prescribed by law to be enclosed)
12. Blood group
RH (Rhesus) factor
13. Have you previously held driving license? If so, give details
Particulars and date of every conviction which has
14. been ordered to be endorsed on any license held by the applicant
15. Have you been disqualified for obtaining a license to drive? If so, for what reasons?
16. Have you been subjected to a driving test as to your fitness or ability to drive a vehicle in respect of which a license to drive is applied for? If so, give the following details:-
- | | | |
|--------------|-------------------|----------------|
| Date of test | Testing authority | Result of test |
| 1.2.3.4. | | |
- 17. I enclose three copies of my recent passport size photograph (where laminated card is used no photographs are required)**
- 18. I enclose the learner's license No.....dated.....issued by the licensing authority.**
- 19. I enclose the driving certificate No.....dated.....issued by.....**
- 20. I have submitted along with my application for learner's license the written consent of parent/guardian.**
- 21. I have submitted along with the application for learner's license/I enclose the medical fitness certificate.**
- 22. I am exempted from the medical test under rule 6 of the Central Motor Vehicles Rules, 1989.**

23. I am exempted from preliminary test under rule 11(2) of the Central Motor Vehicles Rules, 1989.

24. I have paid the fee of Rs.....

*Strike out whichever is inapplicable Date:.....Signature/thumb-impression of applicant Certificate Of Test Of Competence To Drive The applicant has passed the test prescribed under rule 15 of the Central Motor Vehicles Rules, 1989. The test was conducted on (here enter the registration mark and description of the vehicle).....on date).....The applicant has failed in the test (The details of the deficiency to be listed out) Date :.....Signature of Testing Authority.....Full name and designation Two specimen signatures of applicant:

1.

2.

*Strike out whichever is inapplicable. Note:-The application along with the scanned copies of the required documents may also be sent to the concerned Licensing Authority through Electronic Mail, if allowed by the concerned State Government/Union Territory Administration. In such cases, the Licensing Authority shall scrutinize the application and intimate the applicant about the acceptance/any discrepancy. In case the application is accepted, the applicant shall be intimated through Electronic Mail to report to the Authority concerned on an appointed date along with the documents for further verification, submission of application fee and examination of the applicant. [FORM 4-A] [Inserted by GSR 720(E), dated 10.9.2003 (w.e.f. 10.10.2003).] See rule 14(2)] Form Of Application For Issue Of International Driving Permit To Drive A Motor Vehicle In Other Countries To

Passport size Photograph

The licensing Authority,.....I apply for an International Driving Permit to enable me to drive vehicles of the following categories :-Categories Of Vehicles For Which The Permit Is Applied For (A) Motor cycles Category L1 and Category L2; (B) Motor vehicles, other than those in category (A) above, having a permissible maximum mass/weight not exceeding 3,500 kg. (7700 1b) and not more than eight seats in addition to the driver's seat in Category M1; (C) Motor vehicles used for the carriage of goods and whose permissible maximum mass/weight exceeds 3,500 Kg. (7700 1b); (D) Motor vehicles used for the carriage of passengers and having more than eight seats in addition to the driver's seat; (E) Combination of vehicles of which the driving vehicle is in a category or categories for which the driver is licensed (B and/or C and/or D), but which are not themselves in that category or categories. Particulars To Be Furnished By Applicant

1. Name(Surname)(Middle Name).....(First Name)
2. Father's or husband's name

3. Place of birth and country
(Proof to be enclosed)
 4. Address
(a)Present
.....
(b)Permanent
.....
.....
 5. Date of birth (proof to be enclosed)
 6. Educational qualification
 7. Identification marks (1).....
(2).....
 8. Blood group/RH factory
 9. Have you previously held International Driving permit
? If so, give details
Particulars and date of every conviction which has been
 10. ordered to be endorsed on any driving license held by
the applicant.
 11. Have you been disqualified for obtaining a driving
license to drive? If so, for what reason?
 12. Have you been subjected to a driving test as to your
fitness or ability to drive a vehicle in respect of which a
driving license is applied for? If so, give the following
details:
- Date of test Testing authority Result of test
1.2.3.4.

13. I enclose three copies of my recent passport size photograph.

14. I enclose the copy of driving license

**No.....dated.....issued by.....valid up to
.....**

15. I enclose a medical certificate in Form 1-A

16. I have paid the fee of Rs.....

I hereby declare that the particulars given above are true to the best of my knowledge and belief. Date..... Signature/Thumb-impression of applicant. *Strike out whichever is inapplicable. FORM 5[See rules 14(e), 17(1)(b), 27(d) and 31-A(2)] [Substituted by GSR 933(E),

dated 28.10.1989 (w.e.f. 28.10.1989).]Driving Certificate Issued By Driving School Or EstablishmentThis is to certify that Shri/Smt./Kumari.....son/wife/daughter of.....residing at.....was enrolled in this school on.....residing at.....was enrolled in this school onand his/her name is registered at serial number.....in our register in Form 14 and that he/she has undergone the course of training in driving of.....(mention class of vehicle) according to the syllabus prescribed or a period from.....tosatisfactorily.I am satisfied with his/her physical fitness and sense of responsibility.Signature.....Name and designation.....Name and address of the driving school withlicense number and date of issue.[FORM 6] [Substituted by GSR 521(E), dated 15.7.2008 (w.e.f. 15.7.2008).][See rule 16(1)](To be printed in book form of the size six centimetres by eight centimetres)Form Of Driving LicenseName of the license holder.....Son/wife/daughter of.....

Passport size Photograph

[The holder of this license is licensed to drive vehicles of the following description, throughout India and, in case of E-rickshaw or E-cart, in specified areas or routes.] [Substituted for the words "The holder of this license is licensed to drive throughout India vehicles of the following description:-'Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)]Name to be written across the photograph (Part of the seal and signature of the licensing authority to be on the photograph and part on the driving license).....Specimen signature/thumb-impressionof the holder of the licenseSignature and designation of thelicensing authority

| | |
|---|-------|
| Driving license number | ..... |
| Date of issue | ..... |
| Name | ..... |
| Son/wife/daughter of | ..... |
| Citizenship | ..... |
| Temporary address/official address (if any) | ..... |
| Permanent address | ..... |
| Date of birth | ..... |
| Educational qualifications | ..... |
| Optional | |
| Blood group | ..... |
| RH factor | ..... |

[The holder of this license is licensed to drive vehicles of the following description, throughout India and, in case of E-rickshaw or E-cart, in specified areas or routes.] [Substituted for the words "The holder of this license is licensed to drive throughout India vehicles of the following description:-'Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)]Motor cycle without gearMotor cycle with gearInvalid carriageLight motor vehicleTransport vehicleRoad rollerMotor vehicle of a specified description, namelyThe license to drive a motor vehicle other than transport

vehicle if valid from.....to.....[The license to drive a transport vehicle or E-rickshaw or E-cart is valid from to] [Inserted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)]Name and designation of the authority who conducted the driving test.....Signature and designation of the licensing authority[Authorisation to drive transport vehicle or E-rickshaw or E-cart] [Inserted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)]Number.....Date.....Authorized to drive transport vehicle with effect from.....Badge number.....Signature.....Designation of the licensing authorityName and designation of the authority who conducted the driving testSpace for addition of other classes of vehiclesNumber.....Date.....Also authorized to drive the following class or description of motor vehicles:-Name and designation of the authority who conducted the driving test.Signature and designation of the licensing authorityDate.....Space for renewal of driving licenseThe license to drive a motor vehicle other than transport vehicle is hereby renewed from.....to.....Signature of licensing authorityThe license to drive a transport vehicle is hereby renewed from.....to.....From.....to.....Signature of licensing authorityFrom.....to.....Signature of licensing authoritySpace for endorsement by Court

| Date | Section and Rule | Fine or other punishment | Signature of the endorsing authority |
|------|------------------|--------------------------|--------------------------------------|
| (1) | (2) | (3) | (4) |

Space for endorsement by licensing authority

| Date | Proceeding number and date | Disqualification period from.....to..... | Signature of licensing authority |
|------|----------------------------|--|----------------------------------|
| (1) | (2) | (3) | (4) |

[FORM 6-A] [Inserted by G.S.R. 720(E), dated 10-9-2003 (w.e.f. 10-10-2003).][See rule 16(4)]REPUBLIC OF INDIAINTERNATIONAL MOTORTRAFFICINTERNATIONALDRIVING PERMITNo.

Valid until.....(Maximum for 1 year or up to the date of validity of driving license whichever is earlier)Name and Designation of Issuing AuthorityPlace of IssueDate of IssueDriving License No. and valid uptoSeal of the Authority Signature of Issuing Authority

White colour

This permit is not valid for the territory of -(1).....The categories of vehicles for the driving of which it is valid are mentioned in this form at paragraph B.(2)This permit shall in no way exempt the holder from the obligation to conform to the laws and regulations relating to residence and the exercise of a profession in each State through which he travels. In particular, it shall cease to be valid in a State if its holder establishes his normal residence there.

English and French versions

A.PARTICULARS CONCERNING THE DRIVER

- (1) Surname/First name/Middle name/
- (2) Father's or husband's name
- (3) Place of birth and country
- (4) Date of Birth/approximate age
- (5) Address
- (a)Current address
-
- (b)Permanent address
-
-
- (6) Blood group/RH factor

B.CATEGORIES OF VEHICLES FOR WHICH THE PERMIT IS VALID(A)Motor cycles Category L1 and Category L2;(B)Motor vehicles, other than those in category (A) above, having a permissible maximum mass/weight not exceeding 3,500 kg (7700 lb) and not more than eight seats in addition to the driver's seat in Category M1;(C)Motor vehicles used for the carriage of goods and whose permissible maximum mass/weight exceeds 3,500 kg. (7700 lb);(D)Motor vehicles used for the carriage of passengers and having more than eight seats in addition to the driver's seat.(E)Combination of vehicles of which the driving vehicle is in a category or categories for which the driver is licensed (B and/or C and/or D), but which are not themselves in that category or categories.Restrictive conditions of use such as:-Must wear corrective lenses.Valid only for driving vehicle No.Vehicle must be equipped to be driven by a one legged person.Seal or stamp ofThe Authority belowIn the appropriateColumn.

- A.
- B.
- C.
- D.

Photograph 35×45 MM

Seal or stamp of the AuthoritySignature or thumb print of holderDisqualifications:-

The holder is deprived of the right to

drive in the territory of(Name of
country) at.....

On.....

Signature on seal or stamp of the Authority which has
invalidated the permit in its territory

Until.....

On.....

The holder is deprived of the right to
drive in the territory of(Name of the
country) at.....

Signature and seal or stamp of the Authority which has invalidated the permit in its territory.

DETAILS DU CHAUFFEUR

- (1) Nom/Prenom/deuxieme nom
- (2) Nom du Pere ou de mari
- (3) Dieu de Naissance et pays
- (4) Date de Naissance/1'age
- (5) Adresse
 - (a)L'adresse en cours
 - (b)L'adresse permanente
- (6) Groupe Sanguin/Facteur RH

CATEGORIES DES VEHICULES POUR LESQUELLES LE PERMIS EST VALABLE(A)Motos (L1 et L2) Categories(B)Vehicules sauf ceux de categories A, ayant La masse maximum acceptable ne depassant pas 3,500 Kilos (7700 Ib) et pas plus que huit sieges en plus dela siege du chauffeur, (M-1) categorie(C)Vehicules utilises pour porter les Marchandises et don't la Masse Maximum acceptable depasse 3,500 Kilos (7700 Ib)(D)Vehicules utilises pour porter les voyageurs et ayant plus que huit sieges en plus de la siege du chauffeur.(E)Combination de vehicules don't le Vehicule a conduire est dans la categorie ou categories pour lesquels le chauffeur est donne le permis (B et/ou C/ou D) mais lesquels ne sont pas dans cette/ces categorie(s).Conditions restrictive d'usage comme-Doit porter des verres correctifs.-Valable seulement pour le Numero de vehicule a conduire.-Vehicule doit etre muni pour conduire par une personne ayant une jambe.Sceau/CachetDe l'autoritsau-dessou, dansI, espace approprie

- A.
- B.
- C.
- D.
- E.

Photo35×45 MM

Sceau on cache de l'autorite Signature ou Print du pouce Disqualifications:-

Le deteneur est

deposse du droit de

conduire dans le territoire Jusqu's.....le.....

(nom

de province)a.....

Signature et sceau de l'autorite qui ainvalide le permis dans son territoire.

Le deteneur est

deposse du droit de

conduire dans le territoire Jusqu's.....Le.....S

(nom de province)

a.....

I's autorite qui ainvalide le permis dans son territoire.]

[FORM 7] [Substituted by GSR 521(E), dated 15.7.2008 (w.e.f. 15.7.2008).][See rule 16(2)]FORM
FOR DRIVING LICENCE (LAMINATED/SMART CARD TYPE)Visual Inspection ZoneDriving

License No.....Date of Issue.....

Photograph

Valid till (Non-Transport).....Valid till

(Transport).....Name.....(Surname).....(Given

name).....(Middle name).....Son/Daughter/Wife of

.....(Surname).....(Given name).....(Middle

name).....Address

(Current).....

of

Birth.....(Date).....(Month).....(Year).....

to drive the following vehicle class throughout India :-(i)Class of

vehicle.....(ii)Issue Date (dd-mm-yyyy).....Badge

NumberBlood Group and Rh factor of the

driver.....Specimen Signature/thumb-impression of the license

holder.....Signature of the Issuing

Authority.....Identification of Issuing

Authority.....Note:-The provision for security

features like the ghost image and/or the hologram would be provided in the Visual Inspection Zone

of the License by the concerned State Government. Card Serial Number will be printed by card

manufacturer on the back side upper left corner of the card.Machine Readable ZoneThe concerned

State Governments will provide the following features in the license, in Machine Readable

Zone:-Chip Serial Number.....Driving License

No.....Date of

Issue.....Valid till

(Non-Transport).....Valid till

(Transport).....Name.....(Surname).....(Given

name).....(Middle name).....Son/Daughter/Wife

of.....(Surname).....(Given name).....(Middle

name).....Citizenship.....[****] [Omitted by

G.S.R. 708(E), dated 30.8.2010]Date of Birth (dd-mm-yyyy).....Class of

vehicle.....Respective Date of

Issue.....Short name of the Authority conducted driving test for

respective class of vehicle as above.....Designation of the Authority conducting

driving test for respective class of vehicle as above.....Identification of Issuing

Authority.....Endorsement

details (Provision will be made to accommodate the details of 10 Endorsements with following

details)Endorsement/Challan

Number.....Endorsement/Challan

Date.....ID Code of

Authority of

Endorsement.....Section/Rule/Proceeding

No. (Provision for 10

Sections/Rules).....Fine.....

period from
(dd-mm-yyyy).....Disqualification period to
(dd-mm-yyyy).....Settlement/Review
Date
(dd-mm-yyyy).....Settlement/Review
Authority ID.....[Authorisation
to drive E-rickshaw or E-cart in.....(specify areas
or routes)] [Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)]Badge
DetailsBadge
Number.....Valid
till.....Authori
Number.....Authorisation
Date.....FORM
8[See rule 17(1)]Application For The Addition Of A New Class Of Vehicle To A Driving
LicenseToLicensing Authority,.....I,
Shri/Smt./Kumari.....hereby apply for the addition of the following
class/classes of motor vehicles to the attached license:-(a)[Motor cycle without gear,] [Substituted
by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000).](b)Motor cycle with gear,(c)Invalid
carriage,(d)Light motor vehicles,(e)[Transport vehicle,] [Substituted by GSR 221(E), dated
28.3.2001 (w.e.f. 28.3.2001).](f)Medium passenger motor vehicles,[***] [Items (g) and (h) omitted
by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001).][***] [Items (g) and (h) omitted by GSR 221(E),
dated 28.3.2001 (w.e.f. 28.3.2001).](i)Road rollers,(j)Motor vehicles of the following description:-[I
enclose, [Inserted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)](a)A medical
certificate in Form 1-A,(b)Learner's license in Form 3,(c)Driving license in Form 6 or 7 if
any;(d)Driving certificate in Form 5 if the application is to drive a transport vehicle excluding
E-rickshaw or E-cart;(e)I have paid the fee of Rs](k)[E-rickshaw [Inserted by
Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f.
2.6.1989)](l)E-cart]Dated.....20.....Signature or thumb-impression ofthe
applicantCertificate of test of competence to driveThe applicant has passed/failed in the test
specified in rule 15 of the Central Motor Vehicles Rules, 1989. The test was conducted on
a.....(here enter description of vehicle) on
date.....Signature of Testing AuthorityName and designationFORM 9[See rule
18(1)]Form Of Application For The Renewal Of Driving License
Space for28[passport size photograph] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f.
28.10.1989).]
I,
Shri/Smt./Kumari.....son/v
of.....hereby apply for the
renewal of my driving license which is attached and particulars of which are as follows:
(a) Number
(b) Date of issue
(c) Licensing authority by which the license w

- (d) Licensing authority by which the license was last renewed
Number and date of renewal
- (e) Class of vehicles authorized to be driven
- (f) Date of expiry of license to drive
(i) transport vehicle
(ii) vehicles other than transport vehicles

My present address is

If this address is not entered on the license, I do/do not wish that it should be so entered. If the license is not attached, reasons why it is not available?

the license was not renewed within thirty days of the date of expiry, reasons for delay

renewal of license has not been refused by any licensing authority. I have not been disqualified for holding or obtaining a driving license. My license has not been revoked. I enclose a medical fitness certificate in [Form 1-A], I enclose three copies of my recent passport size photograph (5 cms by 6 cms) I have paid the fee of Rs. I hereby declare that to the best of my

knowledge and belief the particulars given above are

true. Date Signature or thumb-impression of

applicant. Name Address

10[See rule 23(1)] State Register Of Driving License

1. (a) Driving license number and date of initial issue
- (b) Licensing authority which issued the license
- (c) Name and designation of the officer who has taken the driving test and the date of passing the test by the holder of the license
2. Name, address and other particulars of the holder of the driving license:
- (a)(a) Name of the holder (with guardian's name, if minor)
- (b) Date of birth
- (c) Educational qualifications
- (d) Permanent address
- (e) Temporary address/official address (if any)
- (f) Subsequent changes of address
- (g) Class and types of vehicles for which license is given
- (h) Addition of vehicles (if any) with dates
- (i) Date of expiry of the license and further renewal (with details of licensing authority which renewed the license)

(j)Details of disqualifications, fine, cancellation, etc., in relation to the holder of the driving license

FORM 11[See rules 24(1), 24(4) and 25]Form Of License For The Establishment Of A Motor Driving SchoolLicense No.....License is hereby granted for the establishment of a school for imparting instructions in driving of motor vehicles specified below:(a)Motor cycle,(b)Invalid carriage,(c)Light motor vehicle,(d)Medium goods vehicle,(e)Medium passenger motor vehicle,(f)Heavy goods vehicle,(g)Heavy passenger motor vehicle,(h)Motor vehicles of the following description:by.....and address of the license holder)at.....(premises of the school)the school being known as the..... subject to the provisions of the Motor Vehicles Act, 1988 and the Central Motor Vehicles Rules, 1989.The license is valid from.....to.....Dated.....Licensing AuthorityThis license is hereby renewed from..... to.....Licensing AuthorityFORM 12[See rule 24(2)]Form Of Application For A License To Engage In The Business Of Imparting Instructions In Driving Of Motor VehiclesToThe Regional Transport Officer,.....The undersigned hereby applies for obtaining a license to run the business of imparting instructions in driving of motor vehicles:

1. Full name of the applicant
2. Son/wife/daughter of
3. Address
4. Place where the applicant desires to start his business
5. [[Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]| Nature and extent of facilities available] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]
6. Qualifications of staff engaged for imparting instructions
7. [[Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]| Make and model of engine to be used for training purposes] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]
8. Details of the registration marks of the vehicles used for imparting driving instructions
9. I have paid the fee of Rs.
Dated..... Signature of the

applicant

Dated.....Signature of the applicantFORM 13[See rules 24(2) and 25]Form
Of Application For Renewing A License To Engage In The Business Of Imparting Instructions In
Driving Of Motor VehiclesToThe Regional Transport

Officer,.....The undersigned hereby
applies for renewal of a license to run the business of imparting instructions in driving of motor
vehicles:

1. Full name of the applicant.....
2. Son/wife/daughter of.....
3. Address.....
4. Place of business.....
5. Number of existing licenses.....
6. Date of issue.....
7. Period of validity.....
8. Whether the application has been made before the expiry of existing license, if
not, the reasons for delay.....
Whether the earlier license was suspended/cancelled for any reason, details
9. thereof such as date of suspension, reasons for such
suspension/cancellation.Date of revocation of suspension/cancellation
10. I have paid the fee of Rs.

Dated.....

Dated.....Signature of the applicantFORM 14[See rule 27(a)] [Substituted
by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]Register Showing The Enrolment Of
Trainee(S) In The Driving School EstablishmentsRegister for the year.....

1. Enrolment number
2. Name of the trainee with his photograph
3. Son/wife/daughter of
4. Address:
- (a) Permanent address
- (b) Temporary address/official address (if any)
5. Date of birth
6. Class of vehicle for which training imparted
7. Date of enrolment
8. Learner's license number and date of its expiry
9. Date of completion of the course
10. Date of passing the test of competence to drive
11. Driving license number and date of issue and the
licensing authority which issued the license
12. Remarks

13. Signature of the license holder/instructor

[Substituted by GSR 148(E), dated 4.3.2009 (w.e.f. 4.3.2009).][Inserted by Notification No. G.S.R. 709 (E) dated 8.10.2014 (w.e.f. 2.6.1989)][Substituted by GSR 148(E), dated 4.3.2009 (w.e.f. 4.3.2009).]FORM 15[See rule 27(i)]Register Showing The Driving Hours Spent By A Trainee

Name of the school/establishment

Name of the trainee

Enrolment number

Date of enrolment

| Date | Hours spent in actual driving From.....hrs To.....hrs | Class of vehicle | Signature of the instructor | [Signature or thumb-impression of the trainee] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] |
|------|--|------------------|-----------------------------|---|
| 1 | 2 | 3 | 4 | 5 |

1.2.3.4.5.

FORM 16[See rule 34(1)]Form Of Application For Grant Or Renewal Of Trade CertificateToThe Registering Authority,.....I/We hereby apply for issue of/renewal of a trade certificate(s):-Table-9

1. Applicant's name
2. Son/wife/daughter of
3. Applicant's full address (proof to be attached)
- Whether the applicant is a[manufacturer or dealer of automobiles or automobile ancillary or a test agency specified under rule 126 of the said rules] [Substituted by Notification No. G.S.R. 291 (E) dated 24.4.2014]in motor vehicles, approved repairer or vehicles, engaged in building bodies of vehicles, engaged in the business of hire purchase/lease/hypothecation of vehicles
5. Number of certificates required
6. Class of motor vehicle(s) in respect of which certificate(s) is required
7. Amount of fee paid
- If the application is for renewal indicate the
8. trade certificateNo., date of issue and date or expiry in respect of which renewal is applied

DeclarationI/We do hereby declare that the trade certificate(s) is/are required by me/us for bona fide trade purpose.Place.....Signature of the applicantDate.....*Strike out whichever is inapplicable.FORM 17[See rule 35(1)]Form Of Trade Certificate(To be printed in circle shape of 70 millimetres diameter)Trade certificate

1. Serial number of certificate

2. Full name and address of certificate holder
3. Trade number assigned in respect of the certificate
4. Class of motor vehicle in respect of which the certificate is to be used
5. Date of expiry of certificate
6. Amount of fee paid
7. Date and stamp of office of issue

Station.....

Date.....

