

- 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 Wankle engine? 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. $(2 \times 10 = 20)$

- 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.

No. of Printed Pages : 4
Roll No.....

180145/120145/30145

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. $(10 \times 1 = 10)$

- 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

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 Governer?
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 Pronybrake dynamometer.
Q.25 What are different parameters of testing of IC engine?