MCQs on Automobile Engineering
1. What is an Automobile?
a) self-propelled vehicle
b) used for carrying passengers and goods on the ground
c) contains the power source for its propulsion
d) All of the mentioned
2. Automobile can be classified based on which of the following parameter?
a) Fuel Used
b) Transmission
c) Drive
d) All of the mentioned
3. Which of the following is a classification of automobiles based on Load?
a) Heavy transport vehicle (HTV)
b) Sedan Hatchback car
c) Four wheeler vehicle
d) Front-wheel drive
4. Which of these were or are used in automobiles to provide suspension.
a) Coil springs
b) Torsion bars
c) Leaf springs
d) All of the mentioned
5. Which of the following is not a part of the transmission system?
a) Clutch
b) Wheels
c) Gear box
d) Axles
6. Which of the following is a classification of IC Engine?
a) Otto cycle engine
b) Four-stroke engines
c) S.I Engines
d) All of the above
7. What is the function of the alternator?
a) Recharging the Battery
b) Voltage Regulator
c) Auto-ignition
d) None of the above

8. Which of the following automobile has two/four doors?
a) Convertible
b) Special purpose vehicles
c) Pickups
d) Sedan
9. Which of the following is found in an automobile’s electrical system?
a) Lighting systems
b) Battery
c) Alternators
d) All of the mentioned
10. Which of the following is necessary for the description of an automobile?
a) Model
b) Capacity
c) Make
d) All of the mentioned
11. Which of the following type of load is supported by an automobile frame?
a) Torque from engine and transmission
b) Sudden impacts from collisions
c) Weight of the body, passengers and cargo loads
d) All of the mentioned
12. Which of the following parts does not include an automobile chassis?
a) Differential
b) Brakes
c) Steering system
d) Shock absorbers
13. Which of the following is defined as an upraised part on the hood which directs the airflow into
a) Hood scoop
b) Spoiler
c) Wings
d) Hotpipe
14. Which of the following parameter is not necessary for the description of an automobile?
a) Model
b) Type
c) Capacity
d) Colour

15. Which of the following car is a ‘Convertible’?
a) Volkswagen Golf GTI
b) Honda S2000
c) Mahindra Scorpio
d) Cadillac XTS
16. What is an IC Engine?
a) the fuel is ignited and burned inside the engine
b) the fuel is burned inside a combustion chamber
c) the fuel is ignited inside a combustion chamber
d) None of the above
17. Which of the following is not an arrangement of ic engine cylinders?
a) Circular
b) Opposed cylinder engine
c) Radial
d) V type engine
18. Which of the following is a cylinder head type of an ic engine?
a) U head
b) F head
c) C head
d) X head
19. The temperature of the piston will be more at _____ in an automobile engine.
a) The piston rings
b) The piston walls
c) The crown of the piston
d) The skirt of the piston
20. Which of the following terms is used to express Ignition advance?
a) Millimetres of piston travel before TDC
b) Time in milliseconds
c) Crank angle
d) All of the mentioned
21. Which of the following is defined as the escape of burned gases from the combustion chamber
a) Passed gas
b) Gas loss
c) Blow by
d) By pass

22. Which of the following material is used to make connecting rod?
a) Cast iron
b) Mild steel
c) Forged steel
d) Tool steel
23. Which of the following is a type of Gasket?
a) Single sheet rigid
b) Copper asbestos
c) Steel asbestos
d) All of the mentioned
24. Which of the following crankcase would result in saving weight also enable cheaper and quick
a) iron
b) nickel
c) aluminium
d) chromium
25. Which of the following isn't a cylinder block part?
a) carburetor
b) cylinder in which piston slides up and down
c) openings for valves
d) passages for the flow of cooling water
26. Which of the following provides passages for the flow of cooling water?
a) crankcase
b) cylinder block
c) piston
d) cylinder head
27. Which of the following is attached to the bottom face of the cylinder block?
a) oil pan
b) cylinder liners
s
d) piston
28. Which of the following serves as a cooling and ventilation of engine lubricating oil?
a) piston
b) cam shaft
c) oil sump
d) crank case