Registering Authority of Region/State

Valid throughout India

Schedule

Form of folder for the certificateThe folder shall be of metal and be weather-proof. It shall be circular in shape and conform to the following dimensions: Circular pattern, without cross bars-certificate trayThe certificate of standard pattern when cut along the outline of the outer of that two circles, shall fit neatly into a sheet-metal tray of suitable thickness, having a turned-up edge of sufficient depth to hold the license and stout cover of transparent white glass. Ring cover: A circular ring of sheet-metal shaped to fit down closely into the tray, and adopted for fixing by screws, bolts, or otherwise to the vehicle in the prescribed position. A rubber packing ring shall be arranged to fit between the ring cover and the cover glass and tray so as to render the whole carrier weather-proof. Dimensions: The aperture within the ring-cover shall clearly exhibit the whole of the certificate lying within the inner circle of the certificate and shall have a diameter of 10 cm. FORM 18[See rule 38(1)] INTIMATION OF LOSS OR DESTRUCTION OF A TRADE CERTIFICATE AND APPLICATION FOR DUPLICATE To The Registering Authority, The trade certificate issued to me/us bearing number..... and valid up to..... has been mutilated/soiled/lost/destroyed* in the following circumstances and is not in my possession for the reasons specified below: I/We surrender the *mutilated/soiled trade certificate. I/We hereby declare that to my/our knowledge the trade certificate has not been either suspended or cancelled under the provisions of the Rules and that the above certificate is not in the use of any one else. I undertake to surrender the trade certificate if it is found by me or restored to me. I/We hereby deposit the fee of Rs..... and apply for the issue of duplicate trade certificate. Signature or thumb-impression of the applicant Address..... Dated:..... out whichever is inapplicable. FORM 19[See rule 43] REGISTER TO BE MAINTAINED BY THE HOLDER OF TRADE CERTIFICATE

| Date | Trade certificate number and in case of vehicle registered | the registration number of the vehicle | Description of motor vehicle | Purpose for which vehicle sent out or brought | Driver's license name No. and address and whether he is the employee | Hours of leaving the premises by the vehicle | Mileage covered between the hours noted in columns(6) and(7) | Signature and designation of the person authorized by the |
|------|--|--|------------------------------|---|--|--|--|---|
|------|--|--|------------------------------|---|--|--|--|---|

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|---|-----|-----|--------|
| | | | | | | of the holder of trade certificate | | | holder |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |

[FORM 20 [Substituted by GSR 276(E), dated 10.4.2007 (w.e.f. 10.4.2007).][See rule 47]APPLICATION FOR REGISTRATION OF A MOTOR VEHICLE(To be made in duplicate if the vehicle is held under an agreement of Hire-Purchase/Lease/Hypothecation and duplicate copy with the endorsement of the Registering Authority to be returned to the Financier simultaneously on Registration of motor vehicle)ToThe Registering

Authority,.....

- Full name of the person to be
- 1 registered as
Registered owner
Son/wife/daughter of
Age of the person to
- 2 be registered as
Registered owner
- 3 Permanent address
(Electoral Roll/Life Insurance
Policy/Passport/Pay slip issued by any office of the Central Government/State Government or a local body/Any other document or documents as may be prescribed by the State Government/Affidavit sworn before an Executive Magistrate or a First Class Judicial Magistrate or a Notary Public to be enclosed)
4. Temporary address/Official
address, if any

5. Duration of stay at the present address
- The annual income
6. and PAN/GIR
number of the owner
7. Place of birth
If place of birth is
8. outside India, when
migrated to India
9. Declaration of
Citizenship status (i)
If deemed Citizen or
Citizen by Birth
(Birth certificate and
school certificate in
support of Citizenship
as Indian to be
enclosed)(ii) If
Citizenship is
acquired by
Descent/Registration(In
case Citizenship
acquired by Descent,
Birth Certificate,
land/property
document of
parent/in case of
Citizenship acquired
by Registration,
certificate to be
enclosed)(iii) If
Citizenship by
Naturalisation
(Certificate of
Naturalisation and
Certificate of
Registration to be
enclosed)(iv) If
non-Indian
Citizen(Valid
passport or other
travel documents and
such other document

or authority as may be
prescribed by law to
be enclosed)

Name and address of
the Dealer or
Manufacturer from
whom the vehicle was

10. purchased (sale
certificate of road
worthiness issued by
the Manufacturer to
be enclosed)
If ex-army vehicle or
imported vehicle,
enclose proof If
locally manufactured
Trailer/Semi-trailer,
11. enclose the Approval
of design by the State
Transport Authority
and Note the
proceedings number
and date of approval
12. Class of vehicle
(if motor cycle,
whether with or
without gear)
13. The motor vehicle is
(a) a new vehicle,
(b) ex-army vehicle,
(c) imported vehicle
(d) [in-use
E-rickshaw or E-cart]
[Substituted by
Notification No.
G.S.R. 27 (E) dated
13.1.2015 (w.e.f.
2.6.1989)]
14. Type of body
15. Type of vehicle
16. Maker's name
17.

- Month and year of manufacture
18. Number of cylinders
19. Horse power
20. Cubic capacity
- Maker's classification
21. or if not known,
- wheel base
22. Chassis No (affix pencil print)
- [Engine number or motor number in the case of Battery Operated Vehicles]
23. [Substituted by GSR 589(E), dated 16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).]
24. Seating capacity (including driver)
25. Fuel used in the engine
26. Unladen weight
- Particulars of previous registration
27. and registered number(if any)
- Colour or colours of
28. body, wings and front end

I hereby declare that the motor vehicle has not been registered in any State in India. ADDITIONAL PARTICULARS TO BE COMPLETED ONLY IN THE CASE OF TRANSPORT VEHICLES OTHER THAN MOTOR CAB

29. Number, description, size and ply rating of tyres, as declared by the manufacturer
- (a) Front axle=
- (b) Rear axles=.....
- (c) Any other axle=.....
- (d) Tandem axle=.....
30. Gross vehicle weight
- (a) as certified by manufacturer.....kgms

- (b) To be registered.....kgms
31. Maximum axle weight
- (a) Front axle=.....Kgms
- (b).Rear axle=.....Kgms
- (c) Any other axle=.....kgms
- (d) Tandem axle=.....kgms
32. (a) Overall length.....
- (b) Overall width.....
- (c) Overall height.....
- (d) Over hang.....

The above particulars are to be filled in for a rigid frame motor vehicle of two or more axles for an articulated vehicle of three or more axles or, to the extent applicable, for trailer, where a second semi-trailer or additional semi-trailer are to be registered with an articulated motor vehicle. The following particulars are to be furnished for each such semi-trailer.

33. Type of body
34. Unladen weight
35. Number, description and size of tyres on each axle
36. Maximum axle weight in respect of each axle
37. The vehicle is covered by a valid certificate of insurance under Chapter XI of the Act Insurance Certificate or Cover Note
- No.....
- Date.....
- Of.....
- (Name of company) valid from
-to.....

38. The vehicle is exempted from insurance. The relevant order is enclosed

39. I have paid the prescribed fee of rupees.....

Date.....Signature or thumb-impression of the person to be registered as registered owner

Note:-The motor vehicle above described is (i) Subject to Hire-purchase agreement/Lease agreement

with.....

to Hypothecation in favour

of.....

held under Hire-purchase agreement, or lease agreement, or subject to Hypothecation*Strike out whatever is inapplicable. If the vehicle is subject to any such agreement the signature of the Financier with whom such agreement has been entered into is to be obtained.

.....

Signature of the Financier with whom an agreement of Hire-purchase, Lease or Hypothecation has been Signature or thumb-impression of the Registered Owner

entered into.

CERTIFICATE OF INSPECTION OF MOTOR VEHICLECertified that the particulars contained in the application are true and that the vehicle complies with the requirements of the Motor Vehicles Act, 1988 and the Rules made thereunder.Date.....Signature of the Inspecting AuthorityRef.

No.....Name.....Designation.....

of the.....OFFICE ENDORSEMENTThe above said motor vehicle has been assigned the Registration number.....and registered in the name of the applicant and the vehicle is subject to an agreement of Hire-purchase/Lease/Hypothecation with the Financier referred above.Date..... Signature of the Registering AuthorityToThe

Financier.....

be sent by registered post acknowledgment due)Specimen signature or thumb-impression of the person to be registered as Registered Owner and Financier are to be obtained in original application for affixing and attestation by the Registering Authority with office seal in Forms 23 and 24 in such a manner that the part of impression of seal or a stamp and attestation shall fall upon each signature.

Specimen signature of the Financier

Specimen signature of the Registered Owner

(1)..... (1).....

(2)..... (2).....

FORM 21[See rules 47(a) and (d)]SALE CERTIFICATE[(To be issued by manufacturer or dealer or registered E-rickshaw or E-cart Association (in case of E-rickshaw or E-cart) or officer of Defence Department (in case of military auctioned vehicles) for presentation along with the application for registration of a motor vehicle).] [Substituted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)]Certified

that.....(brand name of the vehicle)has been delivered by us to..... on..... (date)

Name of the buyer

Son/wife/daughter of

Address (Permanent)

(Temporary)

The vehicle is held under agreement of hire-purchase/lease/hypothecation with.....The details of the vehicle are given below:

1. Class of vehicle
2. Maker's name
3. Chassis No.
- [Engine number or motor number in the case of Battery Operated Vehicles] [Substituted by GSR 589(E), dated 16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).]
4. Horse power or cubic capacity
5. Fuel used
6.

7. Number of cylinders
8. Month and year of manufacture
9. Seating capacity (including driver)
10. Unladen weight
11. Maximum axle weight and number and description of
tyres (in case of transport vehicle)
- (a)Front axle
- (b)Rear axle
- (c)Any other axle
- (d)Tandem axle
12. Colour or colours of the body
13. Gross vehicle weight
14. Type of body

[Signature of the Manufacturer or dealer or officer of Defence Department or registered E-rickshaw or E-cart Association] [Substituted by Notification No. G.S.R. 27 (E) dated 13.1.2015 (w.e.f. 2.6.1989)]/ Dealer or Officer of Defence Department*Strike out whichever is inapplicable.[FORM 22] [Substituted by Notification No. G.S.R. 953 (E), dated 5.10.2016 (w.e.f. 1.4.2017).][See Rules 47(g), 115, 124(2) and 127]Initial Certificate of Compliance with Pollution Standards, Safety Standards of Components and Road-WorthinessTo be issued by the manufacturer or registered E-rickshaw or E-cart Association in case of E-rickshaw or E-cartIt is certified that the following vehicle complies with the emission values, including mass emission norms and noise standards including noise level under the provisions of the Motor Vehicles Act, 1988, and the rules made thereunder as specified below:

1. Brand name of the vehicle:

2. Chassis number:

3. Engine number (motor number, in case of battery operated vehicles):

4. Emission norms applicable:

[Bharat Stage- IV/ VI/ Bharat (Trem) Stage-III/III A etc.]

5. The emission, sound level for horn and pass by noise values of the above vehicle model, obtained during Type Approval as per Central Motor Vehicle Rules, 1989 are given below:

(i)Emission values [refer rule 115 (2)] : (a)For Petrol/ CNG/LPG/ Electric-Hybrid vehicles

| Sr.No. | Pollutant | Mass in gram/ kilometer or gram/ kilowatt per hour |
|--------|--------------------------------------|--|
| (1) | (2) | (3) |
| 1 | Carbon Monoxide | |
| 2 | Hydro Carbon | |
| 3 | Non-Methane HC | |
| 4 | NO _x , if applicable | |
| 5 | HC + NO _x , if applicable | |

(b) For diesel vehicles :

| Sr.No. | Pollutant | Mass in gram/ kilometer or gram/ kilowatt per hour |
|--------|--------------------------------------|--|
| (1) | (2) | (3) |
| 1 | Carbon Monoxide | |
| 2 | Hydro Carbon | |
| 3 | Non-Methane HC | |
| 4 | NO _x , if applicable | |
| 5 | HC + NO _x , if applicable | |
| 6 | PM | |

(ii) Noise level (refer rules 119 and 120) : (a) horn (for all vehicles other than agricultural tractors and construction equipment vehicles) as installed on the vehicle: dB(A); (b) Bystander's position (for all vehicles other than agricultural tractors and construction equipment vehicles) dB(A); (c) Operator's ear level (for agricultural tractors and construction equipment vehicles) dB(A) (Signature of manufacturer or of authorised signatory of registered E-rickshaw or E-cart Association) Note 1: This Form shall be issued with the signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of the manufacturer. Note 2: In the case of e-rickshaw or e-cart, this Form shall be issued with the signature of an authorized signatory of registered E-rickshaw or E-cart association duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of such signatory. [FORM 22-A [Substituted by GSR 784(E), dated 12.11.2008 (w.e.f. 1.4.2009)]. [See Rules 47(g), 115, 124(2), 125C*, [125F, 125G] [Substituted by Notification No. G.S.R. 287 (E) dated 22.4.2014 (w.e.f. 2.6.1989)], 126A, 127] INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD-WORTHINESS (FOR VEHICLES WHERE BODY IS FABRICATED SEPARATELY)

Part I

(TO BE ISSUED BY THE MANUFACTURER) Certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988, and the rules made thereunder, including the following mass emission norms:

Purchased from the Dealer Name and Address

Name of the Registered Owner

Son/wife/daughter of
 Full address (Permanent)
 Full address (Temporary)
 37[PAN No.]

Signature of chassis manufacturerForm 22-A, Part I shall be issued with the signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of the manufacturer[PART-II] [Substituted by Notification No. G.S.R. 287 (E) dated 22.4.2014 (w.e.f. 2.6.1989)](To be issued by the body builder)Certified that the body of the following vehicle has been fabricated by us and the same complies with the provisions of the Motor Vehicles Act, 1988, and the rules made there under:

1. Brand name of the vehicle _____

2. Chassis No. _____

3. Engine No./Motor No. _____

[*4. Bus Body Builder Accreditation Certificate Number _____ Date _____ valid up to date _____. [Substituted by Notification No. G.S.R. 868(E), dated 8.9.2016 (w.e.f. 2.6.1989).]*5. Vehicle Body construction (Bus/ Road Ambulance/ Motor Caravan/ etc.) Type

Approval Certificate Number _____ Date _____ issued by the approved Test Agency.]* Applicable for buses only(Signature of the body builder)[Form 22-A Part II shall be issued with the signature of the body builder duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of the body builder.][FORM 23 [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][See rule 48]CERTIFICATE OF REGISTRATIONRegistration

Number.....Brief description of vehicle.....(e.g. Fiat/Ambassador/Maruti Car, Tata/Ashok Leyland Goods Vehicle, Trailer, Motor Cycle with/without gear, Motor Cycle with side car, etc.)

Purchased from the Dealer
 Name and Address
 Name of the Registered
 Owner
 Son/wife/daughter of
 Full address (Permanent)
 Full address (Temporary)
 [PAN No. [Substituted by
 G.S.R. 708(E), dated] [Inserted by
 30.8.2010.] GSR 148(E), dated 4.3.2009 (w.e.f. 4.3.2009).]

Signature of Registering Authority.....Date.....

DETAILED DESCRIPTION

DETAILED DESCRIPTION

DETAILED DESCRIPTION

DETAILED DESCRIPTION

DETAILED DESCRIPTION

DETAILED DESCRIPTION

Specimen
signature of the
REGISTERED
OWNED to be
affixed and
attested by
REGISTERING
AUTHORITY
with his seal

1. Class of vehicle
The motor vehicle is-
(a) a new vehicle
(b) ex-army vehicle
(c) imported vehicle
(d) migration from other States
2. Maker's name
Dealer's name and address
3. Type of body
4. Month and year of manufacture
5. Number of cylinders
6. Chassis Number
[Engine number or motor number in the case of Battery Operated Vehicles]
7. [Substituted by GSR 589(E), dated 16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).]
8. Fuel used in the engine
9. Horse Power (B.H.P.)
10. Cubic Capacity
11. Maker's Classification
12. Wheelbase
13. Seating capacity (including driver)
14. Unladen weight
15. Colour or colours of body, wings and front end
*Additional particulars in the case of all transport vehicles other than motor cabs
16. Gross vehicle weight
(a) as certified by the manufacturer
(b) as registered
17. [Number, description, size and ply rating of tyres,as declared by the manufacturer] [Substituted for 'Number, description and size of tyres'by

GSR 214(E), dated 18.3.1999 (w.e.f. 18.9.1999).]

- (a) Front axle
- (b) Rear axle
- (c) Any other axle
- (d) Tandem axle.
- Additional particulars of alternative or additional semi-trailer registered with an articulated vehicle
- 18. Registered axle weight
- (a) Front axle
- (b) Rear axle
- (c) Any other axle
- (d) Tandem axle
- 19. Type of body
- 20. Unladen weight
- 21. Number, description and size of tyres on (each) axle
- 22. Registered axle weight (in respect of each axle)
- This certificate is valid from.....to.....

Date.....Signature of the Registering AuthorityNote. The motor vehicle above described is(i)Subject to a Hire-purchase agreement with(ii)Subject to Lease agreement with(iii)Subject to Hypothecation in favour of Specimen signature of the Financier (to be affixed)and attested by the Registering Authority with his sealSignature of the Registering AuthorityDate.....This certificate is renewed:

From..... to

Date..... to Signature of the Registering Authority

From..... to

Date..... to Signature of the Registering Authority

From..... to

Date..... to Signature of the Registering Authority

From..... to

Date..... to Signature of the Registering Authority

Notes:-(i)This shall be in the form of a book having sufficient pages for recording transfer of ownership, change of address, hire-purchase endorsement, cancellation of hire-purchase entries, alteration, suspension and cancellation of certificate of registration, etc. Such entries shall be duly numbered serially in chronological order date wise.(ii)Strike out whichever is inapplicable.(iii)Wherever transfer of ownership/change of address/note and cancellation of endorsement of any agreement is recorded, specimen signature of the registered owner and financier, as the case may be, shall be affixed, sealed and attested by the registering authority next to the recording, in such manner that part of impression of the seal or stamp and attestation shall fall upon the signature.(iv)For two-wheeler and cars, a book be provided without additional particulars

of the transport vehicle and trailer or semi-trailer.(v)For transport vehicles, a book can be provided without the column of renewal of registration.][FORM 23-A [Inserted by GSR 400(E), dated 31.5.2002 (w.e.f. 31.5.2002).](See rule 48)CERTIFICATE OF REGISTRATION (IN ELECTRONIC MEDIUM AS SMART CARD, ETC.)Particulars to be printed on the Visual Inspection Zone of Smart Card:CONTENTS OF VISUAL INSPECTION ZONECERTIFICATE OF REGISTRATION

1. Name of State Transport Department

2. Card Serial Number

3. Vehicle Registration Number

4. Registration Date (In dd-mm-yyyy)

5. Owner's Details:

5.1Name5.2Son/Wife/Daughter of5.3Address: Current Postal Address

5. [4 PAN No.....] [Substituted by G.S.R. 708(E), dated 30.8.2010.]

6. Vehicle's Details:

6.1Name of Manufacturer with Make6.2Colour6.3Fuel6.4Vehicle Class6.5Body Type6.6Seating Capacity6.7Standing Capacity6.8Date of Manufacture (In mm-yyyy)6.9Unladen Weight6.10Cubic Capacity6.11Wheel Base6.12Number of Cylinders6.13Owner Serial (Optional)6.14Chassis Number6.15[Engine number or motor number in the case of Battery Operated Vehicles] [Substituted by GSR 589(E), dated 16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).]

7. [Home State tax paid upto (in dd-mm-yyyy)] [Substituted by G.S.R. 386(E), dated 7.5.2010.]

8. Registration Validity (In dd-mm-yyyy)

9. Signature of Issuing Authority

10. Identification of Issuing Authority

CONTENTS OF MACHINE READABLE ZONE

11. Chip Serial Number

12. Owner Serial (No. of this the ownership has changed)

13. Tax Date (Date of Validity of Tax): dd-mm-yyyy

14. Registration Validity (In dd-mm-yyyy)

15. Hypothecation Details:

15.1Name of Financier15.2Address of Financier15.3Hypothecated from (In dd-mm-yyyy)15.4Hypothecated up to (In dd-mm-yyyy)

16. NOC Details:-(Future use)

16.1NOC Number16.2State to (Code only)16.3RTO to16.4NCRB Clearance Number16.5NOC Issue Date (In dd-mm-yyyy)

17. Insurance Details: (Future use)

17.1Name of Company17.2Cover note/Policy Number17.3Type of Insurance17.4Validity up to (In dd-mm-yyyy)

18. Pollution Under Control Details:-(Future use)

18.1Checking Centre (Code only)18.2Validity up to (In dd-mm-yyyy)

19. Tax Payment Details:

AmountFineExemption/Receipt NumberPayment Date (In dd-mm-yyyy)Valid from (In dd-mm-yyyy)Valid up to (In dd-mm-yyyy)Exemption (Y/N)

20. Fitness Details:

Validity (In dd-mm-yyyy)Inspecting OfficerLocation

21. Additional Information in respect of Transport Vehicle:-

Gross Vehicle Weight (In Kgs.)Number, Description and Size of TyresRegistered Axle WeightNumber of Semi-Trailers

22. Challan Details:-

Challan Number Accused Person (O-Owner, D-Driver, C-Conductor) Section (Code only) Challaning Officer Location Date and Time (In dd-mm-yyyy/hh:mm) Disposing Authority (R-RTO, C-Court) Disposal Date (In dd-mm-yyyy) Penalty Receipt Number

23. Permit Details:

Permit Number Type of Permit Validity from (In dd-mm-yyyy) Validity up to (In dd-mm-yyyy) Area of Operation Route from Route up to Stage 1 Stage 2 Stage 3

24. Permit Actions:

Action Code SUR/SUS/CAN From Date (In dd-mm-yyyy) Up to Date (In dd-mm-yyyy) Reason

25. All India Tourist Permit Details:-

From Date (In dd-mm-yyyy) Up to Date (In dd-mm-yyyy)

26. [Authorisation Details:

For Tourist Permit: State (Code only), Authorisation Number, Validity from (In dd-mm-yyyy), Validity upto (In dd-mm-yyyy), Bank Draft Amount Bank Draft Number Bank (Code only), Bank Draft Issue Date (In dd-mm-YYYY)..... For National Permit (valid for operation throughout the territory of India):- Authorisation Number, Validity from (In dd-mm-yyyy), Validity upto (In dd-mm-yyyy), Amount paid unique receipt number receipt date (In ddmm-yyyy), Bank (Code only) Branch]

27. Counter Signature Details:

Authorising Officer Validity from (In dd-mm-yyyy) Validity up to (In dd-mm-yyyy) Route from Route up to Stage 1 Stage 2 Stage 3

28. In case of Auto-rickshaw/Local Taxies:-

Meter Number Note:-(i) At the time of payment of next instalment of tax, the Issuing Authority shall issue a paper receipt stating that date of validity of tax paid has been extended from so and so date to so and so date. The receipt shall be duly signed by Designated Authority. Name of Issuing Authority shall also be clearly spelt out. The receipt shall be security printed watermark paper carrying such hologram as may be specified by the concerned State. Note:-(ii) In respect of articulated vehicle, additional information of trailer not required.][FORM 24] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][Substituted by Notification No. G.S.R. 386 (E) dated

7.5.2010 (w.e.f. 2.6.1989)][See rule 49]REGISTER OF MOTOR VEHICLE

| Description of registration of motor vehicle | Particulars of registered owner on registration/transfer of ownership/change of Address of motor vehicle | Particulars of agreement of hire-purchase, lease and hypothecation | Entries relating to the certificate of registration | Remarks | |
|--|--|--|--|--|---|
| Particulars | Details | Full Name, Son/wife/daughter of, Present Address | Specimen signature pasted and attested by Registering Authority with official seal affixed | Note and cancellation of an endorsement of such agreement with full name and address of the Financier, attested by Registering Authority | Specimen signature or thumb-impression of Financier, pasted and attested by Registering Authority |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1.Registration No.1. Registration No.2. Date of registration 3. Name of the owner son/wife/daughter of Full address (Permanent)(Temporary) 4. Dealers name and address 5. Particulars of previous registration number, viz.(a) The name of the Registering Authority (b) Registration Number assigned (c) Date of expiry of | | | | | |

registration(d)
Whether held
under HP/Lease &
Hypothecation(e)
If so, particulars
of Financier, etc.6.
The motor vehicle
is(a) new(b)
ex-army(c)
imported45[7.
Class of vehicle (if
motor cycle, with
gear or
withoutgear)]
[Substituted by
GSR 76(E), dated
31.1.2000 (w.e.f.
31.1.2000).]8.
Makers name9.
Type of body10.
Month and year of
manufacture11.
No. of
Cylinders12.
Classes No. Affix
pencil print and to
be attested by the
Registering
Authority13.[Engine
number or motor
number in the
case of Battery
Operated
Vehicles]
[Substituted by
GSR 589(E), dated
16.9.2005, for
'Engine
number'(w.e.f.
16.3.2006).]14.
Fuel used in
engine15. Horse
power16. Cubic
capacity17.

