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Roll No.

220344

**4th Sem. / Automobile Engineering
Subject : Auto Engine - I**

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (6x1=6)

- Q.1 Fuel is ignited in a diesel engine through (CO1)
a) Hot exhaust b) Electric spark
c) None of these d) Heat of compression
- Q.2 The piston compression rings are generally made of (CO1)
a) Aluminum b) Cast Iron
c) Bronze d) Brass
- Q.3 B.H.P. is determined by (CO1)
a) Simple rope brake
b) Band brake
c) Hydraulic dynamometer
d) All of these
- Q.4 The vaporize and atomize the petrol is the function of (CO3)
a) Fuel pump b) Fuel filter
c) Inlet valve d) None of these

- Q.5 A spark occurs at plug when the contact breaker of a coil ignition system (CO3)
- a) Just opens
 - b) Just closes
 - c) Is fully opened
 - d) Is fully closed
- Q.6 Which lubricating oil is less viscous (CO5)
- a) SAE 20
 - b) SAE 30
 - c) SAE 40
 - d) SAE 50

Section-B

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

- Q.7 Crank radius is equal to _____ the stroke length. (CO2)
- Q.8 The bottom portion of the piston is known as _____. (CO1)
- Q.9 The amount of fuel consumed per unit power developed per hour is called as _____. (CO1)
- Q.10 The sets of pipes attached to the cylinder head which carry air-fuel mixture and exhaust gases are called _____. (CO3)
- Q.11 Ignition advance is expressed in _____ of crank shaft rotation. (CO3)
- Q.12 In modern engine, _____ type of thermostat is normally used. (CO3)

Section-C

Note: Short answer type Question. Attempt any eight questions out of Ten Questions. (8x4=32)

- Q.13 Write short note on crank shaft. (CO2)
- Q.14 Define valve mechanism and name its type. (CO3)
- Q.15 Explain the Prony Brake Dynamometer with the help of neat sketch. (CO2)
- Q.16 Explain centrifugal type air cleaner. (CO3)
- Q.17 Explain the advantages of battery ignition system. (CO3)
- Q.18 Write short note on distributor - less ignition system. (CO3)
- Q.19 Write the advantages of water cooled engines. (CO4)
- Q.20 Write the advantage of mist lubrication system. (CO5)
- Q.21 Explain the crank case ventilation and its methods. (CO4)
- Q.22 Write the characteristics of anti-freeze solution. (CO5)

Section-D

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

- Q.23 Write the location, function and material used for any five components of IC engine. (CO2)
- Q.24 Explain the magneto ignition system with the help of neat sketch. (CO3)
- Q.25 Explain the Heat Balance sheet. (CO6)