

- 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
Roll No.

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

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

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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)

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