Makers

classification¹⁸.

Wheel base¹⁹.

Seating capacity
including

driver²⁰. Colour
or colours of body,
wings, front

end²¹. Unladen

weight²². Gross

vehicle weight(i)

as certified by the

manufacturer(ii)

as registered²³.

Additional

particulars in case
of transport

vehicle other than

motor cabs.¹ No.

description and

size of tyres,Front

axleRear axleAny

other axleTandem

axle.² Registered

axle weightFront

axle.....kg.Rear

axle.....kg.Any

other axle.....

kg.Tandem

axle..... kg.²⁴.

Additional

particulars of

alternatives or

additional trailer

or semi-trailers

registered with an

articulated

vehicle¹. Type of

body². Unladen

weight³. Number

and description

and size of tyre on

each axle⁴.

Registered axle

weight in respect
of each vehicle²⁵.

Insurance
certificate/Cover

Note

no.....dated.....

vehicle valid

from.....to.....

issued by.....

(Name and
address of the

insurance

company)²⁶. Rate

of motor vehicle

tax.²⁷ Validity of

registration

from..... to.....

renewal from.....

to²⁸.

Name and

designation of the

Inspecting Officer

who certified the

vehicle as fit for

registration²⁹.

Name and

designation and

signature of the

Registering

Authority

Note: Specimen signature of the registered owners and financiers pasted in columns 4 & 6, respectively, shall be attested with office seal by the Registering Authority in such a manner that the part of impression of seal or stamp and attestation shall fall upon each signature.] FORM 25 [See rule 52(1)] FORM OF APPLICATION FOR RENEWAL OF CERTIFICATE OF REGISTRATION OF A MOTOR VEHICLE, OTHER THAN A TRANSPORT VEHICLE To The Registering

Authority,.....I.....

hereby apply for the renewal of a trade certificate of registration which is attached, the particulars of which are as follows:

(a) Registered No.

(b) Date of issue

(c) Date of expiry

(d) Registering Authority by which the
certificate was issued/last renewed

My present address is..... If this address is not entered in the certificate of registration, I do/do not wish that it should be so entered. The renewal of the certificate has not been refused by any Registering Authority. I hereby declare that the certificate of registration has not been cancelled or suspended by any Registering Authority.

1. Class of vehicle
2. The motor vehicle was registered as
 - (a) A new vehicle
 - (b) Ex-army vehicle
 - (c) Imported vehicle
3. Type of body
4. Maker's name
5. Month and year of manufacture
6. Number of cylinders
7. Cubic capacity/Horse power
8. Maker's classification
9. Chassis No.-Affix pencil print

[Engine number or motor number in the case of Battery
10. Operated Vehicles]. [Substituted by GSR 589(E), dated

16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).]
11. Seating capacity (including driver)
12. Unladen weight
13. Fuel used

I enclose the certificate of insurance for perusal and return. I have paid the fee of Rs.....Date:.....[Signature or thumb-impression of the applicant] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] Note: The motor vehicle above described is not subject to an agreement of hire-purchase, lease or hypothecation. The vehicle is:*(i) Subject to hire-purchase agreement/lease agreement with.....*(i:) Subject to hypothecation in favour of....."Strike out whichever is inapplicable[Signature or thumb-impression of the registered owner] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][Specimen signature or thumb-impression of the registered owner:] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).]

1.

2.

3.

CERTIFICATE Inspected the vehicle-verified the chassis number and engine number. Certified that the particulars contained in the application and the corresponding particulars declared in the certificate of registration of the vehicle are true and that the vehicle complies with the requirements

of the Motor Vehicles Act, 1988, and the Rules made thereunder. Signature of the Inspecting Authority Name..... Designation..... [FORM 26]
 [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] [See rule 53] APPLICATION FOR THE ISSUE OF DUPLICATE CERTIFICATE OF REGISTRATION (To be made in duplicate if the vehicle is held under an agreement of hire-purchase/lease/hypothecation and in triplicate if the Original Registering Authority is different, the duplicate copy and the triplicate copy with the endorsement of the Registering Authority to be returned to the Financier and Registering Authority simultaneously on issue of duplicate certificate) To The Registering Authority..... The certificate of registration of my/our motor vehicle, the registration mark of which is..... has been lost/destroyed/completely written off/soiled/torn/mutilated in the following circumstances.....
 *I/We hereby declare that to the best of my/our knowledge the registration of the vehicle has not been suspended or cancelled under the provisions of the Act or Rules made thereunder and the circumstance, explained above are true. I/We do hereby apply for the issue of a duplicate certificate of registration. The written off/soiled/torn/mutilated Certificate of Registration is enclosed. The vehicle is not held under any agreement of hire-purchase/lease/hypothecation. The vehicle is also not supercharged and free from all encumbrances. I/We hereby declare that I/We on..... (date) have filed a complaint (copy enclosed) with the police about the loss of Certificate of Registration immediately after the loss has been noticed. Date:..... Signature/thumb-impression of Applicant *Strike out whichever is inapplicable. The vehicle is held under hire-purchase/lease/hypothecation agreement with..... and the "No Objection Certificate" has been granted/refused by the Financier hereunder: [Where "No Objection Certificate" is refused, applicant shall make a declaration as required under sub-section (8) of section 51. Signature or thumb-impression of the Owner Name..... Full address..... Date..... Note:-(1) Full particulars of the circumstances shall be furnished in the case of loss or destruction of the Registration Certificate. (2) Strike out whichever is inapplicable. CONSENT OF THE FINANCIER FOR GRANT OF "NO OBJECTION CERTIFICATE" UNDER SECTION 51(6) I/We being a party to an agreement of hire-purchase/lease/hypothecation in respect of motor vehicle specified above: (1) have "No Objection" in issue of the duplicate certificate of registration of the said vehicle. (2) have "Objection" in issue of the duplicate registration certificate of the said vehicle, for the reasons Given hereunder.....
 of the Financier Date..... OFFICE ENDORSEMENT Ref. Number..... Office of the..... A duplicate certificate of registration as requested above is issued with the note of agreement of hire purchase/lease/hypothecation on..... and is noted in the original registration records in Form 24. Signature of the Registering Authority Date..... To..... The Financier.....
 The Registering Authority..... (To be sent to both the above parties by registered post acknowledgement due) Specimen signature or thumb-impression of the Registered Owner and Financier are to be obtained in original application

for affixing and attestation by the Registering Authority with the Office seal in Forms 23 and 24 in such a manner that the part of impression of seal or a stamp and attestation shall fall upon each signature.

Specimen signature of the Financier Specimen signature of the Registered Owner

1.2.

1.2.

[FORM 27] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][See rule 54]APPLICATION FOR ASSIGNMENT OF NEW REGISTRATION MARK TO A MOTOR VEHICLE(To be made in triplicate if the vehicle is held under an agreement of

hire-purchase/lease/hypothecation and in duplicate copy and the triplicate copy with endorsement of the Registering Authority to be returned to the Financier and Original Registering Authority simultaneously, on the assignment of a new registration mark).ToThe Registering

Authority,.....I/We.....son/wife/daugh
of.....being the Registered Owner of Motor Vehicle

No..... bearing Chassis No..... [Engine number or motor number in the case of Battery Operated Vehicles] [Substituted by GSR 589(E), dated 16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).] Type of vehicle..... Registered in the State

of..... hereby declare that I/We have, since the..... day

of..... kept the said motor vehicle in this State and hereby apply for the assignment of a new registration mark to the said motor vehicle.I/We hereby declare that the registration is valid up to..... and it has not been suspended or

cancelled under the provisions of this Act.I/We enclose the certificate of registration and the certificate of fitness (*) of this motor vehicle.I/We enclose a "No Objection Certificate" from the Registering Authority.If the "No Objection Certificate" from the Registering Authority is not

enclosed the applicant should file along with this application a declaration as required under the first proviso to sub-section (1) of section 47.*The vehicle is not subject to an agreement of hire-purchase/lease/hypothecation.The vehicle is subject to an agreement of

hire-purchase/lease/hypothecation with..... and the NOC has been granted/refused by the Financier thereunder.If "No Objection Certificate" has been refused by the Financier, the applicant should file along with this application a declaration as required under

sub-section (8) of section 51.Date..... Signature or thumb-impression of the

Applicant*Strike out whichever is inapplicable.CONSENT OF THE FINANCIER FOR GRANT OF "NO OBJECTIONCERTIFICATE" UNDER SECTION 51(6)I/We, being a party to an agreement of hire-purchase/lease/hypothecation in respect of motor vehicle specified above:(1)have "No

Objection" in assigning the new Registration mark to the said Vehicle(2)have "Objection in assigning the new Registration mark to the said Vehicle for the reasons given hereunder.....

Signature of the FinancierOFFICE ENDORSEMENTRef. Number.....Office of the.....The Vehicle

No..... on removal to this State has been assigned a new Registration mark..... (here enter the

Registration mark).Date.....Signature of the Registering AuthorityToThe

Financier.....
Registering

Authority.....

be sent to both the above parties by registered post acknowledgement due).[FORM 28 [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][See rules 54,58(1), (3) and (4)]APPLICATION AND GRANT OF NO OBJECTION CERTIFICATE(To be made in quadruplicate if the vehicle is held under an agreement of hire-purchase/lease/hypothecation and in duplicate copy, the triplicate copy and the quadruplicate copy with the endorsement of the Registering Authority to be returned to the Registered owner of the vehicle, the Registering Authority in whose jurisdiction the vehicle is to be removed and the Financier simultaneously on grant/refusal of a 'No Objection Certificate')PART I-APPLICATIONToThe Registering Authority,.....I/We intend to transfer the vehicle to the jurisdiction of the Registering AuthorityI/We intend to sell the vehicle to Shri/Smt./Kumari..... who resides in the jurisdiction of the Registering Authority..... of I/We, therefore, request for the issue of a No Objection Certificate for my/our vehicle, the particulars of which are furnished below:

1. Name and address
2. Son/wife/daughter of
3. Registration number of the vehicle
4. Class of vehicle
5. Registering Authority which originally registered the vehicle
- 53[Engine number or motor number in the case of
6. Battery Operated Vehicles] [Substituted by GSR 589(E),
dated 16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).]
7. Chassis number(Affix also pencil print)
8. Period of stay in the State
9. Period up to which motor vehicle tax has been paid
10. Whether any demand for tax is pending, if so, give details
11. Whether the vehicle is involved in any theft cases, if so,
give details
- Whether any action under section 53, 54 or 55 of the
12. Motor Vehicles Act, 1988 is pending before any
- Registering Authority or other prescribed authority, if so,
give details
13. Whether the vehicle is involved in any case of transport of
prohibited goods, if so, give details
- Whether the vehicle is held under an agreement of
14. hire-purchase/lease/hypothecation, if so, give full name
and address of the Financier]

We solemnly declare that the above statement is true.

Date.....Signature or thumb-impression of Registered Owner

Part 11 – CONSENT OF THE FINANCIERS IN THE CASE OF MOTOR

VEHICLE SUBJECT TO AN AGREEMENT/We being a party to an agreement of the hire-purchase/lease/hypothecation in respect of the above said vehicle hereby

1. Give consent to issue the No Objection Certificate for the said vehicle only for the purpose referred above.

2. Refuse to give consent for issue of No Objection Certificate for the said vehicle due to the reasons furnished hereunder:

.....
Signature of the Financier

Part III – OFFICE ENDORSEMENT

(GRANT/REFUSAL OF "NO OBJECTION CERTIFICATE" UNDER SECTION 48(3) OF MOTOR VEHICLES ACT, 1988)(1)No Objection Certificate in respect of the vehicle, the detailed particulars whereof are recorded over above is hereby granted under section 48(3) of the Motor Vehicles Act, 1988 (valid for use at the Registering Authority, on whom it is issued)(2)No Objection Certificate in respect of the motor vehicle, the detailed particulars whereof recorded over above is hereby refused under section 48(3) of the Motor Vehicles Act, 1988, for the reasons recorded as under:.....Date.....Sign
with seal of Registering AuthorityAddress....."Strike out
whichever is inapplicable.ToThe Registered Owner.....The
Financier.....][FORM 29] [Substituted by GSR 338(E), dated
26.3.1993 (w.e.f. 26.3.1993).][See rule 55(1)]NOTICE OF TRANSFER OF OWNERSHIP OF A
MOTOR VEHICLE(To be made in duplicate and the duplicate copy with the endorsement of the
Registering Authority to be returned to the transferor immediately on making entries of transfer of
ownership in Certificate of Registration and Form 24).ToThe Registering
Authority..... (in whose jurisdiction the Transferee resides)
I/We..... resident of..... have on the.....day
of the year..... sold and delivered my/our Vehicle No.....
make.....Chassis No..... [Engine number or motor number in the case of
Battery Operated Vehicles] [Substituted by GSR 589(E), dated 16.9.2005, for 'Engine number'(w.e.f.
16.3.2006).].....
to Shri/Smt..... (Name) son/wife/daughter of.....
residing at..... (House No./Street/Village/Town/Dist. and State) under an
agreement of hire-purchase/lease/hypothecation
with..... The Registration
Certificate and Insurance Certificate have been handed over to him/her/them.To the best of my/our

knowledge and belief the vehicle is not superdary and free from all encumbrances and information furnished is true. I/We undertake to hold my/our self responsible for any inaccuracy or suppression of information. Signature of the Financier (to give his consent) Date..... Signature or thumb-impression of the Registered Owner (Transferor) Date..... I/We..... (Transferee) Copy to: The Registering Authority..... in whose jurisdiction the transferor resides. Note:- To be sent to the Registering Authority by registered post acknowledgement due..... OFFICE ENDORSEMENT Ref. No..... Office of the..... The ownership of the vehicle has been transferred to the name of..... with the note of the above said agreement with effect from..... (date) Date..... Signature of the Registering Authority with Office Seal. *Strike out whichever is inapplicable. [FORM 30] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993)]. [See rule 55(2) and (3)] APPLICATION FOR INTIMATION AND TRANSFER OF OWNERSHIP OF A MOTOR VEHICLE (To be made in duplicate if the vehicle is held under an agreement of hire-purchase/lease/hypothecation. The duplicate copy with the endorsement of the Registering Authority to be returned to the Financier simultaneously on making the entry of the transfer of ownership in the certificate of registration and registration record in Form 24). To The Registering Authority.....

Part I – FOR THE USE OF THE TRANSFEROR

Name of the Transferor..... son/wife/daughter of..... Full address..... I/We hereby, declare that I/We have on this..... day of the year..... sold my/our motor vehicle bearing Registration mark..... to Shri/Smt..... son/wife/daughter of..... residing at..... (full address) and handed over the Certificate of Registration and the Certificate of Insurance to him/her/them. I/We hereby declare that to the best of my/our knowledge the Certificate of Registration of the vehicle has not been suspended* or cancelled. *I enclose the "No objection certificate" issued by the Registering Authority. **If the "No objection certificate" issued from the Registering Authority is not enclosed, the transferor should file along with this application a declaration as required under sub-section (1) of section 50. Date..... Signature or thumb-impression of the Transferor *Details of suspension or cancellation. **Strike out whichever is inapplicable.

Part II – FOR THE USE OF THE TRANSFEEE

Name of the Transferee..... son/wife/daughter of..... Age..... Full address..... (Proof of address to be enclosed). I, hereby declare that I/We have on

this..... day of the
year..... purchased the motor vehicle bearing registration
number..... from..... (name and full
address) and request that necessary entries regarding the transfer of ownership of the vehicle in
my/our case may be recorded in the certificate of registration/certificate of fitness of the vehicle,
which is enclosed. The Certificate of Insurance is also enclosed. To the best of my knowledge and
belief I/We have not suppressed any facts and information furnished is true. The vehicle is not
superdari and free from all encumbrances. I/We undertake to hold myself/ourselves responsible for
any inaccuracy of the information. Date..... Signature or thumb-impression of the
Transferee
**CONSENT OF THE FINANCIER IN THE CASE OF MOTOR VEHICLE SUBJECT TO AN
AGREEMENT OF HIRE-PURCHASE/LEASE/HYPOTHECATION** I/We being a party to an
agreement of hire-purchase/lease/hypothecation in respect of motor vehicle specified above, give
consent to the transfer of ownership of the said motor vehicle in the name of the Transferee named
above, with whom I/We have entered into an agreement of hire-purchase/lease/hypothecation. (Full
name and address of the Financier) Signature of the Financier Date.....
Date..... **OFFICE ENDORSEMENT** Ref. No..... Office of
the..... The transfer of ownership of vehicle under
continuation of an endorsement of hire-purchase/lease/hypothecation agreement has been
recorded with effect from..... in the Registration Certificate of the
vehicle..... and in the Registration record of this
office in Form 24. Date..... Signature of the Registering Authority
To The
Transferor
..... The
Financier
..... (To be
sent to both the above parties by registered post acknowledgement due) Specimen signature or
thumb-impression of the Registered Owner and the Financier are to be obtained in the original
application for affixing and attestation by the Registering Authority with the office seal in Forms 23
and 24, in such manner that the part of impression of seal or stamp and attestation shall fall upon
each signature.

Specimen signature of the Financier Specimen signature of the Registered Owner

- | | |
|----|----|
| 1. | 1. |
| 2. | 2. |

[FORM 31] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993)] [See rule
56(2)] **APPLICATION FOR TRANSFER OF OWNERSHIP IN THE NAME OF THE PERSON
SUCCEEDING TO THE POSSESSION OF THE VEHICLE** (To be made in duplicate if the vehicle is
held under an agreement of hire-purchase/lease/hypothecation and duplicate copy with the an
endorsement of the Registering Authority to be returned to the Financier simultaneously on making
the entry of Transfer of ownership in the certificate of registration and office record in Form
24). To The Registering Authority,.....

- | | |
|-----------------------------|-------|
| 1. Vehicle Registration No. | ..... |
| Make and model | ..... |

make..... model..... type of vehicle. in public auction conducted by or on behalf of the Government.I/We enclose the documents required to be submitted by me/us under sub-rule (1) of rule 57.The ownership of the motor vehicle may kindly be transferred to my/our name.Date.....[Signature or thumb-impression of the applicant] [Substituted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).][FORM 33] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][See rule 59]INTIMATION OF CHANGE OF ADDRESS FOR RECORDING IN THE CERTIFICATE OF REGISTRATION AND OFFICE RECORDS(To be made in triplicate if the vehicle is held under an agreement of hire-purchase/lease/hypothecation, the duplicate copy and the triplicate copy with the endorsement of the Registering Authority to be returned to the Financier and the Registering Authority (from whose jurisdiction the vehicle is removed) simultaneously, on making the entry of change of address in the Certificate of Registration and Form 24).ToTHE REGISTERING AUTHORITY,.....I/We..... Son/wife/daughter of..... (full address)Registered Owner of motor vehicle No..... have ceased to reside, do not have the place of business at the address recorded in the Certificate of Registration with effect from..... The present address is given below (evidences to be enclosed)..... vehicle is not held under any agreement of hire-purchase/lease/hypothecation.The vehicle is held under an agreement of hire-purchase/lease/hypothecation with..... certificate of registration is enclosed. I/We request that the change of address may be recorded in the certificate of registration and Form 24.Date.....Signature or thumb-impression of theRegistered Owner of the vehicle*Strike out whichever is inapplicable.CONSENT OF THE FINANCIER IN THE CASE OF MOTOR VEHICLE HELD UNDER AN AGREEMENTI/We being a party to an agreement of hire-purchase/lease/hypothecation in respect of the above said vehicle, hereby:

1. Give consent for effecting the above change of address with the note of an agreement in my/our favour in Forms 23 and 24 by the Registering Authority.

2. Refuse to give consent for effecting the above change of address by the Registering Authority, due to the reasons furnished hereunder:

..... of the FinancierOFFICE ENDORSEMENTRef. Number..... Office of the.....The above change of address has been entered with the note of agreement of hire-purchase/lease/hypothecation in favour of the Financier in the certificate of registration and in Form 24.Date.....Signature of the Registering AuthorityToThe Financier.....The Registering Authority.....(To be sent to both the parties by registered post acknowledgement due)Specimen signature or

thumb-impression of the Registered Owner and the Financier are to be obtained in original application for affixing and attestation by the Registering Authority with official seal in Forms 23 and 24 in such a manner that the part of impression of the seal or a stamp and attestation shall fall upon each signature:

Specimen signature of the Financier Specimen signature of the Registered Owner

- | | |
|----|----|
| 1. | 1. |
| 2. | 2. |

[FORM 34] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][See rule 60]APPLICATION FOR MAKING AN ENTRY OF AN AGREEMENT OF HIRE-PURCHASE/LEASE/HYPOTHECATION SUBSEQUENT TO REGISTRATION(To be made in duplicate and in triplicate where the Original Authority is different, the duplicate copy and the triplicate copy with the endorsement of the Registering Authority to be returned to the Financier and the Registering Authority simultaneously on making the entry in the certificate of registration and Form 24).ToThe Registering Authority,.....The motor vehicle bearing registration number..... is the subject of an agreement of hire-purchase/lease/hypothecation between..... the registered owner/person to be registered as owner

*and.....
the name and full address of the financier)We request that an entry of the agreement be made in the certificate of registration and the relevant records in your office.The certificate of registration together with the fee is

enclosed.Date.....Date.....Signature or thumb-impression of the Registered ownerSignature of the Financier*Strike out whichever is inapplicable.OFFICE ENDORSEMENTRef. Number..... Office of the.....The entry of the agreement of hire-purchase/lease/hypothecation as requested above is recorded in this office registration record in Form 24 and certificate of registration on.....
(date).Date.....Signature of the Registering AuthorityToThe Financier.....

Registering
Authority.....

be sent to both the above parties by registered post acknowledgement due)Specimen signature or thumb-impression of the Registered Owner and the Financier are to be obtained in original application for affixing and attestation by the Registering Authority with his office seal in Forms 23 and 24 in such a manner that the part of impression of the seal or a stamp and attestation shall fall upon each signature:

Specimen signature of the Financier Specimen signature of the Registered Owner

- | | |
|----|-----|
| 1. | 1. |
| 2. | 2.] |

[FORM 35] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][See rule 61(1)]NOTICE OF TERMINATION OF AN AGREEMENT OF HIRE-PURCHASE/LEASE/HYPOTHECATION(To be made in duplicate and in triplicate where the original Registering Authority is different, the

duplicate copy and the triplicate copy with the endorsement of the Registering Authority to be returned to the Financier and the Registering Authority simultaneously on making the termination entry in the certificate of registration and Form 24). To The Registering

Authority,..... We hereby declare that the agreement of hire-purchase/lease/hypothecation entered into between us has been terminated. We, therefore, request that the note endorsed in the certificate of registration of vehicle No..... in respect of the said agreement between us be cancelled. The certificate of registration together with the fee is enclosed. Date..... Signature or thumb-impression of the Registered Owner Date..... Signature of the Financier with official seal and address *Strike out whichever is inapplicable. OFFICE ENDORSEMENT Ref. Number..... Office of the..... The cancellation of the entry of an agreement as requested above is recorded in this office registration record in Form 24 and registration certificate on..... (date). Date..... Signature of the Registering Authority To The

Financier.....

