

S.B. Roll No.....

REFRIGERATION AND AIR CONDITIONING
5th Exam/Mech./6853/Jan'2022
(FOR BATCH 2018 ONWARDS)

Duration: 1.15Hrs.

M.Marks:25

SECTION-A

Q1. Attempt any three questions.

3x5=15

- i. Explain various leak detection methods of refrigerants.
- ii. Write advantages of Air refrigeration system over Vapour compression system.
- iii. Explain working of Electrolux refrigerator with diagram.
- iv. Discuss the important properties of an ideal refrigerant.
- v. Define specific humidity, DBT and sensible heat.
- vi. Write the difference between water cooled condensers and air cooled condensers.
- vii. Write the various source of heat load.

SECTION-B

Q2. Attempt any one question.

1x10=10

- a. A machine works on reversed carnot cycle between the temperature limits of 500 C and -200 C. Determine C.O.P when it operates as i) Refrigerator ii) Heat pump iii) Heat engine.
- b. Draw a neat diagram of lithium bromide absorption system and explain its working.
- c. Explain vapour compression system of refrigeration with help of diagram.
- d. Write short notes on ammonia, R-11, R-12, R-22 and carbon dioxide.