

- Q.27 Describe different types of nozzles used for fuel injection
- Q.28 Describe pollution control in IC engines.
- Q.29 What checks to be performed before starting an engine.
- Q.30 Describe three types of lubricants.
- Q.31 Explain the working of Rotary / Wankel engine.
- Q.32 What are the parameters to be considered for testing of IC engines?
- Q.33 Describe the different types of Fuel Filters.
- Q.34 Write down the criteria for classification of IC engine?
- Q.35 Describe any one test for testing an I.C. Engine.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 What are the different types of lubrications systems? Explain the working of lubrication system along with different components and their functions.
- Q.37 Describe the working of Fuel Injection System along with its different components and their functions.
- Q.38 What is the purpose of cooling an engine? Also explain the different types of cooling systems.

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4th Sem / Agri Subject:- I.C. Engines / Farm I.C. Engines

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 The ratio of brake horse power to indicated horse power is
- Mechanical efficiency
 - Thermal efficiency
 - Volumetric efficiency
 - Relative efficiency
- Q.2 In cooling system, the thermostat operates at about
- 160°C
 - 80°C
 - 40°C
 - 25°C
- Q.3 During combustion inside the cylinder, the temperature rises above
- 2000-3000°C
 - 1500-2000°C
 - 1000-1200°C
 - 500-600°C
- Q.4 The compression ratio of a Diesel engine is
- 6:1 to 11:1
 - 12:1 to 22:1
 - 1:1 to 5:1
 - None of the above

- Q.5 The component which delivers finely atomized fuel under high pressure to the engine
- a) Fuel Filter b) Fuel Injector
c) Turbocharger d) High pressure pipe
- Q.6 The specific fuel consumption of a diesel engine as compared to that for petrol engine lies in the range of
- a) Lower b) Higher
c) Same for same output d) None of the above
- Q.7 A Diesel engine works on
- a) Diesel cycle b) Otto cycle
c) Carnot cycle d) Dual cycle
- Q.8 Brake Horse Power is determined by
- a) Rope brake
b) Prony brake
c) Hydraulic dynamometer
d) All of above
- Q.9 The ratio of cylinder volume to clearance volume is called
- a) Swept volume b) Crank radius
c) Compression ratio d) Crank throw
- Q.10 A carburettor is used in
- a) Diesel engine
b) Compression Ignition Engine
c) Spark Ignition Engine
d) None of the above

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SECTION-B

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

- Q.11 Define Top dead centre.
- Q.12 What is the function of fuel filter?
- Q.13 Define Specific fuel consumption.
- Q.14 The connecting rod converts reciprocating motion to _____
- Q.15 Give the function of thermostat valve.
- Q.16 Write the function of oil ring.
- Q.17 What is the use of Governor?
- Q.18 What is the objective of Lubrication?
- Q.19 Write the function of oil pressure relief valve.
- Q.20 What is the purpose of cooling an engine?

SECTION-C

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

- Q.21 What is the difference between Internal and External combustion engines?
- Q.22 What are the different types of piston rings and state their functions?
- Q.23 Explain the diesel cycle along with diagram.
- Q.24 Explain the working of Prony brake dynamometer.
- Q.25 What are the objectives of lubrication?
- Q.26 What are the different types of Air Cleaner?

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