Registering

Authority.....

be sent to both the above parties by registered post acknowledgement due) Specimen signature or thumb-impression of the Registered Owner and the Financier are to be obtained in original application for affixing and attestation by the Registering Authority with his office seal in Forms 23 and 24 in such a manner that the part of impression of seal or stamp and attestation shall fall upon each signature. FORM 36 [See rule 61(2)] APPLICATION FOR ISSUE OF A FRESH

CERTIFICATE OF REGISTRATION IN THE NAME OF THE FINANCIER To The Registering Authority,..... I/We.....

possession of motor vehicle no..... make.....

model..... owing to the default of the registered

owner..... (name).....

address) under the provisions of the agreement of hire-purchase/lease/hypothecation: *(1) The certificate of registration of the said vehicle is surrendered herewith. *(2) The registered owner has refused to deliver the certificate of registration to me/us. *(3) The registered owner is

absconding. I/We request you to cancel the certificate and issue a fresh certificate of registration in my/our name. I/We enclose a fee of Rs..... Date..... Signature of the Financier Specimen signatures of the Financier:

1.

.....

2.

..... Copy to the original registering authority *Strike out whichever is inapplicable. [FORM 37] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] [See rule 61(3)] NOTICE TO THE REGISTERED OWNER OF THE MOTOR VEHICLE TO SURRENDER THE CERTIFICATE OF REGISTRATION FOR CANCELLATION AND ISSUE OF FRESH

REGISTRATION CERTIFICATE IN THE NAME OF THE FINANCIER (To be made in duplicate and duplicate copy to be sent to the Financier simultaneously on issue of notice) Office of the Registering Authority.....Ref.

Number.....Date.....Shri/Smt./Kumari.....

(Regd. Owner) is/are hereby informed that..... (Financier) has/have reported that he/they have taken possession of the motor vehicle bearing registration

number..... covered by an agreement of hire-purchase/lease/hypothecation, owing to your default under the provisions of the said agreement and that*(1) You have refused to deliver the certificate of registration to him/her/them.* (2) You have absconded. He/she/they have requested to cancel the certificate of registration and issue a fresh certificate of registration in his/her/their name. You are, therefore, directed to surrender the certificate of registration of the said motor vehicle which has been retained by you in spite of your having lost the possession and thereby the ownership of the motor vehicle under section 2(30) and to send your representation in this regard, if any, to this office within seven days from the date of receipt of this notice by you, failing which a fresh certificate of registration will be issued in the name of the Financier, cancelling the certificate of registration held by you, in accordance with section 51(5). Date..... Signature of the Registering Authority*Strike out whichever is inapplicable To The

Financier.....

be sent by registered post acknowledgement due) FORM 38 [See rule 62(1)] CERTIFICATE OF FITNESS (APPLICABLE IN THE CASE OF TRANSPORT VEHICLES ONLY) Vehicle

No..... is certified as complying with the provisions of the Motor Vehicles Act, 1988, and the Rules made thereunder. The certificate will expire

on..... Date..... 20..... Signature and designation of Inspecting Authority or holder of the letter of authority of the authorized testing station. The certificate of fitness is hereby renewed: - From..... to..... 20..... From..... to..... 20..... From..... to..... 20.....

Signature of Inspecting Authority or the holder of the letter of authority of the authorized testing station. [Form 38A] [Inserted by Notification No. G.S.R. 1096 (E), dated 28.11.2016 (w.e.f. 2.6.1989).] [See rule 62(1)] Report of inspection

conducted on a transport vehicle by an Inspecting Officer or authorised testing station, other than the Inspecting Officer in the office of the registering authority Vehicle bearing registration number

..... has been inspected by the undersigned today and it is certified that it complies with the provisions of the Motor Vehicles Act, 1988 (59 of 1988) and the Central Motor Vehicles Rules, 1989 and is fit for issue of a Fitness Certificate by the registering authority. This report will be

uploaded at the portal <http://parivahan.gov.in/vahan> and the inspection report signed under my hand and seal will be sent to the registering authority by speed post either today or on the next working day for processing the application for issue of certificate of fitness in respect of the vehicle

by the registering authority. Date Signature, name and designation of the Inspecting

Officer or Sign of holder of Place Authority letter of authorised testing station Road

Transport Office in which posted. - District - State - Official seal. FORM 39 [See rule 63(1) and

(5)] FORM OF LETTER OF AUTHORITY ISSUED TO AN AUTHORISED TESTING STATION Letter

of authority No..... Dated..... The letter of authority is hereby granted to..... (Name and full address) for

the establishment of a testing station under sub-section (2) of section 56 of the Act at the

premises.....
of the premises in full)for the purpose of issue and renewal of certificate of fitness to transport vehicles, subject to the provisions of the Motor Vehicles Act, 1988, and the Central Motor Vehicles Rules, 1989, made thereunder.This letter of authority is valid from.....
to.....Date.....Registering AuthorityThis letter of authority is renewed from.....
to.....Date.....FORM 40[See rule 63(2)]APPLICATION FORM FOR GRANT OR RENEWAL OF LETTER OF AUTHORITYToThe Registering Authority,.....I/We.....
address..... hereby submit the following information, namely:

1. Name of the applicant
2. Son/wife/daughter of
3. Address(proof to been closed)
4. Qualification of the applicant
5. Experience in automobile workshop
6. Whether involved/connected directly or indirectly in transport business
7. Machinery and equipment
8. Staff engaged in different cadres:-
- (i) Manager
- (ii) Foreman
- (iii) Mechanic
- (iv) Helpers
- Particulars of a person as required under
9. clause (a)of sub-rule (3) of rule 63 of the Central Motor Vehicles Rules, 1989
- (a) Name
- (b) Age
- (c) Qualification in automobile engineering
- (d) Actual experience in automobile work shop
- (e) Name of firm with full address
- (f) Driving experience of various types of transport vehicles:-
- (i) Driving license number
- (ii) Issued by
- (iii) Date of issue
- (iv) Type of vehicle

- (v) Period of validity of driving license
- (vi) Endorsement on driving license, if any
- 10. Proof of land owned by or hired by the applicant
- 11. Whether garage is equipped with following facilities:
- (i) Water supply
- (ii) Electricity
- (iii) Toilet
- (iv) Rest room
- 12. Sources of finance
- If application is for the renewal of letter
- 13. of authority, furnish following particulars, namely:
- (i) Number of existing letter of authority
- (ii) Date of issue
- (iii) Period of validity
- (iv) If application is not submitted within time, state the reasons
- (v) Whether letter of authority suspended/cancelled/surrendered earlier. Furnish details

14. I hereby solemnly declare that the information given above is true and correct. Further, I hereby declare that I shall abide by the rules, regulations and conditions attached to the letter of authority and as prescribed in the Motor Vehicles Act, 1988, and the Central Motor Vehicles Rules, 1989.

Dated.....Signature of the ApplicantFORM 41[See rule 75]STATE REGISTER OF MOTOR VEHICLES

- 1. Registration No.
- 2. Previous registration number, if any
- 3. Whether the motor vehicle is-
- (a) New vehicle
- (b) Imported vehicle
- (c) Ex-army vehicle
- 4. Maker's name
- 5. Year of manufacture

- 65[Engine number or motor number in the case of Battery
 6. Operated Vehicles] [Substituted by GSR 589(E), dated
 16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).]
 7. Chassis No
 8. Number of cylinders
 9. Cubic capacity/horse power
 10. Type of fuel used
 11. Class of motor vehicle
 12. Name and full address of the registered owner
 13. Seating capacity
 14. Gross vehicle weight
 15. Unladen weight

FORM 42[See rule 76(1)]FORM OF APPLICATION FOR REGISTRATION OF MOTOR VEHICLE
 BY OR ON BEHALF OF A DIPLOMATIC/CONSULAR OFFICER(To be forwarded through the
 competent authority in triplicate)ToThe Registering Authority,.....

- Full name, designation and address of the diplomatic
 1. officer/consular officer/full name, address and station of
 the diplomatic mission/consular office or post
 2. Age of the person to be registered as registered owner
 Name and address of the person from whom the vehicle
 was purchased/name of the port through which the vehicle
 3. was imported/name of the person or company from whose
 bonded stocks the vehicle was purchased and the name of
 the port
 4. Country from which imported
 5. Class of vehicle
 6. Type of body
 7. Maker's name
 8. Year of manufacture
 9. Number of cylinders
 10. Horse power
 11. Maker's classification or, if not known, wheel base
 12. Chassis No.

- [Engine number or motor number in the case of Battery
 13. Operated Vehicles] [Substituted by GSR 589(E), dated
 16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).]
 14. Seating capacity (including driver)
 15. Unladen weight
 16. Particulars of previous registration and registered number

(if any)

- I hereby declare that the vehicle has not been registered in
 17. any other State in India
18. Colour or colours of body, wings and front end
19. Number, description and size of tyres:-
- (a)Front axle
- (b)Rear axle
- (c)Any other axle
20. Maximum laden weight
21. Maximum axle weight (To be furnished in the case of heavy
 motor vehicles only):-
- (a)Front axle
- (b)Rear axle
- (c)Any other axle

The above particulars are to be filled in for a rigid frame motor vehicle of tow or more
 axles. Signature of the Applicant For use in the Ministry of External Affairs (Protocol Division) or in
 the office of the Chief Secretary of the State Government concerned Certified
 that..... (name and designation) is a diplomatic officer/consular officer
 recognised by the Government of India and that he/she is not entitled to exemption from payment
 of registration fees. Place..... Date..... Signature of the
 Officer..... Designation..... FORM 43[See rule
 76(4)] CERTIFICATE OF REGISTRATION OF A MOTOR VEHICLE BELONGING TO A
 DIPLOMATIC OR CONSULAR OFFICER

Registered No.....

Brief description of vehicle, (e.g., Fiat 1100 or Hindustan Landmaster car, Willys jeeps,
 Dodge/Desoto/Gadga petrol/diesel truck, Leyland 36 seater diesel bus, trailer, etc.)

Full name, designation and address of the diplomatic officer/consular officer/full name, address
 and Station of the Diplomatic Mission/Consular officer or
 post..... Transferred to..... Signature of
 the Registering Authority Detailed description:

1. Class of vehicle
2. Maker's name
3. Type of body
4. Year of manufacture
5. Number of cylinders
6. Chassis number
7. [Engine number or motor number in
 the case of Battery Operated
 Vehicles], [Substituted by GSR
 589(E), dated 16.9.2005, for 'Engine

number'(w.e.f. 16.3.2006).]

8. Horse power
9. Maker's classification, or if not known, wheel base
10. Seating capacity (including driver)
11. Unladen weight

ADDITIONAL
PARTICULARS IN THE
CASE OF ALL
TRANSPORT VEHICLES

12. Colour or colours of body, wings and front end
13. Registered laden weight
14. Number, description and size of tyres-
(a)Front axle
(b)Rear axle
(c)Any other axle
15. Registered axle weight (in the case of heavy motor vehicles only):-
(a)Front axle
(b)Rear axle
(c)Any other axle

Date.....20....(Signature of Registering Authority)FORM 44[See rule 78(1)]INTIMATION OF CHANGE OF STATE OF RESIDENCE AND APPLICATION FOR ASSIGNMENT OF FRESH REGISTRATION MARK BY OR ON BEHALF OF A DIPLOMATIC OR CONSULAR OFFICER(To be submitted in triplicate)ToThe Registering Authority,.....I..... that(Name and designation)..... being the owner of.....motor vehicle No..... registered at..... under section 42 of the Motor Vehicles Act, 1988 hereby declare that I have, since the..... day of.....19..... kept the said vehicle in the State of..... and hereby apply for assignment to the motor vehicle of a fresh registration mark.I enclose the certificate of registration and the certificate of fitness* of the vehicle.Date..... Signature of the Owner*Strike out the words "and the certificate of fitness" if inapplicable.For use in the Ministry of External Affairs (Protocol Division) or in theOffice of the Chief Secretary of the State Government concernedCertified that.....(Name and designation)continues to hold the status of a Diplomatic Officer/Consular Officer.He/She is at present stationed

at.....Place.....

Designation.....Date.....Signature of the OfficerFORM 45[See rule 82(1)]APPLICATION FOR GRANT OF PERMIT IN RESPECT OF TOURIST VEHICLEToThe State Transport Authority,.....I/We, the undersigned hereby apply for the grant of permit for tourist vehicle valid throughout the territory of India/in the State of.....(specify the names of the States)

1. Name of the applicant (s) in full
2. Status of the applicant, whether individual, company or partnership firm, co-operative society, etc
3. Name of father or husband(in case of individual) and in case of firm or company the particulars of managing partner or managing director, as the case may be
4. Full address (to be supported by attested copy of ration card, electricity bill, etc., in the case of individual or any other valid documentary proof of the satisfaction of State Transport Authority and in case of company or firm, certified copy of the Memorandum of Association or copy of partnership deed)
5. (a) Whether the applicant himself intends to drive the vehicle?
- (b) If so,whether the applicant-
- (i)Holds heavy passenger motor vehicle driving license
- (ii)The number, date and validity period of driving license
- (iii)Name and address of the licensing authority
6. Registration certificate alongwith the date of first registration, insurance certificate number
7. Details of other permits, if any, held in respect of a particular vehicle
8. Details of total number of tourist permits held by the applicant
9. Type of vehicle
10. Make of motor vehicle
- Particulars of convictions/suspensions/cancellation, if any, during the past three years in respect of the vehicle/permit held by the applicant (s)
11. I/We forward herewith the certificate of registration of the vehicle or I/We will produce the certificate of registration of the vehicle before the permits are issued
12. I/We hereby declare that the above statements are true and that I/We am/are resident(s) of this State having

principal place of business in this State at

14. I/We have paid the fee of Rs.....

Date.....Signature or thumb-impression of the ApplicantFORM 46[See rules

83(1) and 87(1)]FORM OF APPLICATION FOR GRANT OF AUTHORISATION FOR TOURIST
PERMIT OR NATIONAL PERMITToThe Regional/State Transport

Authority,.....I/We the undersigned hereby apply for the
grant of authorisation valid throughout the territory of India/in the State

of.....

(specify the names of the States)

1. Name of the applicant(s) in full
2. Son/wife/daughter of
3. Address
4. Registration mark and year of manufacture and date of registration of the motor vehicle
5. [Engine number or motor number in the case of Battery Operated Vehicles]
6. Chassis number of the motor vehicle
7. Permit number, the authority which had issued the permit and date of issue and date of expiry of the permit
8. Unladen weight of the motor vehicle
9. Gross vehicle weight of the motor vehicle
10. Pay load of the motor vehicle (seating capacity in the case of tourist vehicle)
11. Period for which the authorization is

12. sought for
I/We enclose the
certificate of
registration and
permit of the vehicle

68[***] [Item
12-A omitted by
G.S.R. 76(E),
dated 31.1.2000
(w.e.f. 31.1.2000).
Earlier item 12-A
was inserted by
G.S.R. 684(e),
dated
5.10.1999(w.e.f.
22.10.1999).]

13. [[Substituted
by G.S.R 386(E),
dated 7.5.2010.]

(a) For Tourist
Permit

I/We enclose bank
draft (S) as
described hereunder
towards payment of
the authorization fee
(in case of tourist
permit)

| Sl.No. | Name of the States | Amount paid | Particulars of bank draft(s) and date | Date of payment |
|--------|--------------------|-------------|--|--------------------|
| 1 | 2 | 3 | 4 | 5 |

(b) For National
Permit

I/We enclose the
receipt towards
payment of Rs.
15000/-
as consolidated fee
for National Permit]

FORM 47[See rules 83(2) and 87(2)]AUTHORISATION FOR TOURIST PERMIT OR NATIONAL
PERMIT No.....Office of the Secretary, Regional/State Transport

Authority Authorisation No.....Dated.....This authorisation is valid throughout the territory of India/in the State(s) of:

- 1..... 2.....
- 3..... 4.....
- 5..... 6.....
- 7..... 8.....
- 9..... 10.....

(Here write the names of the States applicable)

1. Name in full and complete address of holder of the permit
2. Registration mark of the motor vehicle and make Year of manufacture
3. Year of manufacture
4. [Engine number or motor number in the case of Battery Operated Vehicles] [Substituted by GSR 589(E), dated 16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).]
5. Chassis number of the motor vehicle
6. Permit number of the motor vehicle
7. Name of the permit issuing authority
8. Date of expiry of the permit
9. Gross vehicle weight of the motor vehicle
10. Unladen weight of the motor vehicle
11. Seating capacity in the case of tourist vehicle
12. Period of validity of the authorisation From.....to.....
13. [[Inserted by The authorization for the following Notification No. G.S.R. State (s) is subject to payment of 76(E), dated 31.1.2000 taxes by their permit holder to the (w.e.f. 2.6.1989).] respective State(s)
1.
2.
3.
4.]

Signature and designation with seal of theTransport Authority[Certificate of payment of composite fee/taxes [Substituted by G.S.R. 386(E), dated 7.5.2010.]

| Sl No. | Name of the States for which payment made | Amount paid Rs.P. | No. and date of bank draft and name of bank | Date of receipt of bank draft | Payable to | Period for which paid | Registration mark of the vehicle | Signature and seal of the authority |
|--------|---|-------------------|---|-------------------------------|------------|-----------------------|----------------------------------|-------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Certified that the National Permit holder has paid the consolidated fee of Rs. 15,000 vide receipt numberdated.....]Signature and seal of the Transport Authority[Note:-This Form shall be security printed watermark paper and shall carry such hologram emblem, as may be specified by the State Government.] [Inserted by G.S.R. 400(E), dated 31.5.2002 (w.e.f.

31.5.2002).]Dated.....Signature or thumb-impression of Applicant(s)*Strike out whichever is inapplicable.FORM 48[See rule 86]APPLICATION FOR THE GRANT OF NATIONAL PERMITToThe Regional/State Transport

Authority,.....I/We, the undersigned, hereby apply for the grant of national permit valid throughout the territory of India/in the State

of.....(here write the names of the States desired)

1. Name of the applicant (s) in full
2. Status of the applicant, whether individual, company or partnership firm, co-operative society, etc.
Name of father or husband(in case of individual) and in
3. case of company or firm the particulars of managing partner of managing director, as the case may be
Full address (to be supported by attested copy of ration card, electricity bill, etc. in case of individual or any other valid documentary proof to the satisfaction of the State
4. Transport Authority/Regional Transport Authority and in case of company or firm, the certified copy of the Memorandum of Association or copy of the deed of partnership, as the case may be)
5. (a) Whether the applicant himself intends to drive the vehicle?
(b)(i) If so, whether the applicant holds heavy goods vehicle driving license
(ii) The number, date and validity period of the driving license
(iii) Name and address of the licensing authority
6. Registration certificate alongwith the date of first registration, insurance certificate
7. Details of any other permits if held in respect of a particular vehicle

8. Details of number of national permits held by the applicant
9. Type of vehicle, whether two-axle truck or articulated vehicle or multi-axle vehicle or tractor-trailer combination
10. Make of motor vehicle
11. Particulars of convictions/suspensions/cancellation, if any, during the past three years in respect of the vehicle/permit held by the applicant (s)
12. I/We forward herewith the certificate of registration of the vehicle or I/We will produce the certificate of registration of the vehicle before the permits are issued
13. I/We hereby declare that the above statements are true and that I/We am/are the resident(s) of this State having principal place of business in this State at
14. I/We have paid the fee of Rs.....

Date.....Signature or thumb-impression of the Applicant[*****] [Form 49 omitted by G.S.R. 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).]FORM 50[See rule 90(3)]BILL OF LADINGBill No.....Dated.....

Name and address of the national permit holder

Registration number of the motor vehicle

Dated.....

Name of the consignor

Name of the consignee

Point of origin

Point of destination

| Number of articles | Description of goods | Kilograms | Freight | Freight | Total |
|--------------------|----------------------|-----------|---------|---------|-------|
| | | | charges | charges | |
| | | | paid | to pay | |
| | | | Rs.P. | Rs.P. | |

| | | | |

Bill

No.....Dated.....Received.....

No.....)Signature of ConsigneeSignature of the CarrierSignature of Consignor*At carrier's riskAt owner's riskValue of the goods Rs.....Delivery at.....

Note:-The bill of lading shall be in the proforma given above and shall be in quadruplicate, the original (white) to be carried in the motor vehicle, the duplicate (light green) for the consignor, the triplicate (pink) for the consignee and the fourth copy (cream yellow) for record of the national permit holder.*Strike out whichever is inapplicable.FORM 51[See rule 141]Certificate of insurance in respect of.....

Certificate

Policy

No..... No.....

1. Registration mark of the vehicle insured
2. Description of the vehicle
3. Make an year of manufacture
[Engine number or motor number in the case of Battery Operated Vehicles]
4. [Substituted by GSR 589(E), dated 16.9.2005, for 'Engine number'(w.e.f. 16.3.2006).]
5. Carrying capacity
6. Name and address of the insured
7. Effective date and time of commencement of insurance
8. Date of expiry of insurance
9. Persons or classes of persons entitled to drive:-

Stage carriage/contract carriage/private service vehicle

Goods carriage

Any person including insured:Provided that a driving holds an effective license at the time of the accident and is not disqualified for obtaining such a license also that the person holds an effective learner's license to drive the vehicle when required for the transport of passengers at the time of the accident and the person satisfies the requirements of rule 3 of the Central Motor Vehicles Rules, 1989.

Any person including insured:Provided that a

| | | |
|-----|--|---|
| | | driving holds an effective license at the time of the accident and is not disqualified from obtaining such a license also that the person holds an effective learner's license to drive the vehicle when required for the transport of passengers at the time of the accident and that such person satisfies the requirements of rule 3 of the Central Motor Vehicles Rules, 1989. |
| | Non-transport vehicles | Any person including insured person including insured person that a person driving holds an effective driving license at the time of the accident and is not disqualified from holding or obtaining such a license also that the person holds an effective learner's license to drive the vehicle when required for the transport of goods at the time of the accident and that such person satisfies the requirements of rule 3 of the Central Motor Vehicles Rules, 1989. |
| 10. | Limitations as to use:-Stage carriage/contract carriage/goods carriage/private service vehicle | The policy covers uses of the vehicle as permitted under the Motor Vehicles Act, 1988. The policy does not cover use for (a) Organized racing, or (b) Speed testing. |
| 11. | Private service vehicle and non-transport vehicle | The policy covers use for any purpose other than (a) Insurance reward, (b) Organized racing, or (c) Speed testing. |

|||

We hereby certify that the policy to which this certificate relates as well as this certificate of insurance are issued in accordance with the provisions of Chapter X or XI of the Motor Vehicles Act, 1988. Authorized Insurer FORM 52 [See rule 42(1)] COVER NOTE

1. Registration mark, number and description of the vehicle insured
2. Name and address of insured
3. Effective date and time of commencement of insurance for the purpose of this Act
4. Date of expiry of insurance
5. Persons or classes of persons entitled to drive
6. Any limitations as to use of motor vehicle
7. The period of validity of this cover note will expire on

I/We hereby certify that this cover is issued in accordance with the provisions of Chapter XI of the Motor vehicles Act, 1988Authorized InsurerFORM 53[See rule 148(1)]CERTIFICATE IN RESPECT OF EXEMPTION OF MOTOR VEHICLE FROM INSURANCECertified that the motor vehicles of the following description:

- (a) Registration number
- (b) Make
- (c) Class, i.e., motor cycle, motor car, stage carriage, goods carriage, contract carriage or other class(to be described)
- (d) Colour of body

Is the property of-

- (i)The Government of

The local authority/State transport undertaking,
namely.....the vehicles of which
have been exempted under section 146 of the Motor Vehicles Act,
1988, by the Government of.....by their order
No.....dated.....

