

- Q.27 Differentiate between battery and magneto ignition system? (CO2)
- Q.28 What is the function of carburetor and how it works? (CO3)
- Q.29 Analyze the effect of additive on fuel and oil? (CO4)
- Q.30 List any five component of lubrication system and mention their uses? (CO3)
- Q.31 Analyze need antifreeze solution also mention their name? (CO4)
- Q.32 Differentiate between distributor less ignition engine and electronic ignition engine? (CO2)
- Q.33 Define BHP, IHP and FHP? (CO1)
- Q.34 How mechanical fuel feed pump works? (CO2)
- Q.35 Analyze any five defects and their remedies in ignition 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 petrol engine over diesel engine? (CO4)
- Q.37 Describe the working of MPFI fuel feed system with neat diagram? (CO3)
- Q.38 Differentiate between balanced coil and bi metallic fuel gauge (any five)? (CO3)

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**4th Sem / Auto
Subject:- Auto Engine-I**

Time : 3Hrs. M.M. : 100

SECTION-A

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

- Q.1 Paint in an automobile body used for
- Prevent rust from growing on the body
 - Improve its external appearance
 - Retain the characteristics of steel for long
 - All of these
- Q.2 The function of a first compression ring (top ring) is that it
- Increases the combustion temperature
 - Creates swirl
 - Maintains a seal and prevents the fuel leakage
 - Maintains a seal and prevents escape of burned gases and loss of pressure in the combustion chamber
- Q.3 The most commonly used power plant in automobiles is
- Gas turbine
 - I.C. engine
 - Battery
 - None of the above
- Q.4 The petrol engines are also known as
- Spark ignition (S.I) engines
 - Compression ignition (C.I) engines

- c) Steam engines
 d) None of these
Q.5 The petrol engine works on
 a) Otto cycle b) Carnot cycle
 c) Diesel cycle d) Rankine cycle
Q.6 An Engine has a clearance volume of 100cm^3 and a swept volume of 800cm^3 . The compression ratio is
 a) 7:1 b) 8:1
 c) 9:1 d) 10:1
Q.7 In a four stroke engine for each crankshaft revolution, the camshaft revolves
 a) One half turn b) One turn
 c) Two turns d) Four turns
Q.8 The main function of an exhaust muffler is the
 a) Optimization of exhaust efficiency
 b) Reduction of exhaust noise
 c) Reduction of nitrogen oxide in the exhaust gases
 d) Reduction of the exhaust gas volume.
Q.9 The clutch is located between the transmission and the
 a) Engine b) Rear axle
 c) Propeller shaft d) Differential
Q.10 The aluminium alloy is used in cylinder blocks because
 a) It is higher and has good heat dissipation characteristics
 b) Material cost is low
 c) It does not require any cylinder liners
 d) The piston is also made of aluminium alloy

SECTION-B

- Note:** Objective type questions. All questions are compulsory. $(10 \times 1 = 10)$
- Q.11** The gear box is located between the clutch and the
Q.12 The bore of an engine is the _____ of the cylinder
Q.13 The gudgeon pin connects _____ and _____
Q.14 Write function of clutch?
Q.15 What is the function of cam shaft?
Q.16 Define B.H.P.?
Q.17 Write function of crankshaft.
Q.18 What is the full form of IHP?
Q.19 What is the function of cam in ignition system?
Q.20 What indicates the performance of engine?

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. $(12 \times 5 = 60)$
- Q.21** Differentiate between air cooling and water cooling system Give five differences only? (CO2)
Q.22 Calculate compression ratio if swept volume is 2500 cm^3 and clearance volume is 500cm^3 ? (CO3)
Q.23 What are the advantages of splash lubrication system over force feed lubrication system, write any five? (CO4)
Q.24 Analyse the advantages of using lubrication in an engine, write any five? (CO4)
Q.25 What is the importance of pump feed fuel system? (CO3)
Q.26 What do you understand by anti freeze solution why it is used? (CO2)