Strength of mechanical Engg

Multiple Choice Questions

UNIT - 3

Q1. The force that opposes the motion of a vehicle is

- 1. Rolling resistance
- 2. Gradient resistance
- 3. Wind or air resistance
- 4. All of the mentioned

Q2. Which of these falls under LMV(LightMotor Vehicle) category based on capacity?1. Motorbikes

- **2.** Cars
- 3. Buses
- 4. Trains

Q3. A conventional suspension system uses which of these

1. Leaf Springs

- 2. Coil Springs
- 3. Torsion bars
- 4. None of the mentioned

Q4. The electrical system of an automobile contains which of the following

- 1. Battery
- 2. Alternators
- 3. Lighting systems
- 4. All of the mentioned

Q5. Which of these were or are used in automobiles to provide suspension.

- 1. Leaf springs
- 2. Coil springs
- 3. Torsion bars
- 4. All of the mentioned

Q6. Which of the following is not a part of the transmission system

- 1. Clutch
- 2. Axles
- 3. Wheels
- 4. Gear box

Q7. What is actual power delivered by the engine known as?

- 1. Shaft power
- 2. Horse power
- 3. Brake power
- None of the mentioned

Q8. Engine pistons are usually made of aluminium alloy because it

- 1. Is lighter
- 2. Wear is less
- 3. Absorbs shocks
- 4. Is stronger
- Q8. The stroke of an engine is the
- 1. Volume of the cylinder
- **2.** Length of the connecting rod
- 3. Internal diameter of the cylinder
- 4. Distance between TDC and BDC

Q9. In a Otto cycle engine, combustion occurs at

- 1. Constant pressure
- 2. Constant temperature
- 3. Constant volume
- 4. Constant heat

Q10. Compression rings have which type of cross section

- 1. Rectangular
- 2. L shaped
- 3. Keystone
- 4. All of the mentioned

Q11. Cylinder liner materials are made of alloy iron containing

- 1. Manganese
- 2. Nickel
- 3. Chromium
- 4. All of the mentioned

Q12. Crankshafts are usually constructed by

- 1. Casting
- 2. Drop forging
- 3. Drawing
- 4. Extrusion

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Q13. Which stroke for a 4-stroke ic engine is considered as the working or power stroke

- 1. Suction stroke
- 2. Compression stroke
- 3. Expansion stroke
- Exhaust stroke

Q14. Connecting rod is attached to the piston by the

- 1. Rod cap
- 2. Piston pin
- 3. Cap bolt
- 4. Lower cap

Q15. The function of a piston is

1. It forms a movable wall of combustion chamber

2. It transmits turning force to the

crankshaft via connecting rod

3. It functions like crosshead and

transmits side thrusts

4. All of the mentioned

Q16. In a four stroke ic engine the number of strokes covered for one complete crankshaft revolution is

1. 4

- **2.** 2
- **3.** 1
- **4.** 0.5

Q17. The plate which acts as a packing between cylinder block and cylinder head is called

- 1. Chaplet
- 2. Liner
- 3. Gasket
- 4. Flange

Q18. What is the material of the connecting rod1. Mild steel

2. Forged steel

- 3. Tool steel
- 4. Cast iron

Q19. What is the disadvantage of using diesel engine in comparison to petrol engine

- 1. Higher weight-to-power ratio
- 2. Higher maintenance cost
- 3. Greater starting difficulties
- 4. All of the mentioned

Q20. Piston rings are not completely closed because

- 1. Closed rings are hard to manufacture
- **2.** Gap allows the ring to expand and fit over

 They are designed to let pass some lubricant to the combustion chamber
None of the mentioned

Q21. Piston pin is also known as

- 1. Gudgeon pin
- 2. Crank pin
- 3. Screw pin
- 4. None of the mentioned

Q22. The crankshaft rotates the camshaft using

- 1. Belt drive
- 2. Chain drive
- 3. Gear drive
- 4. Motor drive

Q23. In a four stroke engine each cylinder has

- a) One valve
- b) Two valves
- c) Three valves
- d) Four valves

Q24. Which of the following is NOT the type of Hybrid Vehicle?

1. Plug-in Hybrid

Strength of mechanical Engg

- 2. Parallel Hybrid
- 3. Natural Gas For Vehicles
- 4. Series Hybrid

Q25.

The Hybrid Electric Vehicle consists of :

- 1. Internal Combustion Engine + Electric Motor
- 2. Motor Electric 1 + Motor electric
 - 2
- 3. NGV engine + Gasoline engine