

Q.4 Which refrigerant is commonly used as an alternative to R410A?

- a) R-134a b) R-717
- c) R-744 d) R-454B

Q.5 What is the purpose of a thermostat in refrigeration systems?

- a) measure pressure
- b) control temperature
- c) increase cooling effect
- d) reduce noise

Q.6 Which air conditioning system is commonly used in residential building?

- a) central ac b) window ac
- c) industrial ac d) chiller system

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Define refrigeration effect.

Q.8 The coefficient of performance (COP) is always greater than efficiency.(True/False)

Q.9 Name any two types of compressors used in refrigeration systems,

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Q.10 _____ is used to detect refrigerant leakage in air conditioning systems.(Fill in the blank)

Q.11 What is the purpose of an evaporator in a refrigeration system?

Q.12 Psychrometric deals with the properties of air-water vapor mixtures. (True/False)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Explain the difference between a heat pump and a refrigerator.

Q.14 What are the effects of superheating and undercooling in refrigeration systems?

Q.15 Describe different types of condensers used in refrigeration.

Q.16 What are the properties of an ideal refrigerant?

Q.17 Explain the working of a thermostatic expansion valve.

Q.18 What is the significance of psychrometric charts in air conditioning.

Q.19 Discuss different methods for refrigerant leakage detection.

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