This certificate is valid up to.....unless cancelled in the
meanwhile.Dated.....Signed on behalf

of.....Designation:FORM 54[See rule 150(a) and (2)]ACCIDENT INFORMATION
REPORT

1. Name of the police station
- CR No./Traffics accident report
- Date, time and place of the accident
- Name and full address of the injured/deceased
- Name of the hospital to which he/she was removed
- Registration number of vehicle and the type of the vehicle
- Driving license particulars
- (a)Name and address of the driver
- (b)Driving license number and date of expiry
- (c)Address of the issuing authority

- (d) Badge No. in case of public service vehicle
8. Name and address of the owner of the vehicle at the time of the accident
- Name and address of the insurance company with
9. whom the vehicle was insured and the particulars of the Divisional Officer of the said insurance company
- Number of insurance policy/insurance certificate and
10. the date of validity of the insurance policy/insurance certificate
- 11 Registration particulars of the vehicle (class of vehicles)
- (a) Registration No.
- (b) [engine number or motor number in the case of Battery Operated Vehicles] [Substituted by GSR 589(E), dated 16.9.2005, for 'Engine number' (w.e.f. 16.3.2006).]
- (c) Chassis No.
12. Route permit particulars
13. Action taken, if any, and the result thereof

FORM 55 [See rule 160(1)] APPLICATION FOR THE APPROVAL OF A FOREIGN INSURER I/We hereby apply for the inclusion of..... of..... (Name of foreign insurer) constituted/incorporated/domiciled at..... in the approved list maintained under rule 159 of the Central Motor Vehicles Rules, 1989, of the Central Government and for the inclusion of my/our name as the guarantor of the said..... (name of foreign insurer) for the purpose of Chapter XI of the Motor Vehicles Act, 1988, and the said Rules. I/We hereby certify that I/We have entered into an arrangement for the purposes of the said Act and the said Rules with the said foreign insurer and I/We hereby agree to act as guarantor in India in respect of the said foreign insurer for the purposes of the said Act and the said Rules..Dated.....20.....Signature of Authorized

InsurerAddress.....FORM

56 [See rule 160(3)] NOTICE TO CEASE TO ACT AS GUARANTOR This is to give notice that I/We desire to cease acting as guarantors in India of..... of..... (Name of foreign insurer)..... (Address of foreign insurer)..... after..... or from..... the expiry of two months from the date on which this notice is delivered to the Central Government, whichever is later, for the purposes of Chapter X I of the Motor Vehicles Act, 1988 and the Central Motor Vehicles Rules, 1989.Dated the..... day of.....20.....Authorized Insurer

FORM 57 [See rules 140(v) and 161(1)] CERTIFICATE FOR FOREIGN INSURANCE Certificate No..... Policy No..... (Optional)

Reference Mass, R (kg) CO(g/km)

(1) (2)

HC(g/km)

(3)1

| | | |
|-----------|-------------------|-----------------|
| R<150 | 12 | 8 |
| 150<R<350 | 12+18(R-150)_____ | 8+4(R-150)_____ |
| | 200 | 200 |

| | | |
|-------|----|----|
| R>350 | 30 | 12 |
|-------|----|----|

Light duty vehicles: | | - Reference Mass, rw(Kg) CO(g/km) HC(g/km)

(1) (2) (3)

rw < 1020 14.3 2.0

1020≤rw≤1250 16.5 2.1

1250≤rw≤1470 18.8 2.1

1470≤rw≤1700 20.7 2.3

1700≤rw≤1930 22.9 2.5

1930≤rw≤2150 24.9 2.7

rw > 2150 27.1 2.9

2. Conformity of

Production Tests: Two and three-wheeler vehicles: | | - Reference Mass, R (kg) CO (g/km) HC (g/km)

(1) (2) (3)

R < 150 15 10

150<R<350 15 + 25 (R-150)_____ 10 + 5 (R-150)_____

| 200 200

R > 350 40 15

Light duty vehicles:

Reference Mass, rw (kg) CO (g/km) HC (g/km)

(1) (2) (3)

rw> 1020 17.3 2.7

1020≤rw≤1250 19.7 2.7

1250≤rw≤1470 22.5 2.8

1470≤rw≤1700 24.9 3.0

1700≤rw≤1930 27.6 3.3

1930≤rw≤2150 29.9 3.5

rw> 2150 32.6 3.7

<i>Explanation.</i>-Mass emission standards refers to the gm. of pollutants emitted per km. run of the vehicle, as determined by a Chassis Dynamometer Test using the Indian Driving Cycle.]

ANNEXURE II[See rule 115(3)]BREAKDOWN OF THE OPERATING CYCLE USED FOR THE TEST

| No.of operation | Acceleration(m/sec) ² | Speed(km/h) | Duration of each operation(s) | Cumulative time (s) |
|------------------|----------------------------------|--|-------------------------------|---------------------|
| (1) | (2) | (3) | (4) | (5) |
| 01. Idling | - | - | 16 | 16 |
| 02. Acceleration | 0.65 | 0-14 | 6 | 22 |
| 03. Acceleration | 0.56 | 14-22 | 4 | 26 |
| 04. Deceleration | -0.63 | 22-13 | 4 | 30 |
| 05. Steadyspeed | - | 13 | 2 | 32 |
| 06. Acceleration | 0.56 | 13-23 | 5 | 37 |
| 07. Acceleration | 0.44 | 23-31 | 5 | 42 |
| 08. Deceleration | -0.56 | 31-25 | 3 | 45 |
| 09. Steadyspeed | - | 25 | 4 | 49 |
| 10. Deceleration | -0.56 | 25-21 | 2 | 51 |
| 11. Acceleration | 0.45 | 21-34 | 8 | 59 |
| 12. Acceleration | 0.32 | 34--112 | 7 | 66 |
| 13. Deceleration | -0.46 | 42-37 | 3 | 69 |
| 14. Steadyspeed | - | 37 | 7 | 76 |
| 15. Deceleration | -0.42 | [37-34] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] | 2 | 78 |
| 16. Acceleration | 0.32 | 34-42 | 7 | 85 |
| 17. Deceleration | -0.46 | 42-47 | 9 | 94 |
| 18. Deceleration | -0.52 | 27-14 | 7 | 101 |
| 19. Deceleration | -0.56 | 14-00 | 7 | 103 |

ANNEXURE III[See rule 115(3)]REFERENCE FUEL FOR TYPE AND PRODUCTION CONFORMITY TESTS

| Serial No. | Characteristic | Requirements | \| \| - (1) | (2) (3) (4) (5) |
|------------|---|--------------------------------|------------|-----------------|
| 1. | Colour, visual | Orange | Red | |
| 2. | Copper-strip corrosion for 3 hours at 50°C. | Not worse than No.1 | P:15(1968) | |
| 3. | Density at 15°C. | Not limited but to be reported | P:16(1967) | |

| | | | | |
|-----|---|--------------------------------|-------|---------------------|
| 4. | Distillation- | | | |
| | (a) Initial boiling point | Not limited but to be reported | | P:18(1967) |
| | (b) Recovery up to 20°C per cent by volume, min. | 10 | 10 | |
| | (c) Recovery up to 125°C per cent. by volume, min. | 50 | 50 | |
| | (d) recovery up to 130°C per cent. by volume, min. | 90 | 90 | |
| | (e) Final boiling point, max. | 215°C | 215°C | |
| | (f) Residue per cent by volume, max. | 2 | 2 | |
| 5. | Octane number (research method) max. | 87 | 94 | P : 27 (1960) |
| 6. | Oxidation stability, in minutes, min. | 360 | 360 | P : 28 (1966) |
| 7. | Residue on evaporation mg/100 ml, max | 4.0 | 4.0 | P : 29 (1960) |
| 8. | Sulphur, total per cent, by weight, max | 0.25 | 0.20 | P : 34 (1966) |
| 9. | Lead content (as Pb), g/l max. | 0.56 | 0.80 | P : 37 (1967) or |
| 10. | Reid vapour pressure at 38 degree C, kgf/cm ³ . max. | 0.70 | 0.70 | P : 39 (1967) |

ANNEXURE IV[See rule 115(4)]LIMIT VALUES OF EXHAUST GAS OPACITY APPLICABLE FOR DIESEL-DRIVEN VEHICLE
The engine tests at steady speed

| Nominal Flow G(1/s) | Absorption Coefficient[K(1/m)] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] | Nominal Flow G(1/s) | Absorption Coefficient[K(1/m)] [Substituted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] |
|------------------------|---|------------------------|---|
| (1) | (2) | (3) | (4) |
| 42 | 2.00 | 120 | 1.20 |
| 45 | 1.91 | 125 | 1.17 |
| 50 | 1.82 | 130 | 1.15 |
| 55 | 1.75 | 135 | 1. [13] |
| 60 | 1.68 | 140 | 1.11 |
| 65 | 1.61 | 145 | 1.09 |
| 70 | 1.56 | 150 | 1.07 |
| 75 | 1.50 | 155 | 1.05 |
| 80 | 1.46 | 160 | 1.04 |
| 85 | 1.41 | 165 | 1.02 |

| | | | |
|-----|------|------|------|
| 90 | 1.38 | 170 | 1.01 |
| 95 | 1.34 | 175 | 1.00 |
| 100 | 1.31 | 180 | 0.99 |
| 105 | 1.27 | 185 | 0.97 |
| 110 | 1.25 | 190 | 0.96 |
| 115 | 1.22 | 195 | 0.95 |
| - | - | <200 | 0.93 |

[The above standards shall not be applicable to agricultural tractors and the same for the agricultural tractors shall be notified at a later date.] [Added by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).][ANNEXURE IV-A [Inserted by GSR 338(E), dated 26.3.1993 (w.e.f. 26.3.1993).] [See rule 115(5)]TEST CYCLEThe following 13-mode cycle shall be followed in dynamometer operation on the test engine:-

Mode No. Engine Speed % Load

| (1) | (2) | (3) |
|-----|--------------|-----|
| 1. | Idle | - |
| 2. | Intermediate | 10 |
| 3. | Intermediate | 25 |
| 4. | Intermediate | 50 |
| 5. | Intermediate | 75 |
| 6. | Intermediate | 100 |
| 7. | Idle | - |
| 8. | Rated | 100 |
| 9. | Rated | 75 |
| 10. | Rated | 50 |
| 11. | Rated | 25 |
| 12. | Rated | 10 |
| 13. | Idle | -] |

[ANNEXURE IV-B [Annexure IV-B, IV-C and IV-D inserted by GSR 493(E), dated 28.8.1997 (w.e.f. 1.4.2000).] [See rule 115(10)]DRIVING CYCLES AND COLD STARTA. For all 2 and 3-wheelers except diesel vehicles: Cold Start Procedures:-

| | |
|---|---------------------------------------|
| Test Cell condition | - |
| Soak Temperature | 20-30C |
| Soak Period | 6.30 hrs |
| Preparatory running before sampling | Idling of 40 seconds and 4 cycles |
| Number of test cycles | 6 |
| Break down of cycles | As per Annexure II to principal rules |
| B. For all other vehicles including diesel 2, 3 and 4-wheelers: | |
| Soak Temperature | 20-30C |
| Soak Period | 6.30 hrs |

Preparatory running before sampling Idling of 40 seconds

Number of test cycles* 4 cycles of Part one and 1 cycle of Part two

Break down of cycles* Modified Indian driving cycle as per Tables I and II

*For diesel, 2 & 3-wheelers

Number of test cycles 6

Break down of cycles Indian driving cycles.As per Annexure II to principal rules.

MODIFIED INDIAN DRIVING CYCLE FOR YEAR 2000
Table I: Operating cycle on the Chassis Dynamometer (Part one)

| No of Operation | Operation | Phase | Acceleration(m/s ²) | Speed(Km/h) | Duration of each | Cumulative time(s) | Gear to be used in the case of manual boxl |
|-----------------|--------------------------------|-------|---------------------------------|-------------|------------------|--------------------|--|
| 1 | Idling | 1 | | | 11 | 11 | 11 6GPM+ |
| 2 | Acceleration | 2 | 1.04 | 0-15 | 4 | 4 | 15 1 |
| 3 | Steady Speed | 3 | | 15 | 8 | 8 | 23 1 |
| 4 | Deceleration | | -0.69 | 15-10 | 2 | | 25 1 |
| 5 | Declaration, clutch disengaged | 4 | | | | 5 | |
| | | | -0.92 | 10-0 | 3 | | 28 Kl(*) |
| 6 | Idling | 5 | | | 21 | 21 | 49 165PM+ |
| 7 | Acceleration | | 0.83 | 0-15 | 5 | | 54 1 |
| 8 | Gear Change | 6 | | | 2 | 12 | 56 |
| 9 | Acceleration | | 0.94 | 15-32 | 5 | | 61 2 |
| 10 | Steady Speed | 7 | | 32 | 24 | 24 | 85 2 |
| 11 | Deceleration | | -0.75 | 32-10 | 8 | | 93 2 |
| 12 | Declaration, clutch disengaged | 8 | | | | 11 | |
| | | | -0.92 | 10-0 | 3 | | 96 K2(*) |
| 13 | Idling | 9 | | | 21 | 21 | 117 165PM+ |
| 14 | Acceleration | | 0.83 | 0-15 | 5 | | 122 1 |
| 15 | Gear Change | | | | 2 | | 124 |
| 16 | Acceleration | 10 | 0.62 | 15-35 | 9 | 26 | 133 2 |
| 17 | Gear Change | | | | 2 | | 135 |
| 18 | Acceleration | | 0.52 | 35-50 | 8 | | 143 3 |
| 19 | Steady Speed | 11 | | 50 | 12 | 12 | 155 3 |
| 20 | Deceleration | 12 | -0.52 | 50-35 | 8 | 8 | 163 3 |
| 21 | Steady Speed | 13 | | 35 | 13 | 13 | 176 3 |

| | | | | | | | | |
|----|---------------------------------------|----|-------|-------|---|----|-----|---------|
| 22 | Gear Change | | | | 2 | | 178 | |
| 23 | Deceleration | 14 | -0.86 | 32-10 | 7 | 12 | 185 | 2 |
| 24 | Deceleration, clutch disengaged | | -0.92 | 10-0 | 3 | | 188 | KZ(*) |
| 25 | Idling | 15 | | | 7 | 7 | 195 | 75PM(*) |

MODIFIED INDIAN DRIVING CYCLE FOR YEAR 2000Table II:Operating cycle on the chassis
Dynamometer (Part two)

| No. of Operation | Operation | Phase | Acceleration(m/s ²) | Speed(km/h) | Duration of each | Cumulative time(s) | Gear to be used in the case of manual gear box |
|---------------------|------------------|----------|---------------------------------|-------------|---------------------|-----------------------|--|
|  | \|\|\| Operation(s) | Phase(s) | | g | | | |
| I | Idling | 1 | | | 20 | 20 | 20 Kt(*) |
| 2 | Acceleration | | 0.83 | 0-15 | 5 | 25 | 1 |
| 3 | Gear Change | | | | 2 | 27 | - |
| 4 | Acceleration | | 0.62 | 15-35 | 9 | 36 | 2 |
| 5 | Gear Change | 2 | | | 2 | 41 | - |
| 6 | Acceleration | | 0.52 | 35-50 | 8 | 46 | 3 |
| 7 | Gear Change | | | | 2 | 48 | - |
| 8 | Acceleration | | 0.43 | 50-70 | 13 | 61 | 4 |
| 9 | Steady Speed | 3 | | 70 | 50 | 111 | 5 |
| 10 | Deceleration | 4 | -0.69 | 70-50 | 8 | 119 | 4,,5+ |
| 11 | Steady Speed | 5 | | 50 | 69 | 188 | 4 |
| 12 | Acceleration | 6 | 0.43 | 50-70 | 13 | 201 | 4 |
| 13 | Steady Speed | 7 | | 70 | 50 | 251 | 5 |
| 14 | Acceleration | 8 | 0.24 | 70-90 | 24 | 275 | 5 |
| 15 | Steady Speed | 9 | | 90 | 83 | 358 | 5 |
| 16 | Deceleration | | -0.69 | 90-80 | 4 | 362 | 5 |
| 17 | Deceleration | 10 | -1.04 | 80-50 | 8 | 370 | 5 |
| 18 | Deceleration | | -1.39 | 50-00 | 10 | 380 | Ks(*) |
| 19 | Idling | 11 | | | 20 | 400 | PM(*) |

(*) PM=gearbox in neutral, clutch engaged.K1K2=First or fifth gear engaged, clutch
disengagedANNEXURE IV-C[See rule 115(10)]REFERENCE FUEL PETROL

||| ASTM Method

| | Minimum | Maximum | |
|--------------------------------------|----------------------|-----------------------|--------------------------|
| Research Octane Number | 95.0 | | D 2699 |
| Motor Octane Number | 85.0 | | D 2700 |
| Density at 15°C (kg/l) | 0.748 | 0.762 | D 1298 |
| Reid Vapour pressure | 0.56 bar | 0.64 bar | D323 |
| Distillation: | \|\|\|- | Initial boiling point | 24°C 40°C D 86 |
| 10%vol. point | 42°C | 58°C | |
| 50% vol. point | 90°C | 110°C | |
| 90%/vol. Point | 155°C | 180°C | |
| Final boiling point | 190°C | 215°C | |
| Residue | | 2% | D86 |
| Hydrocarbon Analysis: | \|\|\|- | Olefins | 20%vol. D1319 |
| Aromatics | (including max. 5% | 45%vol. | (*) D 3606/D 2267 |
| Saturates | vol.benzene)*balance | | D1319 |
| Oxidation Stability_ | 480 Minutes | | D 525 |
| Existent Gum | | 4mg/100ml | D381 |
| Sulphur content | | 0.04%, mass | D 1266/D 2622/D 2785 |
| Copper Corrosion at 50°C | | | D 130 |
| Lead content | | 0.0058/ltr | D3237 |
| Phosphorous content | | 0.00138/ltr | D3231 |
| *Addition of oxygenates prohibited.] | | | |

ANNEXURE IV-D[See rule 115(10)]REFERENCE FUEL DIESEL

| | Minimum | Maximum | ASTM Method |
|------------------------|------------------------|-----------------------|-------------------|
| Cetane Number | 49 | 53 | D 613 |
| Density at 15°C (kg/l) | 0.835 | 0.845 | D 1298 |
| Distillation: | | | D86 |
| 50%point | 245°C | | |
| 91%point | 320°C | 340°C | |
| Final boiling point | - | 370°C | |
| Flash point | 55°C | | D93 |
| CFIT' | | (-)5°C | EN 116 (CEN) |
| Viscosity at 40°C | 2.5 mm ² /s | 3.5mm ² /s | D445 |
| Sulphur content | | 0.3%mass | D1266/D2622/D2785 |

to be
reported

| | | |
|---------------------------------------|------------------|-----------|
| Copper Corrosion | 1 | D 130 |
| Conradson carbon residue (10%, DR) | 0.2%mass | D 189 |
| Ash content | 0.01%mass | D 482 |
| Water content | 0.05%mass | D95/DI744 |
| Neutralization(strong acid) | 0.20 mg/KOH/g2.5 | D2274] |
| No.Oxidation stability | mg/100ml | |

Additives

*

[ANNEXURE IV-E [Inserted by GSR 686(E), dated 20.10.2004. Brought into force-(a) in the National Capital Region and the cities of Mumbai, Kolkata, Chennai, Bangalore, Hyderabad including Secundrabad, Ahmedabad, Pune, Surat, Kanpur and Agra in respect of four wheeled vehicles manufactured on and from 1st April 2005, except in respect of four wheeled transport vehicles plying on Inter-State Permits or National Permits or All India Tourist Permits within the jurisdiction of these cities; and (b) in other areas of the country, from such date as may be notified by the Central Government. Here 'National Capital Region'shall have the same meaning as assigned to it in clause (f) of section 2 of the National Capital Region Planning Board Act, 1985 (2 of 1985).]

[See rule 115(14)]DRIVING CYCLES AND COLDSTART FOR FOUR-WHEELED VEHICLES:AS DESCRIBED IN (A), (B) AND (C)

| | |
|--|--|
| Soak Temperature | 200C-30(1C |
| Soak Period | 6-30 hours |
| Preparatory running before sampling | Nil |
| Number of test cycles | 4 cycles of Part one and one cycle of Part two |
| Break down of cycles | Modified Indian Driving Cycle as per Table 1 and 2 of Annexure IV-B of sub-rule (10)] |

ANNEXURE IV-F[See rule 115(14)]TECHNICAL CHARACTERISTIC OF REFERENCE FUEL
PRESCRIBED FOR APPROVAL TESTS AND TO VERIFY CONFORMITY OF PRODUCTION

| Parameter | Unit | Limits(1) | Test Method | |
|--|-------------|-----------|-------------|--|
|  | \| Minimum | Maximum | \|- | Cetane Number(2) \| 52.0 54.0 EN-ISO 5165 |
| Density at15°C | Kg/m3 | 833 | 837 | EN-150 3675 |
| Distillation:-50%point95%point-final boilingpoint | OC °C °C | 245345-- | 350370 | EN-ISO 3405EN-ISO 3405EN-ISO 3405 |
| Flash point | °C | 55 | -- | EN 22719 |
| CFPP | °C | -- | -5 | EN 116 |
| Viscosity at 400C | mm2/s | 2.5 | 3.5 | EN-ISO 3104 |
| Polycyclic aromatic hydrocarbons | % m/m | 3 | 6.0 | IP 391 |

| | | | | |
|--|---------|----|------------|--------------------|
| Sulphur content(3) | mg/kg | -- | 300 | Pr.EN-ISO/DIS14596 |
| Copper corrosion | \| -- | 1 | EN-ISO2160 | |
| Conradson carbon residue (10% DR) | % m/m | -- | 0.2 | EN-ISO 10370 |
| Ash content | %m/m | -- | 0.01 | EN-ISO 6245 |
| Water content | %m/m | -- | 0.05 | EN-ISO 12937 |
| Neutralization(strong acid)number | MgKOH/g | -- | 0.02 | ASTM D 974-95 |
| Oxidation stability(4) | mg/ml | -- | 0.025 | EN-ISO 12205 |
| New and better method for polycyclicaromaticsunder development | % m/m | -- | -- | EN 12916 |

(1)Values quoted in the specification are "true values". In establishment of their limit values the terms of ISO 4259 Petroleum Products-Determination and application of precision data in relation to methods of test have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account, in fixing a maximum and minimum value, the minimum difference is 4R (R=Reproducibility).Notwithstanding this measure, which is necessary for technical reasons, the manufacturer of fuels should nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value in the case of quotations of maximum and minimum limits. Should it be necessary to clarify the questions as to whether a fuel meets the requirements of the specification, the terms of ISO 4259 should be applied.(2)The range of cetane number is not in accordance with the requirements of a minimum range of 4R, however, in the case of a dispute between fuel supplier and fuel user, the terms of ISO 4259 may be used to resolve, such dispute provided replicate measurements, of sufficient number to achieve the necessary precision, are made in preference to single determinations.(3)The actual sulphur content of the fuel used for the Type I test shall be reported.(4)Even though oxidation stability is controlled, it is likely that shelf life will be limited. Advice should be sought from the supplier as to storage conditions and life.

