

## **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Discuss the classification of automobiles based on different criteria such as purpose, load capacity and fuel used. (CO2)
- Q.24 Explain in detail the construction and working of four four-stroke petrol engines. (CO1)
- Q.25 Explain the differences between conventional, semi-integral, and integral chassis frame types. (CO3)

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220314

**1<sup>st</sup> Sem/Branch : Automobile Engineering**

**Subject : Basics of Automobile Engineering**

Time : 3 Hrs.

M.M. : 60

## **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Crane is a (CO1)
- a) Goods Vehicle
  - b) Passenger Vehicle
  - c) Special purpose vehicle
  - d) All of the above
- Q.2 The Body of a vehicle is fixed to (CO3)
- a) Frame
  - b) Axle
  - c) Bumper
  - d) Suspension
- Q.3 Clutch is located between the Gear Box and the (CO4)
- a) Differential
  - b) Axle
  - c) Engine
  - d) Propeller Shaft

Q.4 Pistons are usually made up of (CO4)

- a) Iron
- b) Plastic
- c) Copper
- d) Aluminium

Q.5 Air bags are inflated with

- a) Chlorine Gas
- b) Oxygen Gas
- c) Nitrogen gas
- d) Hydrogen gas

Q.6 The clearance time to clear the road is indicated by

- a) Red light
- b) Green Light
- c) White light
- d) Amber light

### SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Full form of BDC is \_\_\_\_\_ (CO1)

Q.8 Piston is connected with connecting rod with the help of \_\_\_\_\_ Pin. (True/False) (CO2)

Q.9 Give one example of sports utility vehicle. (CO3)

Q.10 Road signs and signals provide \_\_\_\_\_ to drivers about the road conditions and any potential hazards ahead. (CO5)

Q.11 Write full form of HMV. (CO1)

Q.12 Define passive safety (CO5)

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Write five applications of automobiles. (CO1)

Q.14 Enlist the functions of the transmission system.

(CO2)

Q.15 Describe cowl Assembly (CO3)

Q.16 Explain the various types of road markings on road.

(CO5)

Q.17 Explain Airbag in detail. (CO5)

Q.18 Define Automobile, Chassis and body. (CO3)

Q.19 Explain Active Safety Systems. (CO5)

Q.20 Describe the layout of a two-wheeler. (CO1)

Q.21 Compare front-wheel and rear-wheel drive. (CO4)

Q.22 Write the name of bus manufacturers in India with brand name. (CO1)