

- Q.26 Describe different types of nozzles used for fuel injection.
- Q.27 Explain the diesel cycle along with diagram.
- Q.28 What is the need and importance of alternate fuel used in IC engines?
- Q.29 Describe the properties of engine lubricants.
- Q.30 What are different types of lubricants?
- Q.31 What is Wankleengine? Explain its working.
- Q.32 What are the pre-starting checks for an IC Engine?
- Q.33 Describe the working of four stroke cycle engine.
- Q.34 Describe any one test for testing an I.C. Engine.
- Q.35 Describe pollution control in IC engines.

SECTION-D

Note: Long Answer type question. Attempt any two questions. (2x10=20)

- Q.36 Explain the working of Fuel injection system along with its different components and their functions.
- Q.37 What is the purpose of cooling an engine? Also explain the different types of cooling systems.
- Q.38 What are different types of lubrication systems? Explain the working of lubrication system along with different components and their functions.

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4th Sem / AGRI Engg.
Subject : I C Engine / Farm I C Engines

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

- Q.1 A petrol engine works on
 a) Diesel Cycle b) Otto cycle
 c) Carnot cycle d) Dual cycle
- Q.2 A carburettor is used in
 a) Diesel engine b) C.I. Engine
 c) S.I. Engine d) All of the above
- Q.3 The compression ratio of a C.I. Engine is
 a) 6:1 to 11:1 b) 12:1 to 22:1
 c) 1:1 to 5:1 d) None of the above
- Q.4 The thermostat valve operates at about
 a) 100 to 160 °C b) 75 to 80 °C
 c) 30 to 40 °C d) 15 to 25 °C
- Q.5 The ratio of brake power to indicated power is
 a) Mechanical efficiency
 b) Thermal efficiency

- c) Volumetric efficiency
 - d) Relative efficiency
- Q.6 The component which delivers finely atomized fuel under high pressure to the combustion chamber of the engine
- a) Fuel filter b) Fuel injector
 - c) Turbo charger d) High pressure pipe
- Q.7 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.8 The ratio of total cylinder volume to clearance volume is called
- a) Swept volume b) Crank radius
 - c) Compression ratio d) Crank throw
- Q.9 BHP is determined by
- a) Simple rope brake
 - b) Band brake
 - c) Hydraulic dynamometer
 - d) All of above
- Q.10 The distance travelled by piston from Top dead centre to Bottom dead centre
- a) Bore b) Stroke
 - c) Stroke bore ratio d) Swept volume

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SECTION-B

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

- Q.11 Define Swept volume.
- Q.12 Define Specific fuel consumption.
- Q.13 What is the function of crankshaft?
- Q.14 What is the purpose of cooling an engine?
- Q.15 Give the function of thermostat valve.
- Q.16 What is the use of Governor?
- Q.17 Write the function of oil ring.
- Q.18 What is the objective of Lubrication?
- Q.19 Define thermal efficiency.
- Q.20 What is the function of fuel filter?

SECTION-C

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

- Q.21 What are different criteria for classification of IC engine?
- Q.22 Explain the various defects in cooling system.
- Q.23 What are the different types of Air cleaner?
- Q.24 Explain the working of Prony brake dynamometer.
- Q.25 What are different parameters of testing of IC engine?

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