

- Q.31 Explain the otto cycle along with diagram.
 Q.32 What are different parameters of testing of IC engines?
 Q.33 What are the pre-starting checks for an IC Engine?
 Q.34 What is the difference between wet and dry type Air cleaner?
 Q.35 List different components of Lubrication system along with their function.

SECTION-D

- Note:** Long answer questions. Attempt any two questions out of three Questions. (2x10=20)
- Q.36 What are different methods of cooling an I.C. engine? Also explain the defects in cooling system and their rectification.
 Q.37 What is the importance of testing of IC Engines? Explain any one test for testing an IC Engine in detail.
 Q.38 What are different components of Fuel Injection System? Also explain its working.

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4th Sem.
Branch : Agri
Sub.: I.C. Engines/Farm I.C. Engines

Time : 3 Hrs. **M.M. : 100**

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

- Q.1 The distance travelled by piston from Top dead centre to Bottom dead centre.
 a) Bore b) Stroke
 c) Stroke bore ratio d) Swept volume
- Q.2 The thermostat valve operates at about
 a) 100°C b) 75°C
 c) 40°C d) 25°C
- Q.3 The lowest temperature at which the lubricating oil will flash with a small flame.
 a) Fire point b) Flash point
 c) Pour point d) Cloud point
- Q.4 The ratio of total cylinder volume to clearance volume is called
 a) Swept volume b) Crank radius
 c) Compression ratio d) Crank throw

SECTION-B

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

- Q.11 Define Piston displacement.**

- Q.12 Define additives.
 - Q.13 What is the purpose of Lubrication in an engine?
 - Q.14 The thermostat valve operates at temperature _____.
 - Q.15 What is the function of crankshaft?
 - Q.16 Write the function of connecting rod.
 - Q.17 Write the function of piston ring.
 - Q.18 What is the function of fuel injector?
 - Q.19 Write down the function of fuel feed pump?
 - Q.20 Define Thermal efficiency.

SECTION-C

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

- Q.21 Describe three types of nozzles used in fuel injection system.
 - Q.22 How would you classify an internal Combustion engine?
 - Q.23 Explain the working of Rope brake dynamometer.
 - Q.24 Explain the various defects in cooling system.
 - Q.25 Compare the petrol engine and diesel engine.
 - Q.26 What are different types of alternate fuels used in IC engines?
 - Q.27 Describe the working of four stroke cycle engine.
 - Q.28 Describe any five properties of engine lubricants.
 - Q.29 What is Wankle engine? Explain its working?
 - Q.30 What are different types of lubricants?