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4th Sem / Automobile Engineering Subject:- Auto Engine - 1

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 The stroke of an engine is the

 - Volume of the cylinder
 - Length of the connecting rod
 - Internal diameter of the cylinder
 - Distance between T.D.C. and B.D.C

Q.2 The capacity of a battery is usually expressed in terms of

 - Volts
 - Amperes
 - Weight
 - Ampere hours

Q.3 The connecting rods are generally made of _____ shaped cross-section.

 - I
 - C
 - L
 - H

Q.4 The instrument used to check specific gravity of acid in a battery is

 - Hydrometer
 - Hygrometer
 - Anemometer
 - Multimeter

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- Q.5 The diesel engine works on

 - a) Otto cycle
 - b) Carnot cycle
 - c) Diesel cycle
 - d) Rankine cycle

Q.6 The component in the radiator of an automobile that increases the boiling point of water is

 - a) Drain plug
 - b) Water jacket
 - c) Vacuum valve
 - d) Pressure cap

Q.7 If the engine coolant leaks into the engine oil, then engine oil

 - a) Appears milky
 - b) Become foamy
 - c) Turns black
 - d) None of these

Q.8 The connecting rod connects the piston and the

 - a) Cylinder head
 - b) Cylinder block
 - c) Camshaft
 - d) Crankshaft

Q.9 The piston compression rings are made of

 - a) Cast iron
 - b) Steel
 - c) Aluminium
 - d) Bronze

Q.10 The main task of a battery in automobiles is to

 - a) Supply electricity to the alternator
 - b) Act as a reservoir or stabilizer of electricity
 - c) Supply electricity to the vehicle's electrical system at all times while the engine is running
 - d) Supply a large amount of power to turn the starter motor when the engine is being started

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SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 The connecting rod is located between the piston and the _____.
- Q.12 The third stroke of four stroke engine is known as _____.
- Q.13 The connecting rod has _____ and _____ end.
- Q.14 Write function of piston?
- Q.15 What is the function of differential?
- Q.16 Define F.H.P?
- Q.17 To biggest part of an engine is called _____.
- Q.18 What is the full form of B.H.P?
- Q.19 What is the function of battery in ignition system?
- Q.20 What is the function of antifreeze solution?

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Differentiate between battery and magneto ignition system. Give five differences only? (CO2)
- Q.22 Calculate compression ratio if Swept volume is 2800 cm³ and clearance volume is 250 cm³? (CO3)
- Q.23 What are the advantages of force feed lubrication system over splash lubrication system write any five? (CO4)
- Q.24 Analyze any five properties of lubricants? (CO4)

- Q.25 What is the importance of MPFI system engine? (CO3)
- Q.26 What do you understand by gravity fuel feed system? (CO2)
- Q.27 Differentiate between Distributorless and Electronic ignition system? (CO2)
- Q.28 What is the necessity of cooling system? (CO3)
- Q.29 Analyze the effect of compression ratio on petrol and diesel engine? (CO4)
- Q.30 List any five components of ignition system and mention their uses? (CO3)
- Q.31 Analyze need of electronic ignition system? (CO4)
- Q.32 Differentiate between carburetion and MPFI system? (CO2)
- Q.33 Define TDC, BDC and compression ratio? (CO1)
- Q.34 How electric fuel feed pump works? (CO3)
- Q.35 Analyse any five defects and their remedies in fuel supply system? (CO4)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Analyze the advantages and disadvantages of diesel engine over petrol engine? (CO4)
- Q.37 Describe the working of electronic ignition system? (CO3)
- Q.38 Explain construction and working of water cooling system with neat diagram? (CO3)

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