MCQs on Transmission
1. Which of the following is the need of the gearbox?
a) To vary the speed of the vehicle
b) To vary the torque of the vehicle
c) To vary the power of the vehicle
d) To vary the acceleration of the vehicle
2. In which type of manual transmission the double-declutching is used?
a) Constant-mesh gearbox
b) Sliding mesh gearbox
c) Synchromesh gearbox
d) Epicyclical gearbox
3. In which of the gearbox all gears are always in contact?
a) Constant-mesh gearbox
b) Sliding mesh gearbox
c) Synchromesh gearbox
d) Epicyclical gearbox
4. In which of the gearbox sun and planet gear set is used?
a) Constant-mesh gearbox
b) Sliding mesh gearbox
c) Synchromesh gearbox
d) Epicyclical gearbox
5. Where is the overdrive located?
a) Between transmission and engine
b) Between transmission and rear axle
c) Between transmission and propeller shaft
d) Between transmission and differential
6. Which of the following is not part of automatic transmission?
a) Epicyclic gearbox
b) Torque convertor
c) Multi-plate clutch
d) Sliding mesh gearbox
7. In which of the configuration of epicyclic gearbox output will be forward and fast output speed?
a) Sun gear stationary, ring gear driven, planet carrier driving
b) Sun gear driving, ring gear driven, planet carrier stationary
c) Sun gear driven, ring gear stationary, planet carrier driving
d) Sun gear stationary, ring gear stationary, planet carrier driving
8. Which types of gears are used in constant mesh gearbox?
a) Spur gear
b) Helical gear
c) Bevel gear
d) Worm gear
9. Why are the helical gears used commonly in transmission over spur gears?

a) Low cost and high strength
b) Low noise level and high strength
c) Low noise level and economy
d) Low noise level and low cost
10. Increase of torque in a vehicle is obtained by decreasing power.
a) True
b) False

MCQs on Engine's Fuel System
1. When is the choke used in the engine?
a) When the vehicle is idling
b) When the vehicle is accelerating
c) When the engine is cold
d) When the engine is hot
2. What does the venturi in carburetor cause?
a) Increase of air velocity
b) A decrease in air velocity
c) A decrease in fuel flow
d) Decrease of manifold vacuum
3. Where is the lean air-fuel mixture needed?
a) During starting
b) During idling
c) During acceleration
d) During cruising
4. Which of the following is the most widely used fuel supply system?
a) Gravity system
b) Pressure system
c) Pump system
d) Vacuum system
5. Why is the small hole provided in the pump body?
a) A vent for the oil
b) A vent for water
c) A vent for air
d) A vent for the fuel
6. Which of the following is the most accurate petrol injection system?
a) Manifold injection
b) Port injection
c) Throttle body injection
d) Direct injection
7. Where does the power for mechanical fuel pump come from?
a) Camshaft
b) Crankshaft
c) Distributor shaft
d) Propeller shaft
8. What is the stoichiometric air-fuel ratio of diesel?
a) 50: 1
b) 14.7: 1
c) 25: 1
d) 14.5: 1

9. What is the purpose of the venturi in the carburetor?
a) To decrease the fuel flow
b) To increase the manifold vacuum
c) To increase the air velocity
d) To decrease the air velocity
10. When does the simple carburetor supplies rich mixture?
a) Idling
b) Cruising
c) Accelerating
d) Starting

MCQs on Tyres and Wheels
1. Which types of wheels cannot be used with a tubeless tire?
a) Disc wheel
b) Light alloy wheel
c) Wire wheel
d) Composite wheel
2. Which type of wheels is preferred in sports cars?
a) Disc wheel
b) Wire wheel
c) Magnesium alloy wheel
d) Aluminum alloy wheel
3. In case of a wire wheel, the vehicle weight is supported by the wire in _____
a) Tension
b) Bending
c) Shear
d) Compression
4. What does the ‘ply rating’ refer to?
a) Aspect ratio
b) Rated strength
c) Recommended inflation pressure
d) The actual number of plies
5. Where will an underinflated tire wear the thread most?
a) Near center
b) Near the edge
c) In the cross direction
d) In the lateral direction
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6. Where will an overinflated tire wear the thread most?
a) Near center
b) Near the edge
c) In the cross direction
d) In the lateral direction
7. What do the permissible of mixing cross-ply and radial-ply automobile tires allow?
a) Cross-ply tires on left wheels
b) Cross-ply tires on right wheels
c) Cross-ply tires on front wheels
d) Cross-ply tires on rear wheels
8. What is the purpose of tire rotation on automobiles?

a) Avoid ply separation
b) Equalize wear
c) Get better ride
d) Reduce bump
9. A car is fitted with 6 * 14 wheels and 185/65 R 14 tires on them. What is the rolling radius of the original tire?
a) 398.05 mm
b) 298.05 mm
c) 288.05 mm
d) 278.05 mm
10. What does the code 145 SR -13 tire designation represent?
a) 145” width, 13” diameter, cross-ply
b) 145 mm width, 13” diameter, radial-ply
c) 145” width, 13 cm diameter, radial-ply
d) 145 mm width, 13 cm diameter, cross-ply

