

SECTION-D

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

- Q.23 Explain the working principle of a four-stroke diesel engine with neat sketches. (CO1)
- Q.24 Explain the working of fuel injection pump and injector with the help of a diagram. (CO3)
- Q.25 Describe different types of lubrication systems used in IC engines. (CO4)

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Roll No.

3rd Sem./ Agriculture Sub : IC Engine

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q1. What is the function of the crankshaft in an IC engine? (CO1)
- a) Fuel supply b) Power transmission
c) Cooling d) Air filtration
- Q.2 Which engine works on constant volume cycle? (CO2)
- a) Diesel b) Petrol
c) Dual d) Gas turbine
- Q.3 Which cycle is also known as Otto cycle? (CO2)
- a) A constant pressure cycle
b) Constant volume cycle
c) Dual cycle
d) Limited pressure cycle

- Q.4 Fuel injectors are used in (CO3)
 a) Petrol engines b) Diesel engines
 c) Rotary engines d) All engines
- Q.5 Which lubricant property is essential for high load? (CO4)
 a) Viscosity b) Transparency
 c) Color d) Thickness
- Q.6 Thermostat valve is used to: (CO5)
 a) Cool engine faster
 b) Maintain engine temperature
 c) Heat fuel
 d) Reduce power

SECTION-B

- Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)
- Q.7 Define indicated and brake power. (CO1)
- Q.8 Define compression ratio. (CO2)
- Q.9 Which cycle is used in diesel engines? (CO3)
- Q.10 What is the function of a fuel filter? (CO4)
- Q.11 Name one additive used to improve lubrication. (CO4)
- Q.12 What is Morse test used for? (CO5)

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SECTION-C

- Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)
- Q.13 Differentiate between 2-stroke and 4- stroke IC engines. (CO1)
- Q.14 Describe Otto cycle with neat sketch. (CO2)
- Q.15 Describe working of fuel injection system in diesel engine. (CO3)
- Q.16 What are the properties of a good lubricant? (CO4)
- Q.17 What is a Dual Cycle? Mention its practical importance. (CO2)
- Q.18 Write a short note on the working of inlet and exhaust manifolds. (CO1)
- Q.19 Describe the functions of lubricating oil in IC engines. (CO4)
- Q.20 What are the function of a thermostat valve? (CO5)
- Q.21 Explain any two applications of thermodynamic cycles in IC engines. (CO2)
- Q.22 Write a short note on BS emission norms. (CO5)

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