

No. of Printed Pages : 2

Roll No.

188443

Level 4 / 2nd. Sem. / DVOC

Ref. & Air Cond.

Subject : Basics of Thermodynamics

Time : 2 Hrs.

M.M. : 50

SECTION-A

Note: Very short answer type questions. All questions are compulsory (10x1=10)

- Q.1 Write name of a fire tube boiler.
- Q.2 Define evaporation.
- Q.3 Describe condenser.
- Q.4 Define inter cooling.
- Q.5 Define clearance volume in IC engine.
- Q.6 Define mean effective pressure.
- Q.7 Give zeroth law of thermodynamics.
- Q.8 Define isolated system.
- Q.9 Define steady state flow process.
- Q.10 Describe C.O.P.

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SECTION-B

Note: Short answer type questions. Attempt any six questions out of eight questions. (6x5=30)

- Q.11 Explain the elements of power plant and give their working.
- Q.12 What is reciprocating steam engine? Give their main parts and their working principle.
- Q.13 Differentiate between reciprocating air compressor and rotary compressor.
- Q.14 Write a short note on compressor lubrication.
- Q.15 Write the differences between two stroke cycle engine and four stroke cycle engine.
- Q.16 Explain open and closed system with neat diagrams.
- Q.17 Explain the concept of heat pump.
- Q.18 Define entropy. Give its physical concept and significance.

SECTION-C

Note: Long answer type questions. Attempt any one questions out of two questions. (1x10=10)

- Q.19 Explain various operations of a dual cycle in detail.
- Q.20 State & explain second law of thermodynamics. Explain the concept of perpetual motion machine of first order and that of second order.

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