MCQs on Engine Technicals
1. What is the material of the connecting rod?
a) Mild steel
b) Forged steel
c) Tool steel
d) Cast iron
2. Which of the following item is made of aluminium alloy?
a) Piston ring
b) Piston
c) Connecting rod
d) Crankshaft
3. Piston pin is also known as _____
a) Gudgeon pin
b) Crank pin
c) Screw pin
d) None of the mentioned
4. Compression rings are fitted at the _____
a) Middle of skirt
b) Bottom of skirt
c) Top of skirt
d) None of the mentioned
5. Piston rings are not completely closed because _____
a) Closed rings are hard to manufacture
b) Gap allows the ring to expand and fit over
c) They are designed to let pass some lubricant to the combustion chamber
d) None of the mentioned
6. The entrance of the piston pin hole is sealed by _____
a) Steel plating
b) Snap ring
c) Rubber ring
d) None of the mentioned
7. Compression rings have which type of cross section _____
a) Rectangular
b) L shaped
c) Keystone
d) All of the mentioned
8. Passenger car engines contain _____
a) 2 compression ring and 1 oil control ring

b) 2 compression ring and 2 oil control ring
c) 1 compression ring and 1 oil control ring
d) 2 compression ring and no oil control ring
9. The function of a piston is _____
a) It forms a movable wall of combustion chamber
b) It transmits turning force to the crankshaft via connecting rod
c) It functions like crosshead and transmits side thrusts
d) All of the mentioned
10. If the diameter of a piston is ‘D’ then the length of skirt is usually of the range of _____
a) 0.75D to 0.8D
b) 0.5D to D
c) 1.5D to 2D
d) 0.2D to 0.6D
11. The plate which acts as a packing between cylinder block and cylinder head is called _____
a) Chaplet
b) Liner
c) Gasket
d) Flange
12. Which one of the following is a type of Gasket?
a) Copper asbestos
b) Steel asbestos
c) Single sheet rigid
d) All of the mentioned
13. In an automobile engine the temperature of the piston will be more at _____
a) The crown of the piston
b) The skirt of the piston
c) The piston walls
d) The piston rings
View Answer
14. The firing order in case of four cylinder inline engines is usually _____
a) 1-2-4-3
b) 1-3-4-2
c) 1-4-3-2
d) Either 1-3-4-2 or 1-4-3-2
15. In case of four cylinder opposed cylinder engines the firing order is _____
a) 1-4-3-2
b) 1-3-4-2
c) 1-2-3-4
d) 1-2-4-3

16. In case of four cylinder inline engine the number of firing strokes in one revolution of crank is _____
a) 1
b) 2
c) 3
d) 4
17. In four cylinder engines the ignition advance depends on _____
a) Quality of fuel
b) Engine speed
c) Cylinder dimensions
d) Quality of fuel and engine speed
18. Ignition advance is expressed in terms of _____
a) Crank angle
b) Millimetres of piston travel before TDC
c) Time in milli seconds
d) All of the mentioned
19. In internal combustion engine the approximate percentage of the combustion heat that passes to the cylinder w
a) 5%
b) 10%
c) 30%
d) 60%
20. In a four stroke S.I engine the exhaust valve usually opens _____
a) At BDC
b) 35 degree to 60 degree before BDC
c) 35 degree to 60 degree after BDC
d) 10 degree to 20 degree before BDC
21. In S.I engine the intake valve closes _____
a) At BDC
b) At TDC
c) 25 degree to 84 degree after BDC
d) 10 degree to 20 degree before TDC
22. In a diesel engine the pressure during combustion may increase to a range at _____
a) 10-15 atm
b) 15-20 atm
c) 20-30 atm
d) 55-75 atm
23. In a diesel engine the temperature of gases under full load may be of the order of _____
a) 550-650 degree Celsius
b) 200-300 degree Celsius
c) 150-200 degree Celsius
d) 100 degree Celsius

24. The fuel is injected into the cylinder in diesel engine when the piston is _____
a) Exactly at TDC after compression stroke
b) Exactly at the BDC before compression stroke
c) Approaching TDC during compression stroke
d) Approaching TDC during exhaust stroke
25. A single cylinder four stroke engine is rotating at 2000 rpm. The number of power strokes occuring in one minute
a) 500
b) 1000
c) 2000
d) 4000
26. The pressure in an engine cylinder is less than atmospheric pressure when the engine is performing which stroke
a) Suction
b) Compression
c) Power
d) Exhaust
27. The angle in degrees moved by the crankshaft of a four cylinder engine between firing impulses is _____
a) 90
b) 180
c) 360
d) 720

