

S.B. Roll No.....

THERMODYNAMICS-II
5th/Mech/5325/0853/May'16

Duration: 3 hrs.

M.Marks=75

SECTION A

Fill in the blanks.

1x15=15

- Q1:-i** In a 150 cc Scooter, The Parameter 150cc represents _____
- ii.** A two stroke engine employs _____ cuts in the cylinder walls instead of _____
- iii.** The drive for mechanical pump is taken from _____
- iv.** The function of ignition coil is to _____
- v.** The airless injection is also known as _____
- vi.** Distributor type fuel injection pump is used in _____ diesel engine.
- vii.** The Fire point of a lubricant should be _____ than normal atmosphere temp.
- viii.** Thermostat is used in _____ cooling system.
- ix.** Relative efficiency of an I.C. engine is defined as _____
- x.** Morse test is used to find _____ of Multicylinder engines.
- xi.** The steam enters the nozzle at _____ pressure and _____ velocity
- xii.** The overall efficiency of steam plant is _____ with used of condenser.
- xiii.** The efficiency of gas turbine is _____ than steam turbine.
- xiv.** The fuel and oxidisers carried by the Rocket are known as _____
- xv.** A Radial engine is used in _____

SECTION B

Q2:- Note:- Attempt any FIVE questions:-

5x6=30

- a.** Define compression Ratio and Piston speed.
- b.** Compare battery ignition system with Magneto ignition system
- c.** Name different types of Nozzles fitted in fuel injector.
- d.** Why is thermostat essential in cooling system?
- e.** What is the purpose of IC engine testing?
- f.** Give advantages of Gas turbine over steam turbine.
- g.** Discuss main functions of incorporating a condenser in a steam power plant.
- h.** Give the field of applications of Gas turbines.

SECTION C

Note:- Attempt any THREE questions:-

10x3=30

- Q3:-** Explain with neat sketch working of Four Stroke Petrol Engine.
- Q4:-** Explain with neat sketch working of Battery ignition system.
- Q5:-** Describe Mico fuel injection system for multicylinder engine with neat sketch.
- Q6:-** A single cylinder C.I. engine working on two stroke cycle runs at 500 rpm. The diameter of the bore and stroke length is 10 cm each. If the mean effective pressure is 6.5 bar. Calculate Indicated power of the engine.
- Q7:-** Why compounding of Steam Turbine is done? Explain velocity compounding with neat sketch.