ANNEXURE IV-G[See rule 115(14)]TECHNICAL CHARACTERISTICS OF REFERENCE FUEL PRESCRIBED FOR APPROVAL TESTS AND TO VERIFY CONFORMITY OF PRODUCTIONType: Unleaded petrol

| Parameter | Unit | Limits(n) | Test Method | |
|------------------------------------|-------------------|---------------|---------------|------------|
| Minimum | Maximum | | | |
| Research Octane number, RON | \| 95.0 | -- | EN 25164 | |
| Motor octane number, MON | \| 85.0 | -- | EN 25163 | |
| Density at 15°C | Kg/m ³ | 748 | 762 | ISO 3675 |
| Reid vapour pressure | kPa | 56.0 | 60.0 | EN 12 |
| | | | | EN-ISO |
| Distillation:initial boiling point | °C | | | 3405EN-ISO |
| evaporated at 100°C | % | 2449.081.0190 | 4057.087.0215 | 34115EN-I |
| evaporated at 150°C | v/v% | | | 3405EN-ISO |
| final boiling point | v/v% | | | 3405 |

| | | | | |
|--------------------------------------|----------------|------------|-----------|--------------------------------|
| Residue | % volume | -- | 2 | EN-ISO 3405 |
| Hydrocarbon analysis | %v/v %v/v %v/v | --28.0---- | 1040.01.0 | ASTMD1377 EN 12177 ASTM D 1319 |
| Carbon/hydrogen ratio | \| Report | Report | | |
| Oxidation Stability | minutes | 480 | -- | EN-ISO 7536 |
| Oxygen content | %m/m | -- | 2.3 | EN 1601 |
| Existent gum | mg/ml | -- | 0.04 | EN-ISO 6246 |
| Sulphur content(3) | mg/kg | -- | 100 | Pr.ENISO/ 14596 |
| Copper corrosion for 3 hours at 50°C | | - | 1 | EN-ISO 2160 |
| Lead content | mg/l | -- | 5 | EN 237 |
| Phosphorous content | mg/l | - | 1.3 | ASTM D 3231 |

(1)The value quoted in the specification are "true value". In establishment of their limit values the terms of ISO 4259 "Petroleum products - Determination and application of precision data in relation to methods of test" have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account; in fixing a maximum and minimum value, the minimum difference is 4R (R=reproducibility). Notwithstanding this measure, which is necessary for statistical reasons, the manufacturer of fuels should nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value in case of quotations of maximum and minimum limits. Should it be necessary to clarify the question as to whether a fuel meets the requirements of the specifications, the terms of ISO 4259 should be applied.(2)The fuel may contain oxidation inhibitors and metal deactivators normally used to stabilise refinery gasoline streams, but detergent/dispersive additives and solvent oils must not be added.(3). The actual sulphur content of the fuel used for the Type I test shall be reported. Annexure IV-H[See rule 115(14)]Liquefied Petroleum Gas (LPG)

| Parameter | Unit | Limits Fuel A | Limits Fuel B | Test Method | | Motor octane number | \| 93.5 | \| 93.5 | \| EN 589 Annex B |
|--------------|---------|---------------|---------------|-------------|----|---------------------|------|---------|----------------|
|  | \| Minimum | Maximum | Minimum | Maximum | \| - |  |  |  |  |
| Composition: | \| \| \| \| \| - | C3content | %vol. | 48 | 52 | 83 | 87 | ISO7941 | |
| C4content | % vol. | 48 | 52 | 13 | 17 | ISO 7941 | | | |
| Olefins | %vol. | 0 | 12 | 9 | 15 | ISO7941 | | | |

| | | | | | | | |
|------------------------|--------|---------|-------------------|-------------|------|------|-----------|
| Evaporation residue | mg/kg | \| 50 | \| 50 | NFM 41-015 | | | |
| Total sulphur content | ppm | \| \| \| \| - |  | weight | \| 50 | \| 50 | EN 24261) |
| | (1) | \| \| \| \| - | Hydrogen sulphide | -- | \| None | \| None | ISO8819 |
| Copper strip corrosion | Rating | \| Class I | \| Class I | ISO 6251(2) | | | |
| Water at 0°C | \| \| Free | \| Free | Visual inspection | | | | |

(1)Value to be determined at standard conditions 293,2K (20°C) and 101,3 kPa.(2)This method may not accurately determine the presence of corrosive materials if the sample contains corrosion inhibitors or other chemicals, which diminish the corrosivity of the sample to the copper strip. Therefore, the addition of such compounds for the sole purpose of basing the test method is prohibited.Note.-Fuel A and Fuel B are two types of LPG fuels used for testing of vehicles/engines, to take care of the variation in commercial LPG fuel.ANNEXURE IV-I[See rule 115(14)]NATURAL GAS (NG)Reference Fuel G 20

| Characteristics | Units | Basis | Limits | Test Method | |
|-----------------|----------|-------|--------|-------------|-----------|
| | | | | Minimum | Maximum |
| Composition: | | | | | |
| Methane | %mole | 11A1 | 99 | 100 | ISo6974 |
| Balance | | | | | |
| [Inerts+C2/C2+1 | %mole | -- | -- | I | ISo6974 |
| N2 | %mole | -- | -- | -- | ISO 6974 |
| Sulphur content | mg/M3(1) | --- | --- | 50 | ISo6326-5 |

(1)Value to be determined at standard conditions 293,2K (20C) and 101, 3 k Pa.

| Characteristics | Units | Basis Limits | | Test Method | |
|-----------------|-----------|--------------|------|-------------|---------|
| | | | | Minimum | Maximum |
| composition: | | | | | |
| Methane | %mole | 92.5 | 91.5 | 93.5 | ISO6974 |
| Balance | | | | | |
| [inerts+C2/C2+1 | %mole | -- | - | 1 | ISO6974 |
| N2 | %mole | 7.5 | 6.5 | 8.5 | ISO6974 |
| Sulphur content | m',/m3(1) | -- | -- | | |

(1)Value to be determined at standard conditions 293, 2K (20C) and 101, 3k Pa.Reference Fuel G25

| Characteristics | Units | Basis | Limits | Test Method | |
|-----------------|-------|---------|---------|-------------|----------|
|  |  | \| Minimum | Maximum | | |
| Composition: |  | \| |  |  |  |
| Methane | %mole | 86 | 84 | 88 | ISO 6974 |

| | | | | | |
|---|-------|-----|----|-----------|----------|
| Balance | \| |  |  |  |  |
| [Inerts+C ₂ /C ₂ +1 %mole | --- | --- | I | ISO6974 | |
| N ₂ | %mole | 14 | 12 | 16 | ISO 6974 |
| Sulphur content | \| -- | -- | 50 | ISO6326-5 | |

(1) Value to be determined at standard conditions 293, 2K (20C) and 101, 3 k Pa. Note: G-20, G-23 and G-25 are three type of CNG fuels, out of which any two is selected for testing of vehicles/engines to take care of the variation in the commercial NG Fuel. The nomenclatures G-20, G-23 and G-25 are as used in EEC.[ANNEXURE IV-J [Inserted by GSR 84(E), dated 9.2.2009 (w.e.f. 9.2.2009).] [See rule 115(15)] Technical Specification of the Reference Fuel to be used for testing vehicles equipped with Gasoline engines.

| Parameter | Unit | Limits(1) | Test Method | |
|-------------------------------|---------|-----------|-------------|---------------------------------|
| Minimum | Maximum | | | |
| Research octane number, RON | \| 95.0 | - | EN 25164 | |
| Motor octane number, MON | \| 85.0 | - | EN 25163 | |
| Density at 15 degreesC | kg/m3 | 740 | 754 | ISO 3675 |
| Reid vapour pressure | kPa | 56.0 | 60.0 | Pr.EN ISO;13016-1;(DVPE) |
| Distillation: | \| \| |  |  |  |
| --evaporated at 70 degrees C | % v/v | 24.0 | 40.0 | EN-ISO 3405 |
| -evaporated at 100 degrees C | %v/v | 50.0 | 58.0 | EN-ISO 3405 |
| --evaporated at 150 degrees C | % v/v | 83.0 | 89.0 | EN-ISO 3405 |
| -final boiling point, | degreeC | 190 | \| - | Residue % v/v \| EN-ISO 2.0 3405 |
| Hydrocarbon analysis: | \| \| |  |  |  |
| -olefins | %v/v - | \| 10.0 | ASTM D 1319 | |
| -aromatics | % v/v | 29.0 | 35.0 | ASTM D 1319 |
| -benzene | % v/v - | \| 1.0 | ASTM D 1319 | |
| -saturates | %v/v | Report | Report | Pr.EN 12177 |
| Carbon/Hydrogen | \| \| Report | ASTM D | | |

| | | | | |
|---------------------|---------|------|---------|-------------|
| ratio | | 1319 | | |
| Induction period(2) | minutes | 480 | - | EN-ISO 7536 |
| Oxygen content | % m/m - | - | 1.0 | EN 1601 |
| Existent gum | mg/ml - | - | 0.04 | EN-ISO 6246 |
| Sulphur content (3) | mg/kg - | - | 10 | ASTM D 5453 |
| Copper corrosion | - | - | Class 1 | EN-ISO 2160 |
| Lead content | mg/l - | - | 5 | EN 237 |
| Phosphorus content | mg/l - | - | 1.3 | ASTM D 3231 |

|||||

(1)The values quoted in the specifications are "true values". In establishment of their limit values the terms of ISO 4259 Petroleum products-Determination and application of precision data in relation to methods of test have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account; in fixing a maximum and minimum value, the minimum difference is 4R (R=reproducibility). Notwithstanding this measure, which is necessary for technical reasons, the manufacturer of fuels should nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value in the case of quotations of maximum and minimum limits. Should it be necessary to clarify the questions as to whether a fuel meets the requirements of the specifications, the terms of ISO 4259 should be applied.(2)The fuel may contain oxidation inhibitors and metal deactivators normally used to stabilize refinery gasoline streams, but detergent/dispersive additives and solvent oils must not be added.(3)The actual sulphur content of the fuel used for the Type I test shall be reported.]ANNEXURE IV-K[See rule 115(15)]Technical Specification of the Reference Fuel to be used for testing vehicles equipped with Diesel engines.

| Parameter | Unit | Minimum | Maximum | Test Method |
|-------------------------------------|--------------------|---------|---------|--------------|
| Cetane number(2) | | 52.0 | 54.0 | EN-ISO 5165 |
| Density at 15 degrees C | Kg/m ³ | 833 | 837 | EN-ISO 3675 |
| Distillation: | | | | |
| -50% point | Degree C | 245 | - | EN-ISO 3405 |
| -95% point | Degree C | 345 | 350 | EN-ISO 3405 |
| -final boiling point | Degree C | - | 370 | EN-ISO 3405 |
| Flash point | Degree C | 55 | - | EN 22719 |
| CFPP | Degree C | - | -5 | EN 116 |
| Viscosity at 40 degrees C | mm ² /s | 2.3 | 3.3 | EN-ISO 3104 |
| Polycyclic aromatic hydrocarbons | %m/m | 3.0 | 6.0 | IP 391 |
| Sulphur content(3) | Mg/kg | - | 10 | ASTM D 5453 |
| Copper corrosion | | - | Class 1 | EN-ISO 2160 |
| Conradson carbon residue (10% DR) | %m/m | - | 0.2 | EN-ISO 2160 |
| Ash content | %m/m | - | 0.01 | EN-ISO 6245 |
| Water content | %m/m | - | 0.02 | EN-ISO 12937 |
| Neutralisation (strong acid) number | Mg KOH/g | - | 0.02 | ASTM D 974 |

| | | | | |
|---|--------------|---|-------|------------------|
| Oxidation stability ⁴ | Mg/ml | - | 0.025 | EN-ISO 12205 |
| Lubricity (HFRR wear scan diameter at 60 degrees C) | Micrometerum | - | 400 | CEC F-06-A-96 |
| FAME | Prohibited | | | |

(1)The values quoted in the specifications are "true values". In establishment of their limit values the terms of ISO 4259 Petroleum products-Determination and application of precision data in relation to methods of test have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account; in fixing a maximum and minimum value, the minimum difference is 4R (R=reproducibility). Notwithstanding this measure, which is necessary for technical reasons, the manufacturer of fuels should nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value in "the case of quotations of maximum and minimum limits. limits. Should it be necessary to clarify the questions as to whether a fuel meets the requirements of the specifications, the terms of ISO 4259 should be applied.(2)The range for cetane number is not in accordance with the requirements of a minimum range of 4R. However, in the case of a dispute between fuel supplier and fuel user, the terms of ISO 4259 may be used to resolve such disputes provided replicate measurements, of sufficient number to archive the necessary precision, are made in preference to single determinations.(3)The actual sulphur content of the fuel used for the Type I test shall be reported.(4)Even though oxidation stability is controlled, it is likely that shelf life will be limited. Advice should be sought from the supplier as to storage conditions and life.ANNEXURE IV-L[See rule 115(15)]SPECIFICATION OF REFERENCE FUEL FOR CNGCNG Reference Fuel for Category M and Category N Vehicles not exceeding 3.500 Kgs GVW and two and three wheelers.

||| Limits

| Characteristic | Units | Basis | minimum | maximum | Test method | | | |
|--------------------|-----------------------|---------------------|---------|---------|-------------|--------------------|-----|--------------|
| Reference fuel G20 | \|\|\|\|\|- | Composition: \|\|\|\|\|- | Methane | %mole | 100 | 99 | 100 | ISO 6974 |
| Balance(1) | %mole | - | - | 1 | ISO6974 | | | |
| N ₂ | %mole | \|\|\| ISO 6974 | | | | | | |
| Sulphur content | mg/m ³ (2) | - | - | 10 | ISO 6326-5 | | | |
| Wobbe Index (net) | MJ/m ³ (3) | 48.2 | 47.2 | 49.2 | \|- | Reference fuel G25 | \|\|\| | Composition: \|\|\|\|\| |
| Balance(1) | %mole | - | - | 1 | ISO 6974 | | | |
| N ₂ | %mole | 14 | 12 | 16 | ISO 6974 | | | |
| Sulphur content | mg/m ³ (2) | - | - | 10 | ISO 6326-5 | | | |
| Wobbe Index (net) | MJ/m ³ (3) | 39.4 | 38.2 | 40.6 | | | | |

(1)Inerts (different from N₂) + C₂+C₂+. (2)Value to be determined at 293,2 K (20°C) and 101.3 kPa. (3)Value to be determined at 273,2 K (0°C) and 101.3kPa. The above type of vehicles should be tested with both types of Reference Fuels CNG Reference Fuel for Vehicles above 3.500 Kgs GVW

| \|\|\| Limits | - | Characteristic Units Basis | Minimum | Maximum | Test method |
|-------------------|-----------------------|----------------------------|---------|---------|-------------|
| Reference Fuel G8 | \|\|\| \| | Composition: | | | |
| Methane | | 87 | 84 | 89 | |
| Ethane | | 13 | 11 | 15 | |
| Balance(1) | % -mole | - | - | 1 | ISO 6974 |
| Sulphur content | mg/m ³ (2) | | 10 | | ISO 6326-5 |

(1)Inerts + C₂. (2)Value to be determined at standard conditions (293.2 K (20°C) and 101.3 kPa).

Limits

| Characteristic Units Basis | minimum | maximum | Test method |
|----------------------------|---------|--------------|--|
| Reference fuel G23 | \|\|\| \| | Composition: \|\|\| \| | - Methane \| 92.5 91.5 93.5 \| - Balance(1) % - mole |
| N ₂ | \| 7.5 6.5 | 8.5 | \| - Sulphur content mg/m ³ (2) - - 10 ISO6326-5 |

(1)Inerts (different form N₂) + C₂ + C₂+. (2)Value to be determined at standard conditions (293.2 K (20°C) and 101.3 kPa).

Limits

| Characteristic Units Basis | minimum | maximum | Test method |
|----------------------------|---------|--------------|---|
| Reference fuel G25 | \|\|\| \| | Composition: \|\|\| \| | - Methane \| 86 84 89 \| - Balance(1) % - mole - - 1 |
| N ₂ | \| 14 12 | 16 | \| - Sulphur content mg/m ³ (2) - - 10 ISO 6326-5 |

(1)Inerts (different from N₂ + C₂ + C₂) (2)Value to be determined at standard conditions (293.2 K (20°C) and 101.3 kPa). [Annexure IV-LA] [Inserted by Notification No. G.S.R. 643(E), dated 27.6.2017 (2.6.1989).] (see the proviso to sub-rule (3) of rule 115B) Technical Specifications of the Reference LNG Fuel

| Sr. No. | Component | Concentration |
|---------|---|---------------|
| 1. | Methane % | 87.33-99.71 |
| 2. | Ethane % | 0.09-10.26 |
| 3. | Propane % | 0.03-3.56 |
| 4. | Butane + % | 0-1.48 |
| 5. | Sulphur | < 10 ppm |
| 6. | LNG Density kg/m ³ | 421.39-467.35 |
| 7. | Expansion ratio m ³ (n)/m ³ liq | 558-600.0 |
| 8. | Gas GCV MJ/m ³ (n) | 39.91-46.24 |
| 9. | Wobbe Index MJ/m ³ (n) | 53.51-56.77 |

ANNEXURE IV-M[See rule 115(15)](SPECIFICATION OF REFERENCE FUEL FOR LPG)LPG
Reference Fuel for Category M and Category N vehicles not exceeding 3,500 kgs GVW and two and three wheelers

| Parameter | Unit | Fuel A | Fuel B | Test method |
|------------------------|--------|----------------|----------------|-------------------|
| Composition | | | | ISO 7941 |
| C3-content | %vol. | 30±2 | 85±2 | |
| C4-content | %vol. | balance | balance | |
| <C3>C4 | %vol. | maximum 2 | maximum 2 | |
| Olefins | %vol. | maximum 12 | maximum 15 | |
| Evaporation residue | mg/kg | Maximum 50 | Maximum 50 | ISO 13757 |
| Water at oOC | | Free | Free | Visual inspection |
| Total sulphur content | Mg/kg | Maximum 10 | Maximum 10 | EN 24260 |
| Hydrogen Sulphide | | none | none | ISO 8819 |
| Copper strip corrosion | Rating | Class 1 | Class 1 | ISO 6251(1) |
| Odour | | Characteristic | Characteristic | |
| Motor octane number | | Minimum 89 | Minimum 89 | EN 589 Annex B |

(1)This method may not accurately determine the presence of corrosive materials if the sample contains corrosion inhibitors or other chemicals which diminish the corrosivity of the sample to the copper strip. Therefore, the addition of such compounds for the sole purpose of biasing the test method is prohibited.LPG Reference Fuel for Vehicles above 3,500 Kgs GVW

| Parameter | Unit | Fuel A | Fuel B | Test method |
|------------------------|--------|----------------|----------------|--|
| Composition: | | | | 1507941 |
| C3content | % vol | 50+2 | 85+2 | \|- C4content % vol balance balance \|- <C3 |
| Water at o°C | | Free | free | Visual inspection |
| Total sulphur content | mg/kg | max. 10 | max. 10 | EN 24260 |
| Hydrogen sulphide | | none | none | ISO 8819 |
| Copper strip corrosion | rating | Class 1 | Class 1 | ISO 6251(1) |
| Odour | | Characteristic | Characteristic | Motor octane number min. 92.5 min. 92.5 EN 589 Annex B |

(1)This method may not accurately determine the presence of corrosive materials if the sample contains corrosion inhibitors or other chemicals which diminish the corrosivity of the sample to the copper strip. Therefore, the addition of such compounds for the sole purpose of biasing the test

method is prohibited. ANNEXURE IV-N [See rule 115(15)] SPECIFICATION OF COMMERCIAL GASOLINE FUEL

| Characteristics | Unit | Requirements | |
|--|-------------------|------------------|------------------|
| | | Unleaded regular | Unleaded premium |
| Color, visual | | Orange | Red |
| Density@ 150C | Kg/m ³ | 720-775 | 720-775 |
| Distillation: | | | |
| (a) Recovery up to 70°C (E 70) | %volume | 10-45 | 10-45 |
| (b) Recovery up to 100°C (E 100) | %volume | 40-70 | 40-70 |
| (c) Recovery up to 150°C (E 150) | %volume | 75 min | 75 min |
| (d) Final Boiling Point (FBP), max | oC | 210 | 210 |
| (e) Residue, max. | %volume. | 2 | 2 |
| Research Octane Number (RON) min | | 91 | 95 |
| Motor Octane Number (MON). min | | 81 | 85 |
| Gum content (solvent washed), max | mg/100 ml | 5 | 5 |
| Oxidation Stability min | minutes | 360 | 360 |
| Sulphur, total, max | mg/kg | 50 | 50 |
| Lead content (as Pb), max | g/l | 0.005 | 0.005 |
| Reid Vapour Pressure (RVP), max | kPa | 60 | 60 |
| Vapour Lock Index (VU) | | | |
| (a) Summer, max | | 750 | 750 |
| (b) Other months max | | 950 | 950 |
| Benzene Content, max | %volume | 1 | 1 |
| Copper strip corrosion for 3 hrs @ 50°C, max | Rating | Class 1 | Class 1 |
| Olefin content, max | % volume | 21 | 18 |
| Aromatics content max | % volume | 35 | 35 |
| Oxygen content max | %mass | 2.7 | 2.7 |
| Oxygenates Content | | | |
| (a) Methanol, max | % volume | 3 | 3 |
| (b) Ethanol, max | % volume | 5 | 5 |
| (c) Iso-propyl alcohol, max | % volume | 10 | 10 |
| (d) Iso-Butyl alcohol max | %volume | 10 | 10 |
| (e) Tertiary-butyl alcohol. max | %volume | 7 | 7 |
| (f) Ethers containing 5 or more carbon atoms per molecule, max | %volume | 15 | 15 |
| (g) Other oxygenates, max | %volume | 8 | 8 |

1. Test methods and other provisions details along with the requirements as given above shall be issued by Bureau of Indian Standards.

2. Petrol of 89 RON and 79 MON and having all other properties as the unleaded regular grade indicated above shall also be available for meeting requirements of the older vehicles which will be conforming to pre-Euro III equivalent vehicular emission norms.

3. Type test for Phosphorous content in petrol shall be introduced.

4. These standards specifications have been finalized by the Expert Committee after discussions with the automobile and oil industry as per Auto Fuel Policy.

ANNEXURE IV-O[See rule 115(15)]SPECIFICATION OF COMMERCIAL DIESEL FUEL

| Characteristics | Unit | Requirements | |
|--|-------------------|-----------------------------|--------|
| Ash, max | % mass | 0.01 | |
| Carbon Residue (Ramsbottom) on 10 % residue max | % mass | 0.3 without additives | |
| Cetane number (CN), min | \| 51 | | |
| Cetane Index (CI), min | \| 46 | | |
| Distillation: | \| \| - | 95%vol. recovery at °C, max | °C 360 |
| Flash point: | \| \| - | (a) Abel, min | °C 35 |
| Kinematic viscosity @ 40°C | Cst | 2.0-4.5 | |
| Density@15 °C | kg/m ³ | 820-845 | |
| Total Sulphur max | mg/kg | 50 | |
| Water content, max | mg/kg | 200 | |
| Cold filter Plugging point (CFPP) | \| \| - | (a) Summer, max | °C 18 |
| .(b) Winter, max | °C | 6 | |
| Total contaminations, max | mg/kg | 24 | |
| Oxidation stability, max | g/m ³ | 25 | |
| Polycyclic Aromatic Hydrocarbon (PAH), max | % mass | 11 | |
| Lubricity, corrected wear scar diameter (wsd 1, 4) @ 60°C, max | µm (microns) | 460 | |
| Coper strip corrosion for 3 hrs @ 50°C | Rating | Class 1 | |

1. These density and 95 per cent distillation recovery temperature limits shall be company pool average values. However, all samples shall meet the density @ 15°C limit of 820-860 kg/m³ and 95 per cent. minimum distillation recovery at 370°C.

2. For diesel processed from Assam crude, relaxation of CN & CI by 3 units and density shall be applicable as provided in the present BIS specification.

3. Test methods and other provisions/details along with the requirements as given above shall be issued by Bureau of Indian Standards.

4. These standards specifications have been finalized by the Expert Committee after discussions with the automobile and oil industry as per Auto Fuel Policy.