MCQs on Steering System
1. The front axle of a car has pivot centers 1.3 m apart. The angle of inside lock is 40℃ and the angle of the outside
a) 5.5 m
b) 3.5 m
c) 4.5 m
d) 6.5
2. If the wheelbase, the pivot center, and wheel track of the are 2.5 m, 1.1 m, and 1.3 m respectively. The angle of
a) 2.6 m
b) 3.6 m
c) 4.6 m
d) 1.6 m
3. What is the angle between the steering axis and the vertical in the plane of the wheel?
a) Castor
b) Camber
c) Steering axis inclination
d) Kingpin inclination
4. If the front of the front wheels is inside and rear of front wheels are apart when the vehicle is at rest, then the
a) Toe-in
b) Toe out
c) Positive camber
d) Positive castor
5. What is the name of the angle through which the wheel has to turn to sustain the side force?
a) Slip angle
b) Castor angle
c) Camber
d) Kingpin inclination
6. What is called the cornering force over the slip angle?
a) Castor trail
b) Cornering power
c) Self-righting torque
d) Pneumatic trail
7. What is a condition called when the vehicle will try to move away from its normal direction and to keep it on the
a) Understeer
b) Oversteer
c) Reversibility
d) Irreversibility
8. What is the purpose of the reciprocating ball type steering gear?
a) To reduce the operating cost

b) To reduce the number of parts
c) To reduce the operating friction
d) To reduce the toe-out during the turns
9. What is the angle between the vertical when the top of the wheel slants outward?
a) Negative camber
b) Negative castor
c) Positive camber
d) Positive castor
10. The furniture rollers are provided with negative castor.
a) True
b) False

MCQs on Braking System
1. In a disc brake, which component provides the pad-to-disc adjustment?
a) Bleed screw
b) Piston
c) Caliper
d) Piston seal
2. What is the braking torque at leading shoe if resultant frictional force acts at a distance of 250 mm from the brake drum center, coefficient of friction between the shoe and the drum as 0.5, the free ends of the two shoes are
a) 276.6 Nm
b) 256.6 Nm
c) 266.6 Nm
d) 246.6 Nm
3. On what principle does the braking system in the car work?
a) Frictional force
b) Gravitational force
c) Magnetic force
d) Electric force
4. Generally which brakes are on the front wheels?
a) Drum brake
b) Disk brake
c) Shoe brake
d) Double shoe brake
5. If the car is moving on the level road at a speed of 50 km/h has a wheelbase 3 m, a distance of C.G. from ground 700 mm and distance from rear wheels is 1.1 m. Coefficient of friction is 0.7. What is the retardation if the brakes
a) 3.7 m/s2
b) 2.7 m/s2
c) 1.7 m/s2
d) 4.7 m/s2
6. If the car is moving on the level road at a speed of 50 km/h has a wheelbase 4 m, a distance of C.G. from ground 800 mm and distance from rear wheels is 1.2 m. Coefficient of friction is 0.8. What is the retardation if the brakes
a) 3.4 m/s2
b) 2.4 m/s2
c) 1.4 m/s2
d) 4.4 m/s2
7. If the car is moving on the level road at a speed of 50 km/h has a wheelbase 4 m, a distance of C.G. from ground 800 mm and distance from rear wheels is 1.2 m. Coefficient of friction is 0.8. What is the retardation if the brakes
a) 7.8 m/s2
b) 6.8 m/s2
c) 5.8 m/s2

d) 4.8 m/s2
8. The car is moving up on the 12o inclined road with horizontal at 36 km/h which is having wheelbase 1.4 m. The C.G. of the car is 0.9 m above the road. The coefficient of friction is 0.7. What is the retardation of the car if the
a) 8.75 m/s2
b) 8.81 m/s2
c) 7.71 m/s2
d) 6.81 m/s2
9. The car is moving down on the 14° inclined road with horizontal at 36 km/h which is having wheelbase 1.4 m. The C.G. of the car is 0.9 m above the road. The coefficient of friction is 0.75. What is the retardation of the car if
a) 4.76 m/s2
b) 5.76 m/s2
c) 6.76 m/s2
d) 7.76 m/s2
10. The metering valve is used to proportion the braking effect between the front and the rear axle.
a) True
b) False