

- Q.25 What is the necessity of cooling system in engines?
(CO4)
- Q.26 Write any five disadvantage of air-cooled engines.
(CO4)
- Q.27 Write any five disadvantages of mist lubrication system.
(CO4)
- Q.28 What are additives? Name some common additives.
(CO4)
- Q.29 What are the different types of lubricants? (CO4)
- Q.30 Define indicated power and brake power (CO5)
- Q.31 Define thermal efficiency. (CO5)
- Q.32 Describe the heat balance sheet of an IC engine.
(CO5)
- Q.33 Explain Principle of operation of turbojet engine.
(CO6)
- Q.34 Give comparison between impulse and reaction turbine.
(CO6)
- Q.35 Write the function of a steam condenser. (CO6)

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain working principle of two stroke petrol engine with neat sketch. (CO1)
- Q.37 Explain air fuel mixture requirements at different load and speed conditions in SI engine. (CO2)
- Q.38 Explain methods of reducing pollution of diesel engines. (CO5)

No. of Printed Pages : 4

171751

Roll No.

5th Sem / Mech Subject:- Thermodynamics - II

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 Function of gudgeon pin is (CO1)
- Acts as stiffeners
 - Connects piston to connecting rod
 - Supports piston head
 - None of above
- Q.2 In a two stroke engine, the working cycle is completed in _____ revolution of crankshaft (CO1)
- One revolution
 - Two revolutions
 - Three revolutions
 - Four revolutions
- Q.3 A diesel engine work on (CO1)
- Dual cycle
 - Diesel cycle
 - Otto cycle
 - Carnot cycle
- Q.4 Major constituent of CNG is (CO5)
- Butane
 - Ethane
 - Methane
 - Propane

- Q.5 In Magneto Ignition system (CO2)
- No battery is required
 - Engine starting is difficult
 - Used in high speed engines
 - All of the above
- Q.6 A 100 cc engine has following parameter as 100 cc (CO1)
- Clearance volume
 - Fuel tank capacity
 - Swept volume
 - Cylinder volume
- Q.7 Mechanical efficiency is always (CO5)
- More than one
 - Less than one
 - Equal to one
 - Zero
- Q.8 Morse test is conducted on (CO5)
- Single cylinder engines
 - Slow speed engines
 - High speed engines
 - Multi cylinder engines
- Q.9 The ram jet engine has (CO6)
- Single compressor unit
 - Double compressor unit
 - No compressor unit
 - Both a and b
- Q.10 A space rocket is propelled by (CO6)
- An automobile engine
 - Steam engine
 - Nuclear submarine
 - Rocket propellant

SECTION-B

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

- Q.11 Classify engines according to the fuel used. (CO1)
- Q.12 What is the function of connecting rod? (CO1)
- Q.13 Define compression ratio. (CO1)
- Q.14 What is the purpose of the Secondary coil in ignition system? (CO2)
- Q.15 Define air injection system. (CO3)
- Q.16 What is the purpose of governing in a steam turbine? (CO6)
- Q.17 Which type of lubrication system is used in two-stroke engine? (CO4)
- Q.18 What are the advantages of using CNG as fuel for engines? (CO5)
- Q.19 Define cooling pond. (CO6)
- Q.20 Give classification of gas turbines. (CO6)

SECTION-C

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

- Q.21 Define cylinder bore, stroke length and crank radius. (CO1)
- Q.22 Compare petrol and diesel engines. (CO1)
- Q.23 Give any five factors which affects the carburation. (CO2)
- Q.24 What are the functional requirements of a good fuel injection system? (CO3)