Annexure IV-P(See Rule 115A(7))Diesel Fuel Specifications

| Characteristics | Minimum | Maximum | Test Method |
|--|---------|---------------|---|
| Cetane Number | 52 | 54 | EN-ISO 5165 |
| Density at 15°C (kg/m ³) | 833 | 837 | EN-ISO 3675 |
| Distillation: in °C | \|\|\|- | 50%point (OC) | 245 \|\|- 95%point (°C) 345 350 EN-ISO 3405 |
| Final boilingpoint(°C) | - | 370 | \|- Flash point (°C) 55 \| EN 22719 |
| CFPP(°C) | \| (-) 5 | EN 116 | |
| Viscosity at 40°C (mm ² /s). | 2.5 | 3.5 | EN-ISO 3104 |
| Polycyclic aromatic hydrocarbons (% m/m) | 3.0 | 6.0 | IP 391 |
| Sulphur Content (mg/kg) | - | 300 | ASTM D 5453 |
| Copper Corrosion | - | Class 1 | EN-ISO 2160 |
| Conradson carbon residue (10%DR) | - | 0.2 | EN-ISO 10370 |

(%m/m)

| | | | |
|--|---|-------|------------------|
| Ash Content (% m/m) | - | 0.01 | EN-ISO 6245 |
| Water Content (% m/m) | - | 0.05 | EN-ISO 12937 |
| Neutralisation(strong acid) No. (mg KOH/g) | - | 0.02 | ASTM D 974 |
| Oxidation Stability (mg/ml) | - | 0.025 | EN-ISO 122051 |

[Annexure IV-Q] [Inserted by Notification No. G.S.R. 412(E), dated 19.5.2015 (w.e.f. 2.6.1989)][See rule 115E]Technical specifications of the reference fuel E85

| Parameter | Unit | Limits ¹ | Test method ² |
|--|-------------------|---|--------------------------|
| Minimum | Maximum | | |
| Research octane number, RON | | 95 | - EN ISO 5164 |
| Motor octane number, MON | | 85 | - EN ISO 5163 |
| Density at 15 °C | kg/m ³ | Report | ISO 3675 |
| Vapour pressure | kPa | 40 | 60 EN ISO 13016-1 (DVPE) |
| Sulphur content ^{3, 4} | mg/kg | - | 10 EN ISO 20846 |
| EN ISO 20884 | | | |
| Oxidation stability | minutes | 360 | EN ISO 7536 |
| Existent gum content (solvent washed) | mg/(100 ml) | - | 5 EN-ISO 6246 |
| AppearanceThis shall be determined at ambient temperature or 15 °Cwhichever is higher. | | Clear and bright, visibly free of suspended orprecipitated contaminants | Visual inspection |
| Ethanol and higher alcohols ⁷ | % V/V | 83 | 85 EN 1601 |
| EN 13132 | | | |
| EN 14517 | | | |
| Higher alcohols (C ₃ -C ₈) | % V/V | - | 2 |
| Methanol | % V/V | | 0.5 |
| Petrol ⁵ | % V/V | Balance | EN 228 |
| Phosphorus | mg/l | | 0.36 |

| | | | | |
|--|--------------|---------|------------|----------------|
| | | | | ASTM D 3231 |
| Water content | % V/V | | 0.3 | ASTM E 1064 |
| Inorganic chloride content | mg/l | | 1 | ISO 6227 |
| pHe | | 6.5 | 9 | ASTM D 6423 |
| Copper strip corrosion (3h at 50 °C) | Rating | Class 1 | | EN ISO 2160 |
| Acidity, (as acetic acid CH ₃ COOH) | % m/m (mg/l) | - | 0.005 (40) | ASTM D 1613 |
| Carbon/ hydrogen ratio | | Report | | |
| Carbon/ oxygen ration | | Report | | |

1. The values quoted in the specifications are "true values". In establishment of their limit values the terms of ISO 4259 Petroleum products -

Determination and application of precision data in relation to methods of test have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account; in fixing a maximum and minimum value, the minimum difference is 4R (R = reproducibility).

Notwithstanding this measure, which is necessary for technical reasons, the manufacturer of fuels shall nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value in the case of quotations of maximum and minimum limits. Should it be necessary to clarify whether a fuel meets the requirements of the specifications, the terms of ISO 4259 shall be applied.

2. In case of dispute, the procedure for dissolving the dispute and interpretations of the results based on test method precision, describe in EN ISO 4259 shall be used.

3. In case of national dispute concerning sulphur content, either EN ISO 20846 or EN IS) 20884 shall be called up similar to the reference in the National annex of EN 228.

4. The actual sulphur content of the fuel used for the Type I Test shall be reported.

5. The unleaded petrol content can be determined as 100-minus the sum of the per cent content of water and alcohol.

6. There shall be no intentional addition of compounds containing phosphorus, iron, manganese, or lead to this reference fuel.

7. Ethanol to meet the specification of EN 15376 is the only oxygenate that shall be intentionally added to this reference fuel.

[Annexure IV-R] [Inserted by Notification No. G.S.R. 412(E), dated 19.5.2015 (w.e.f. 2.6.1989)][See rule 115E]Technical specifications of the reference fuel (ED95)¹

| Parameter | Unit | Limits ² | Test method ³ |
|--|-------------------|---------------------|--------------------------|
| Minimum | Maximum | | |
| Total alcohol (Ethanol including content on higher saturated alcohols) | % m/m | 92.4 | EN 15721 |
| Other higher saturated mono-alcohols (C ₃ -C ₅) | % m/m | | 2 EN 15721 |
| Methanol | % m/m | | 0.3 EN 15721 |
| Density 15°C | kg/m ³ | 793 | 815 EN ISO 12185 |
| Acidity, calculated as acetic acid | % m/m | | 0.0025 EN 15491 |
| Appearance | | Bright and clear | |
| Flashpoint | °C | 10 | EN 3679 |
| Dry residue | mg/kg | 15 | EN 15691 |
| Water content | % m/m | | 6.5 EN 154894 |
| EN-ISO 12937 | | | |
| EN 15692 | | | |
| Aldehydes calculated as acetaldehyde | % m/m | | 0.01 ISO 1388-4 |
| Esters calculated as ethylacetat | % m/m | | 0.1 ASTM D1617 |
| Sulphur content | mg/kg | | 10 EN 15485 |
| EN 15486 | | | |
| Sulphates | mg/kg | | 4 EN 15492 |
| Particulate contamination | mg/kg | | 24 EN 12662 |
| Phosphorus | mg/l | | 0.2 EN 15487 |
| Inorganic chloride | mg/kg | | 1 EN 15484 or EN 15492 |
| Copper | mg/kg | | 0.1 EN 15488 |

Electrical conductivity

 $\mu\text{S/cm}$

2.5

DIN 51627-4 or
prEN 15938

1. Additives are necessary to fulfill the ED95 fuel specification such as cetane improver as specified by the

engine manufacturer, shall be added to the ethanol fuel, as long as no negative side effects are known. If these conditions are satisfied, the maximum allowed amount is 10 % m/m. Denaturants for ED95 fuel, if required, shall be approved by the vehicle manufacturer or shall be either Ethyl Tert Butyl Ether (ETBE); or Iso butanol; or Methyl Ethyl Ketone (MEK); or Tert butanol or Iso Propanol.

2. The values quoted in the specifications are "true values". In establishment of their limit values the terms of ISO 4259 Petroleum products -

Determination and application of precision data in relation to methods of test have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account; in fixing a maximum and minimum value, the minimum difference is 4R (R = reproducibility).

Notwithstanding this measure, which is necessary for technical reasons, the manufacturer of fuels shall nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value in the case of quotations of maximum and minimum limits. Should it be necessary to clarify whether a fuel meets the requirements of the specifications, the terms of ISO 4259 shall be applied.

3. Equivalent EN/ISO methods will be adopted when issued for properties listed above.

4. Should it be necessary to clarify whether a fuel meets the requirements of the specifications, the terms of EN 15489 shall be applied.

[Annexure IV-S [Substituted by Notification No. G.S.R. 682(E), dated 12.7.2016 (w.e.f. 2.6.1989).][See rule 115 (E)] Technical specifications of the reference fuel E100 (As per IS 15464:2004)

| Sr. No. | Characteristic | Requirement |
|---------|--|-------------|
| 1 | Relative density at 15.6/15.6 OC, max | 0.7961 |
| 2 | Ethanol content percent by volume at 15.6/15.6 OC, min(excluding denaturant) | 99.5 |
| 3 | Miscibility with water | Miscible |
| 4 | Alkalinity | Nil |

| | | |
|----|---|-------------------|
| 5 | Acidity (as CH ₃ COOH) mg/l, max | 30 |
| 6 | Residue on evaporation percent by mass, Max | 0.005 |
| 7 | Aldehyde content (as CH ₃ CHO) mg/l, max | 60 |
| 8 | Cooper mg/kg, max | 0.1 |
| 9 | Conductivity, μ S/m, max | 300 |
| 10 | Methyl alcohol, mg/litre, max | 300 |
| 11 | Appearance | Clear and bright] |

[Annexure IV-S [Inserted by
Notification No. G.S.R. 412(E),
dated 11.4.2016 (w.e.f.
2.6.1989).][See rule
115F]Technical specifications of
the reference fuel B100{]

| Serial number | Characteristic | Requirement | Method of Test, reference to |
|---------------|--|-------------|---|
| ISO/ASTM/EN | [P:] of IS 1448 | | |
| 1 | Density@ 15°C, kg/m ³ | 860-900 | ISO 3675 ISO 12185 D 4052 [P:16/P:32] |
| 2 | Kinematic Viscosity @ 40°C, cSt | 2.5-6.0 | ISO 3104 [P:25] |
| 3 | Flash Point, Pensky-Martens Closed – Cup test(PMCC)°C, minimum | 120 | ISO 3679 [P:21] |
| 4 | Sulphur, mg/kg, maximum | 10.0 D | 5453 [P:83] |
| 5 | Carbon residue (Ramsbottom)(1)per cent by mass, maximum | 0.05 | D 4530 ISO 10370 -- |
| 6 | Sulphated ash, per cent by mass, maximum | 0.02 | ISO 6245 [P:4] |
| 7 | Water content, mg/kg, maximum | 500 | D 2709 ISO 3733 ISO 6296 [P:40] |
| 8 | Total contamination, mg/kg, maximum | 24 | EN 12662 -- |
| 9 | Copper corrosion 3 hours @ 50°C, maximum | 1 | ISO 2160 [P:15] |

| | | | | |
|----|---|-----------|-----------------------|-------------|
| 10 | Cetane No., minimum | 51 | ISO 5165 | [P:9] |
| 11 | Acid value, mg KOH/g, maximum | 0.5 | EN 14101 | [P:1/sec 1] |
| 12 | Methanol(2), per cent by mass, maximum | 0.2 | EN 14110 | -- |
| 13 | Ethanol(3), per cent by mass, maximum | 0.2 | -- | -- |
| 14 | Ester content, per cent by mass, minimum | 99.5 | EN 14103 | -- |
| 15 | Free Glycerol, per cent by mass, maximum | 0.02 | D 6584 | -- |
| 16 | Total Glycerol, per cent by mass, maximum | 0.25 | D 6584 | -- |
| 17 | Phosphorus, mg/kg, maximum | 10 | D 4951 | -- |
| 18 | Sodium and Potassium , mg/kg, maximum | To report | EN 14108 and EN 14109 | -- |
| 19 | Calcium and Magnesium, mg/kg, maximum | To report | (4) | -- |
| 20 | Iodine value | To report | EN 14111 | -- |
| 21 | Oxidation stability at 110°C, h, minimum | 6 | EN 14112 | -- |
| 22 | Mono-glyceride content, per cent by mass, maximum | 0.05 | EN 14105 | -- |
| 23 | Di-glyceride content, per cent by mass, maximum | 0.01 | EN 14105 | -- |
| 24 | Tri-glyceride content, per cent by mass, maximum | 0.01 | EN 14105 | -- |

(1)Carbon residue shall be run on 100 per cent sample.(2)Applicable for fatty acid methyl ester.(3)Applicable for fatty acid ethyl ester.(4)European method is under development.]]}[Annexure IV-T] [Inserted by Notification No. G.S.R. 889(E), dated 16.9.2016 (w.e.f. 2.6.1989).][See Rule 115 (18)]Technical specifications of the reference Diesel Fuel (B7)

| Parameter | Unit | Limits ¹ | Test method |
|----------------------------|-------------------|---------------------|--------------|
| Minimum | Maximum | | |
| Cetane Index | | 46.0 | EN ISO 4264 |
| Cetane number ² | | 52.0 | 56.0 |
| Density at 15 °C | Kg/m ³ | 833.0 | 837.0 |
| | | | EN ISO 12185 |

Distillation:

| | | | | |
|--|--------------------|-------|---------|--------------------------|
| - 50% point | °C | 245.0 | - | EN ISO 3405 |
| - 95% point | °C | 345.0 | 360.0 | EN ISO 3405 |
| - final boiling point | °C | - | 370.0 | EN ISO 3405 |
| Flash point | °C | 55 | - | EN ISO 2719 |
| Cloud point | °C | - | -10 | EN 23015 |
| Viscosity at 40 °C | mm ² /s | 2.30 | 3.30 | EN ISO 3104 |
| Polycyclic aromatic hydrocarbons | % m/m | 2.0 | 4.0 | EN 12916 |
| Sulphur content | mg/kg | - | 10.0 | EN ISO 20846EN ISO 20884 |
| Copper corrosion 3hrs, 50°C | - | - | Class 1 | EN ISO 2160 |
| Conradson carbon residue (10 % DR) | % m/m | - | 0.20 | EN ISO 10370 |
| Ash content | % m/m | - | 0.010 | EN ISO 6245 |
| Total contamination | mg/kg | - | 24 | EN 12662 |
| Water content | mg/kg | - | 200 | EN ISO 12937 |
| Acid number | mg KOH/g | - | 0.10 | EN ISO 6618 |
| Lubricity (HFRR wear scan diameter at 60 °C) | µm | - | 400 | EN ISO 12156 |
| Oxidation stability @ 110 °C ₃ | h | 20.0 | EN | 15751 |
| FAME ₄ | % v/v | 6.0 | 7.0 | EN 14078 |

1. The values quoted in the specifications are 'true values'. In establishment of their limit values the terms of ISO 4259 Petroleum products -

Determination and application of precision data in relation to methods of test have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account; in fixing a maximum and minimum value, the minimum difference is 4R (R = reproducibility).

Notwithstanding this measure, which is necessary for technical reasons, the manufacturer of fuels shall nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value in the case of quotations of maximum and minimum limits. Should it be necessary to clarify whether a fuel meets the requirements of the specifications, the terms of ISO 4259 shall be applied.

2. The range for cetane number is not in accordance with the requirements of a minimum range of 4R. However, in the case of a dispute between fuel supplier and fuel user, the terms of ISO 4259 may be used to resolve such disputes provided replicate measurements, of sufficient number to archive

the necessary precision, are made in preference to single determinations.

3. Even though oxidation stability is controlled, it is likely that shelf life will be limited. Advice shall be sought from the supplier as to storage conditions and life.

4. FAME content to meet the specification of EN 14214.

[Annexure IV-U] [Inserted by Notification No. G.S.R. 889(E), dated 16.9.2016 (w.e.f. 2.6.1989).][See rule 115(19)]Specification of Commercial Gasoline Fuel

| Characteristics | Unit | Requirements | |
|--|-------------------|---|---|
| | | Regular | Premium |
| Color, visual | | Orange | Red |
| Density @ 150C | Kg/m ³ | 720-775 | 720-775 |
| Distillation : | | | |
| a) Recovery up to 700C (E 70) | % volume | 10-55 (summer)10-58 (other month) | 10-55 (summer)10-58 (other month) |
| b) Recovery up to 1000C (E 100) | % volume | 40-70 | 40-70 |
| c) Recovery up to 1500C (E 150) | % volume | 75 min | 75 min |
| d) Final Boiling Point (FBP), max | oC | 210 | 210 |
| e) Residue, max | % volume | 2 | 2 |
| Research Octane Number (RON) min | | 91 | 95 |
| Motor Octane Number (MON), min | | 81 | 85 |
| Gum content (solvent washed), max | mg/100ml | 4 | 4 |
| Oxidation Stability, min | minutes | 360 | 360 |
| Sulphur, total, max | mg/kg | 10 | 10 |
| Lead content (as Pb), max | g/l | 0.005 | 0.005 |
| Reid Vapour Pressure (RVP) @ 38oC, max | kPa | 67 | 67 |
| Vapour Lock Index (VLI) | | | |
| a) Summer, max | | 1050 | 1050 |
| b) Other months, max | | 1100 | 1100 |
| Benzene Content, max | % volume | 1 | 1 |
| Copper strip corrosion for 3 hrs @ 500C, max | rating | Class 1 | Class 1 |
| Olefin content, max | % volume | 21 | 18 |
| Aromatics content, max | % volume | 35 | 35 |
| Oxygen content, max | % mass | 3.7 | 4.5 |

Oxygenates Content

| | | | |
|---|----------|----|----|
| a) Methanol, max | % volume | 3 | 3 |
| b) Ethanol, max | % volume | 10 | 10 |
| c) Iso-propyl alcohol, max | % volume | 10 | 10 |
| d) Iso-Butyl alcohol, max | % volume | 10 | 10 |
| e) Tertiary-butyl alcohol, max | % volume | 7 | 7 |
| f) Ethers containing 5 or more carbon atoms per molecule, max | % volume | 15 | 15 |
| g) Other oxygenates, max | % volume | 8 | 8 |

Note:1. Test methods and other provisions and details along with therequirements as given above shall be issued by Bureau of IndianStandards.2. TheAromatics content, (max) shall be permitted up to 40% in NorthEastern States till 01.04.2023

[Annexure IV-V] [Inserted by Notification No. G.S.R. 889(E), dated 16.9.2016 (w.e.f. 2.6.1989).][See rule 115(19)]Specification of Commercial Diesel Fuel

| Characteristics | Unit | Requirements |
|--|-------------------|----------------------|
| Ash, max | % mass | 0.01 |
| Carbon Residue (Ramsbottom) on 10 % residue, max | % mass | 0.3without additives |
| Cetane number (CN), min | | 51 |
| Cetane Index (CI), min | | 46 |
| Distillation : | | |
| 95% vol. recovery at oC, max | oC | 360 |
| Flash point : | | |
| a) Abel, min | oC | 35 |
| Kinematic Viscosity @ 40oC | cst | 2.0-4.5 |
| Density @15oC, max | kg/m ³ | 845 |
| Total Sulphur, max. | mg/kg | 10 |
| Water content, max | mg/kg | 200 |
| Cold filter Plugging point (CFPP) | | |
| a) Summer, max | oC | 18 |
| b) Winter, max | oC | 6 |
| Total contaminations, max | mg/kg | 24 |
| Oxidation stability, max | g/m ³ | 25 |
| Polycyclic Aromatic Hydrocarbon (PAH), max | % mass | 8 |
| Lubricity, corrected wear scar diameter @ 60oC,max | µm (microns) | 460 |

| | | |
|---|--------|-----------|
| Copper strip corrosion for 3 hrs @ 500C | rating | Class – 1 |
| FAME content max. | % v/v | 7.0 |

Note :1. Test methods and other provisions/ details along with therequirements as given above shall be issued by Bureau of IndianStandards.2. TheCetane number (CN), (min) shall be permitted up to 48 in NorthEastern States till 01.04.2023

[Annexure IV-W] [Inserted by Notification No. G.S.R. 889(E), dated 16.9.2016 (w.e.f. 2.6.1989).][See rule 115(18)]Technical Specification of Reference Hydrogen Fuel.

| Characteristics | Units | Limits | Test Method | |
|-------------------------------------|----------|--------|-------------|-------------|
| Minimum | Maximum | | | |
| Hydrogen Purity | % mole | 98 | 100 | ISO 14687-1 |
| Total Hydrocarbon | μmol/mol | 0 | 100 | ISO 14687-1 |
| Water ¹ | μmol/mol | 0 | 2 | ISO 14687-1 |
| Oxygen | μmol/mol | 0 | 2 | ISO 14687-1 |
| Argon | μmol/mol | 0 | 2 | ISO 14687-1 |
| Nitrogen | μmol/mol | 0 | 2 | ISO 14687-1 |
| CO | μmol/mol | 0 | 1 | ISO 14687-1 |
| Sulphur | μmol/mol | 0 | 2 | ISO 14687-1 |
| Permanent Particulates ³ | | | | ISO 14687-1 |

(1)Not to be condensed(2)Combined water, oxygen, nitrogen, argon: 1.900 µmol/mol.(3)The hydrogen shall not contain dust, sand, dirt, gums, oils or other substances in an amount sufficient to damage the fuelling station equipment of the vehicle (engine) being fuelled.[Annexure IV-X] [Inserted by Notification No. G.S.R. 889(E), dated 16.9.2016 (w.e.f. 2.6.1989).]See Rule 115Technical specification for Reference fuel E-5

| Parameter | Unit | Limits ¹ | Test method | |
|-----------------------------|---------|---------------------|-------------|-----------------------|
| Minimum | Maximum | | | |
| Research octane number, RON | | 95.0 | - | EN25164/prENISO5164 |
| Motor octane number, MON | | 85.0 | - | EN25163/prENISO5163 |
| Density at 15°C | kg/m3 | 743 | 756 | ENISO 3675/ENISO12185 |
| Vapour pressure | kPa | 56.0 | 60.0 | ENISO 13016-1(DVPE) |
| Water content | %v/v | 0.015 | ASTME | 1064 |
| Distillation: | | | | |
| – Evaporated at 70°C | %v/v | 24.0 | 44.0 | ENISO3405 |
| – Evaporated at100°C | %v/v | 48.0 | 60.0 | ENISO 3405 |
| – Evaporated at150°C | %v/v | 82.0 | 90.0 | ENISO 3405 |
| – Final boiling point | °C | 190 | 210 | ENISO 3405 |
| Residue | %v/v | — | 2.0 | ENISO 3405 |

Hydro-carbon analysis:

| | | | | |
|-------------------------------|---------|--------|----------|------------------------|
| – Olefins | %v/v | 3.0 | 13.0 | ASTMD1319 |
| – Aromatics | %v/v | 29.0 | 35.0 | ASTMD1319 |
| – Benzene | %v/v | - | 1.0 | EN12177 |
| – Saturates | %v/v | Report | ASTM1319 | |
| Carbon/ hydrogen ratio | | Report | | |
| Carbon/ oxygen ratio | | Report | | |
| Induction period ² | minutes | 480 | - | ENISO 7536 |
| Oxygen content ⁴ | %m/m | Report | EN1601 | |
| Existent gum | mg/ml | - | 0.04 | ENISO 6246 |
| Sulphur content ³ | mg/kg | - | 10 | ENISO 20846/ENISO20884 |
| Copper corrosion | | - | Class 1 | ENISO 2160 |
| Lead content | mg/l | - | 5 | EN237 |
| Phosphorus content | mg/l | - | 1.3 | ASTMD3231 |
| Ethanol ⁵ | %v/v | 4.7 | 5.3 | EN1601/EN 13132 |

1The values quoted in the specifications are "true values". For establishing the limit values, the terms of ISO4259:2006 (Petroleum products— Determination and application of precision data in relation to methods of test) have been applied and for fixing a minimum value, a minimum difference of 2 R above zero has been taken into account; for fixing a maximum and minimum value, the minimum difference is 4R (R= reproducibility). Notwithstanding this measure, which is necessary for technical reasons, the fuel manufacturer shall nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value when quoting maximum and minimum limits. Should it be necessary to clarify whether a fuel meets the requirements of the specifications, the terms of ISO4259:2006 shall be applied. 2The fuel may contain oxidation inhibitors and metal deactivators normally used to stabilize refinery petrol streams, but detergent/dispersive additives and solvent oils shall not be added. 3The actual sulphur content of the fuel used for the type I test shall be reported. 4Ethanol meeting the specification of prEN15376 is the only oxygenate that shall be intentionally added to the reference fuel. 5There shall be no intentional addition to this reference fuel of compounds containing phosphorus, iron, manganese or lead.

