

No. of Printed Pages : 2

Roll No.

188443

DVOC (Level 4)

2nd Sem. / Trade: Ref. & Air Cond.

Subject : (4.GV.06) Basics of Thermodynamics

Time : 2 Hrs.

M.M. : 50

SECTION-A

Note: Very short questions. Attempt all ten questions.
(10x1=10)

- Q.1 Write one use of steam.
- Q.2 Define boiler efficiency.
- Q.3 Define isothermal process.
- Q.4 Write the function of air compressor.
- Q.5 Define compression ratio.
- Q.6 Define swept volume.
- Q.7 Define isolated system.
- Q.8 Give the statement of first law of thermodynamics.
- Q.9 Define entropy.
- Q.10 Give full form of C.O.P.

SECTION-B

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

- Q.11 Differentiate fire tube boiler and water tube boilers.

(1)

188443

- Q.12 What is steam turbine? Give their classification.
- Q.13 Describe the construction and working of reciprocating compressor.
- Q.14 Define steam condenser and explain its objective.
- Q.15 Enlist the various parts of IC engine and materials used for making them.
- Q.16 Describe and explain quasi-static process.
- Q.17 Explain isolated type thermodynamic system in brief.
- Q.18 Explain perpetual motion machine of first order.

SECTION-C

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

- Q.19 Explain various operations of an otto cycle in detail.
- Q.20 What are the processes involved in a carnot cycle? Derive an Expression for the thermal efficiency of carnot cycle.

(2)

188443