Annexure V [See rule 132(2)] TRANSPORT EMERGENCY CARD (ROAD)

| | |
|--------------------|--|
| Cargo | Mention chemical identity of the dangerous and hazardous goods |
| Nature of hazard | ..... |
| Protective devices | ..... |
| Emergency action | Notify police and fire brigade immediately |
| Spillage | ..... |
| Fire | ..... |
| First-aid- | ..... |

Additional information provided by the manufacturer or sender.

[Annexure VI [Inserted by GSR 933(E), dated 28.10.1989 (w.e.f. 28.10.1989).] [See rule 1-A]Specimen Of Objective Examination of a Driver

1. You are driving upto an intersection where there is no signal, people are crossing in front of your car, you should

(a)continue into the intersection without reducing speed(b)slow down and be careful(c)stop and allow persons to cross the road.

2. You wish to take a "U" turn at an intersection controlled by a traffic light, you should

(a)drive to another intersection that has no traffic light(b)wait until the light turns green before making the "U" turn(c)make the "U" turn if there is a policeman at the intersection.

3. You are driving towards an intersection where flashing yellow traffic light is displayed, you should

(a)slow down and proceed with caution(b)stop, if possible to do so safely(c)continue at the same speed.

4. You are driving on a two-lane street, the vehicle in front of you is moving very slowly, and the road ahead is clear for overtaking, you should

(a)pass the vehicle from the left hand side(b)pass the vehicle from the right hand side(c)pass the vehicle from any convenient side.

5. Your car is involved in an accident hurting people, you should

(a)report to the nearest police station and take the persons to the hospital(b)need not report to the police station(c)need not report to the police station but should take the persons to the hospital.

6. While driving, to make a right turn, the proper hand signal is

(a)extend right palm in a horizontal position outside of and to the right of vehicle with palm of the hand turned to the front(b)extend right arm and rotate in anti-clockwise direction(c)extend right arm with palm downward and move up and down several times.

7. A pedestrian is crossing the street at an intersection in an unmarked cross-walk, you should

(a)yield to the pedestrian the "right of way"(b)proceed with care as pedestrian is "Jay-walking"(c)reduce speed and warn pedestrian.

8. While driving, you wish to change from one lane to another, you should

(a)give the proper turn signal(b)change lanes only when it is safe to do so by giving the proper turn signal(c)never change lanes as it is against the law.

9. You approach an intersection that does not have traffic lights, a policeman or traffic signs, you should

(a)slow down and use caution(b)come to a full stop(c)not change speed if the way is clear.

10. You have a valid learner's license to drive a car, you should

(a)drive only in daylight hours(b)have someone with a valid driver's license on the seat beside you when you drive(c)practice driving only on streets that have very little traffic.][ANNEXURE VII [Inserted by GSR 221(E), dated 28.3.2001 (w.e.f. 28.3.2001). Earlier it was omitted by GSR 76(E), dated 31.1.2000 (w.e.f. 31.1.2000) and inserted by GSR 684(E), dated 5.10.1999 (w.e.f. 22.10.1999).] [See Table below rule 62(1)]CHECK HEAD LAMP BEAMThe Horizontal cut off of the passing beam when tested at 10 metres.Distance in an unladen condition of the vehicle shall be always below the heal lamp center line and the difference shall be within 5 cm to 25 cm.Note-Each head lamp shall be checked individually by blocking the other lamp.][FIGURE[ANNEXURE VIII [Annexure VIII substituted by G.Section R 788(E), dated 27.11.2002 (w.e.f. 2.6.2003).] [See clause (c) of sub-rule (4) and sub-rule (9) of rule 115-C]SAFETY CHECKS FOR USE OF LPG FUEL IN FOUR-WHEELED VEHICLES AND ABOVE (AS PER AIS 026)AND TWO-WHEELED AND THREE-WHEELED VEHICLES (AS PER) AIS 027) AND INDIAN GAS CYLINDER RULES, 1981(as amended from time to time)

| LPG Kit Component | [Approving/Certifying/Verifying Authority] [Substituted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004).] | Clause of AIS 026/027/Other Rules, Standards, etc. |
|--|---|---|
| 86[(1)(a) Cylinder for four-wheelers and above | *Department of Explosives, Nagpur to approve/endorse in case of foreign make | *ECE-R-67-01 or IS:14899-2000 or as approved under Gas Cylinder Rules, 1981 |
| (b) Cylinder for two-wheelers and three-wheelers | *Department of Explosives, Nagpur to approve/endorse in case of foreign make | *ECE-R-67-01 or IS:14899-2000 or as approved under Gas Cylinder Rules, 1981 |
| (2) Cylinder Valves/Multi Function Valve | *Department of Explosives, Nagpur to approve/endorse in | *ECE-R-67-01 or IS:15100-2001 or as |

| | | |
|--|---|--|
| | case of foreign make | approved under Gas Cylinder Rules, 1981] |
| | | United Nations Economic Commission for Europe Regulation No. 67 |
| (3) Regulator/vaporizer* | Testing or verification of certificate with test report by Test Agency as per United Nations Economic Commission for Europe Regulation No. 67 Rev.1 | Rev.1 Note:-Regulator/vaporizer is to be tested, as per Economic Commission for Europe Regulation No. 67(Rev.1), including endurance test for 6,000 number of cycles |
| (4) Gas-Air Mixer* | Testing/verification of certificate with test report by Test Agency as per United Nations Economic Commission for Europe Regulation No. 67 Rev.1 | United Nations Economic Commission for Europe Regulation No. 67 Rev.1 |
| | | United Nations Economic Commission for Europe Regulation No. 67 Rev.1 or equivalent |
| (5) Petrol and Gas Solenoid Valves* | Testing/verification of certificate with test report by Test Agency as per United Nations Economic Commission for Europe Regulation No. 67 Rev.1 | standard. Note:-Petrol solenoid valve is to be tested, as per Economic Commission for Europe Regulation No. 67 (Rev. 1), for endurance only at a pressure 1.5 times the working pressure for 6,000 number of cycles. |
| (6) Inspection, Testing and Commissioning Certificate(a) Leak testing(b) Excess flow valve test*(c) To be tested by Test Agency Automatic fill limiter*(d) Compartment/sub-compartment | | Clause 14 of AIS 026/AIS 027 |
| (7) Filling Connection | Installation on vehicle to be checked by Test Agency | As per Appendix A, Clause (d) of AIS 026/AIS 027 |
| (8) Ventilation | Test agency to verify | Clause 8(E) of AIS 026/AIS 027 |
| (9) Testing of Conduit* | Testing/Verification of Certificate with Test Report by Test Agency as per equivalent standard | Clause 8(F)(iii) of AIS 026/AIS 027 |

| | | |
|---|--|---|
| (10)(a) LPG Fuel line exceeding 4.5 kg/cm ² | | Clause 9 of AIS 026/AIS 027 |
| *Pressure testing | Testing/Verification of Certificate with Test Report by Test Agency as per equivalent standard | Clause 9(i) of AIS 026/AIS 027 |
| *Size of tube as per engine capacity | Manufacturer's declaration to be verified by Test Agency | Clause 9(ii) of AIS 026/AIS 027 |
| *Fitment on vehicle | Verification by Test Agency as per Safety Code of Practice | Clause 9(v)f of AIS 026/AIS 027 |
| (b) Flexible Hose/fuel line not exceeding* 4.5 kg/cm ² | | Clause 10 of AIS 026/AIS 027 |
| *Material | Testing/Verification of Certificate with Test Report by Test Agency as per equivalent standard | Clause 9(ii)(a) of AIS 026/AIS 027 |
| *Fitment on vehicle | Verification by Test Agency as per Safety Code of Practice | Clause 10(b), 9(v) of AIS 026/AIS 027 |
| *Pressure | Testing/Verification of certificate with Test Report by Test Agency as per Equivalent standard | Clause 10(A)(i) of AIS 026/AIS 027 |
| (c) Joints and connections to withstand Pressure without any leakage | Verification by Test Agency | Clause 9(iv) and 10(A) of AIS 026/AIS 027 |
| (11) Compartment/Sub-compartment* | Test to be carried out by Test Agency as per Safety Code of Practice | Clause 8D of AIS 026/AIS 027 |
| (12) Safety check for installation of LPG system | Safety checks to be carried out by Test Agency as per Safety Code of Practice | Relevant clauses of AIS 026/AIS 027 |
| *Certificate issued conforming to equivalent prescribed standards by accredited testing agency of the country of origin or a report issued by internationally accredited test laboratory may also be accepted. Note:-Only the latest version of all the standards as mentioned, shall be referred for compliance.[ANNEXURE IX [Substituted by Notification No. G.S.R. 643(E), dated 27.6.2017 (2.6.1989).] [See para E of rule 115B] Safety Checks for use of CNG/ Bio-CNG/ LNG Fuels in internal combustion engine vehicles (as per AIS 028) and Indian Gas Cylinder Rules, 2004(as amended from time to time) | | |

| Sr. No. | CNG/ BIO-CNG/ LNG Kit Component | Certifying/ Verifying Authority | Clause of AIS-028/ Other Rules and Standards |
|---------|---------------------------------|---------------------------------|--|
|---------|---------------------------------|---------------------------------|--|

| | | | |
|-----|---|--|---|
| | CNG/ BIO-CNG/ LNG Cylinder* | PESO, Nagpur to certify or endorse in case of foreign make | Gas cylinder rules 2004 or International standards as endorsed by PESO |
| 1.1 | Fitment of cylinder on vehicle | Test agency to verify as per AIS-028 | Clause no. 2.3, 2.5 and 2.6 of AIS-028 IS: 3224 (for CNG valves) or Gas cylinder rules 2004 or International standards as endorsed by PESO |
| 2 | CNG/ LNG (Shut off valve) Cylinder valves* | PESO, Nagpur to certify or endorse in case of foreign make | rules 2004 or International standards as endorsed by PESO |
| 3 | Regulator (CNG)/ Regulator and Vaporiser/ heat exchanger (LNG)* | Testing of the component as per IS: 15713 or ISO-15500 by test agency. Alternatively, test agency to verify the test certificate or report conforming to the above standard issued by accredited testing laboratory. | IS: 15713 or ISO-15500 |
| | | LNG regulator and Vaporiser/ heat exchangers shall meet requirements of ECE R110 or equivalent standard | ECE R110 or equivalent standard |
| 4 | Gas-Air Mixer* | Testing of the component as per IS :15714 or ISO-15500 by test agency. Alternatively, test agency to verify the test certificate or report conforming to the above standard issued by accredited testing laboratory. | IS: 15714 or ISO-15500 |
| 5 | Gas Injector* | Testing of the component as per ISO-15500 by test agency. Alternatively, test agency to verify the test certificate or report conforming to the above standard issued by accredited testing laboratory. | ISO-15500 |
| 6 | Petrol Solenoid Valve* | Testing of the component as per IS: 15717 by test agency. Alternatively, test agency to verify the test certificate or report conforming to the above standard issued by accredited testing laboratory. | IS: 15717 |
| 6.1 | Gas Solenoid Valve* | Testing of the component as per IS: 15712 or ISO-15500 by test agency. Alternatively, | IS: 15712 or ISO-15500 |

| | | | |
|--------|---|--|--|
| | | test agency to verify the test certificate or report conforming to the above standard issued by accredited testing laboratory. | |
| | | Automatic valve of LNG System shall meet requirements of ECE R110 or equivalent standard. | Automatic Valve for LNG System : ECE R110 or equivalent standard |
| 7 | Filling Connection (NZS & NGV-1 type) for CNG/ LNG receptacle | Installation on vehicle to be checked by test agency as per AIS-028 | Clauses 2.2.2, 2.2.3, 2.2.4, 2.2.5 and 2.2.6 of AIS-028 |
| 8 | Ventilation | Test agency to verify. | Clause 2.4.2 of AIS-028 |
| 9 | Testing of Conduit* | Testing of the component or verification of certificate or test report as per IS: 15715 by test agency. | IS: 15715 |
| 10 | CNG/ BIO-CNG/ LNG fuel line | | |
| 10.1 | High pressure - exceeding 100 kPa* | | |
| 10.1.1 | Exceeding 2.15 MPa | | |
| | - Rigid pipe. | Testing of the component or verification of certificate or test report as per IS: 15716 by test agency. | IS: 15716 |
| | | LNG rigid pipeline shall meet requirements of ECE R110 or equivalent standard | ECE R 110 or equivalent standard |
| | - Flexible hose | Testing of the component or verification of certificate or test report as per IS 15718 by test agency. | IS 15718 |
| | | LNG pipeline shall meet requirements of ECE R110 or equivalent standard | ECE R110 or equivalent standard |
| 10.1.2 | Pressure upto 2.15 Mpa | Testing of the component or verification of certificate or test report as per IS: 15722 by test agency. | IS: 15722 with amendments |
| | | LNG pipeline shall meet requirements of ECE R110 or equivalent standard | ECE R110 or equivalent standard |

| | | | |
|------|--|--|--------------------------------------|
| 10.2 | Joints and connections* | Testing by test agency. | Clause 3.1.4.1, 3.2.1 (b) of AIS-028 |
| | | LNG joints & connection shall meet requirements of ECE R110 or equivalent standard. | ECE R110 or equivalent standard |
| 11 | Compartment or Sub-compartment* | Testing of the component or verification of certificate or test report as per IS: 15720 by test agency. | IS: 15720 |
| 12 | Specific LNG components | (a) Following specific components, as applicable shall meet requirements of ECE R 110 or other International standards (b) Electronic Control Unit, Pressure and/or temperature sensor (if not part of LNG cylinder) | ECE R 110 or equivalent standard |
| 13 | Safety check for installation of CNG/ BIO-CNG/LNG system | Safety checks to be carried out by test agency as per AIS-028. | Relevant clauses of AIS-028 |

* Certificate issued by accredited testing agency of the country of origin or a report issued by internationally accredited test laboratory may also be accepted. Note 1 - Only the standards, as amended from time to time, as mentioned above, shall be referred for compliance. Note 2 - LNG system Components downstream of Vaporiser or heat exchanger shall be considered as CNG components. Note 3 - Test agency to conduct applicable CMVR test as applicable with commercial available LNG fuel.] ANNEXURE X [(See Item F of rule 115-B and sub-rule (10) of rule 115-C)] [Substituted by G. Section R 788(E), dated 27.11.2002, for '(See Item F of rule 115-B)' (w.e.f. 2.6.2003)]. SAFETY AND PROCEDURAL REQUIREMENTS FOR TYPE APPROVAL OF CNG AND LPG OPERATED VEHICLES Ministry of Road Transport and Highways has prescribed Safety Code of Practice and Procedure to be followed by the test agencies prescribed under CMVR for the purposes of issuing type approval certificates for CNG and LPG operated vehicles. The safety code of practice and type approval procedure to be followed for CNG and LPG operated vehicles is given in AIS 024 (Safety and Procedural Requirements for Type Approval of CNG Operated Vehicles) and AIS 025 (Safety and Procedural Requirements for Type Approval of LPG Operated Vehicles) standards respectively. These documents contain safety code of practice and procedure to be followed for installation of CNG/LPG kits by vehicle manufacturers (OE), kit installers or kit manufacturers or kit suppliers or kit importers. These standards also contain technical specifications of vehicle and kit, checklist for fitness tests of in-use converted vehicles, criteria to authorise kit installer and details about installation. Role and responsibility of each agency concerned is given in the above referred documents, salient features of which are described below: Role of Test Agency (Page No. 3 to 6 of AIS 024 and Page Nos. 3 and 4 of AIS 025). - Type Approval of CNG and LPG vehicles is carried out by the test agencies according to the Safety and Procedural Requirements for Type Approval of CNG/LPG Operated Vehicles. The test agencies carry out type approval certification trials on the vehicles and components submitted by vehicle/kit manufacturers/kit suppliers. Type Approval certification trials basically involve testing and

evaluation of vehicles and components for performance and safety and installation checks on the vehicle. If the vehicle meets the type approval norms and prescribed testing for components, type approval certificate is awarded to the vehicle/kit manufacturers/kit suppliers and the vehicle/kit manufacturers/kit suppliers are supposed to manufacture and market the vehicles fitted with kits conforming to those specifications. Necessary owner's manual, service manual, periodical inspection and maintenance instruction and adequate infrastructure to offer after sales service is the responsibility of vehicle/kit manufacturers/kit suppliers. Responsibility of vehicle/kit manufacturer/kit supplier (Page Nos. 3 and 4 of AIS 024 and Page 3 of AIS 025). -Prime responsibility of the vehicle/kit manufacturers/kit suppliers, as the case may be, is to manufacture and supply the vehicles fitted with CNG/LPG kits conforming to the specifications declared at the time of type approval. Necessary owner's manual giving the instructions about periodical maintenance, safety checks and do's and don'ts is to be prepared by vehicle/kit manufacturers/kit suppliers and provided to the vehicle owners. Necessary tools and gadgets to carry out installation, periodical inspection and maintenance of the vehicle shall be provided. If the kit manufacturer/supplier feels that additional safety instructions need to be provided in the vehicle, then it should be displayed at an appropriate location inside and outside the vehicle. During warranty period vehicle/kit manufacturers/kit suppliers should strictly adhere to the maintenance schedule and give appropriate training to the users. If the vehicle/kit manufacturers/kit suppliers feel that normal training is not sufficient, they should arrange comprehensive training to the users, drivers and other technicians on inspection, operation and maintenance. Vehicle/kit manufacturers/kit suppliers shall establish necessary infrastructure while establishing/appointing service centres/kit installers as per Annexure V of AIS 024 and AIS 15 standards. Responsibility of Owners/ Users (Clause Nos. 12 and 15 of Annexure V of AIS 024/AIS 025) The owner/ driver shall be instructed in the correct way that the gas system and controls function along with owner's operation manual for the gas system outlining the following: * Basic gas system explanation with a diagram * Fuel change over switch operation if bi-fuel system is fitted * Starting procedure for cold and hot start * How the vehicle is refueled * In the event of backfire check procedure and compliance * In the event of gas leak shut off procedure and compliance * Emergency or information contact numbers in the event of emergency Users should comply with all the instructions given by the vehicle manufacturers/ kit installers. Necessary periodic inspection, as listed in owner's manual, shall be carried out by the users. Users should follow the instructions while filling gas and carry out leakage test periodically. Users to insist on appropriate training to be given to the drivers and technicians by vehicle manufacturers/ kit installers/ suppliers. Periodic inspection of valves, pipelines, cylinders and regulator/ vaporizer shall be carried out. In case of malfunctioning of any component, necessary repair and maintenance to be carried out at authorized service station under the assistance/ guidance of installers, vehicle/ kit manufacturers/ suppliers. The vehicle owner shall apply to the concerned registering authority within 14 days of undertaking the alteration for endorsement of particular alteration in the registration certificate mentioning place and date of installation and installation certificate number. Statutory Requirements for Registration of Vehicle. - Enhancement of safety can be ensured taking the following measures:- While registering in every converted bus, vehicle manufacturers/kit installers along with bus body builders and transport authority shall jointly examine the bus prior to registration. The registration of such a vehicle; shall be done only after signing the report jointly by all the concerned along with the transport authority. Details of training module and frequency of training shall be communicated to

the users/competent authority such as transport authority/registration authority by vehicle manufacturers/kit installers. User-friendly approach from vehicle manufacturers and kit installers for servicing, maintenance and supply of spare parts is essential. The details shall be worked out prior to placement of order. Additional safety features such as 2 Nos. of dry powder type fire extinguishers of 2 kg each shall be provided one in driver's cabin and another in passenger compartment. Gas leakage detector will further enhance safety. For electrical installation, flameproof cables shall be used, especially positive terminals shall be locked firmly with all cables and pipes with proper looming to take care of vibrations; tire retardant material shall be used for seat/upholstery/root and side lining. Safety instructions about alertness in case of gas leakage and Tire hazard shall be displayed. Note:-The AIS standards referred to in this Annexure are available with the Automotive Research Association of India (ARAD), P.B. No. 832, Pune 411004, India (Fax-91-20-5434190, Website <http://www.araiindia.com>). Copies of this document are also available with the other testing agencies, as referred to in rule 126 of the Central Motor Vehicles Rules, 1989. [ANNEXURE XI] [Inserted by GSR 513(E), dated 10.8.2004 (w.e.f. 10.9.2004).] [See clause (s) of rule 2] I. Smart Card specifications for Driving License, Registration Certificate, Regional Transport Office cards, endorsing authority cards, reviewing authority cards, key generation authorities cards, etc. (a) Microprocessor based Integrated Circuit Card with contacts and with a minimum of 4 kb to available Electrically Erasable Programmable Read Only Memory (EEPROM) (b) Compliant to ISO/IEC 7816-1, 2 and 3 (c) Compliant to SCOSTA VI.2b, dated March 15, 2002 (d) Supply voltage 3V nominal (e) (e) T=0 or T=1 transport protocol (f) Min 10 years data retention (g) Min 3,00,000 EEPROM write cycles (h) Operating ambient temperature range -25°C to +55°C (i) Glossy surface, Poly Vinyl Chloride PVC/Acrylonitrile Butadiene Styrene (ABS) plastic construction with overlay to allow color dye sublimation printing (j) Smart Cards must have data objects for card sequence no (Tag 5F34) and cards primary account no (Tag 5A) at the Master File level as per International Standards Organisation 7816 Once programmed these data objects cannot be changed.

11. Specifications of Hand Held Terminals

(a) Display 4 lines x 16 characters back lit Liquid Crystal Display (LCD). Contrast level should such that it can be read in broad day light (b) Key Pad : Numeric, Function and scroll keys. Support for entering non-numeric characters us in g this key pad should also be available. (c) Power On/Off : Switch or automated sleep mode enabled. (d) Smart Car Readers : Two built in International Standards Organisation 7816 compliant smart card readers with 3V interface and with both T=0 and T=1 transport protocols. (e) Battery pack : (Rechargeable and removable) with 8 hours of on time and 7 days stand-by time. Preferably support should be there to operate device with the help of standard 1.5 Volts Dry Cells of standard size. (f) Memory : Memory requirements will depend on the application and the number of applications supported by the Terminal. (g) Printer : Printer is Optional and Printer Port is desirable. (h) Application : National Standard of Driving License and Registration Certificate as specified in this Annexure. (i) Communication : Standard Communication interfaces for loading and unloading of software (u grades). III. Specifications of Dye Sublimation Printer Print Process: Dye Sublimation Resolution: 300 dpi. Print Speed approximately 30 seconds per side. Colours-up to 16.7 million colours by using YMCK+O/YMCKO/KO ribbon. Capable of edge to edge printing Having card input hopper and in-built card cleaning system. Capable of printing and

smart card electronic personalisation in single pass. Smart card encoder within the printer shall be Factory Standard for PC to Smart Card Reader interface, International Standards Organisation 7816 compliant, support 3V chip card with T=0 and T=1 protocol. IV. Specifications of Smart Card Reader Factory Standard for PC to Smart Card Reader interface, ISO 7816 compliant, support 3V chip card with T=0 and T=1 protocol, USB interface, external. Readers must have Factory Standard for PC to Smart Card Reader interface drivers. Note.-The microprocessor chip of the Smart Card mentioned at Para I shall necessarily conform to the specifications given in this Annexure for Smart Card based Driving License and Vehicle Registration documents for Transport and Non-Transport vehicles and shall contain the information prescribed by these rules. This microprocessor chip shall not carry any other information not prescribed for the purpose. In addition to this microprocessor chip, any extra information as maybe required by any State Government or Union Territory Administration may be stored on the card in the form of any additional information storage media or any other technological media outside the above referred microprocessor chip embedded in the Smart Card, which shall not conflict in any way with the minimum specifications prescribed by the Central Government under these rules or the operation of the same. Further, the operating environment in the form of Operating System, Protocol and other details given above relating to the microprocessor chip, as given in items (a) to (j) of paragraph I shall be complied with, without any variation, whatsoever.][Sub-Rule (2) substituted by GSR 111(E), dated 10.2.2004 (w.e.f. 10.8.2004) and as corrected by vide GSR 176(E), dated 5.3.2004.]