SCHOOL OF DIPLOMA ENGINEERING, SOLDHA
QUESTIONS FOR REVISION
DIPLOMA ME 5TH SEM
SUBJECT-RAC

VERY SHORT QUESTION (2 MARKS)

1. Define refrigeration effect
2. Define one ton of refrigeration
3. Define C.O.P. of a refrigeration system.
4. Name the principle parts of a simple vapour compression system.
5. Define refrigeration effect.
6. Name some secondary refrigerants
7. What are hydrocarbons?
8. Classify refrigerants
9. What is the function of compressor
10. Define condenser
11. Define cooling tower
12. What is thermostat switch
13. What is overload protector
14. Define psychrometry
15. Define moist air
16. Define saturation air
17. Define specific humidity
18. Define degree of saturation
19. Define dry bulb temperature
20. Define dew point temperature
21. Define wet bulb temperature
22. What is heating with humidification
23. Define air conditioning
24. What is year round air conditioning
25. What is the function of evaporator in simple vapour compression system

SHORT QUESTION (4 MARKS)

1. Differentiate between C.O.P. and efficiency
2. Name different methods methods of refrigeration
3. Write advantages of ice refrigeration
4. Write the principle of vapour compression refrigeration system
5. Draw the flow diagram of a simple vapour compression refrigeration system
6. Draw the *pv* diagram of simple vapour compression refrigeration cycle
7. Write the objectionable property of R-717
8. What are double acting reciprocating compressor
9. What are vertical reciprocating compressor
10. Write the advantages of hermetically sealed reciprocating compressor
11. Explain tube evaporator
12. Explain shell and coil evaporator
13. Name different types of expansion valve
14. What is important of psychometriy
15. How dehumidification of air achived

LONG QUESTION (10 MARKS)

1. Differentiate between heat engine, refrigerator and heat pump
2. Explain ice refrigeration
3. A Carnot refrigerator system has working teemprature of -30^0C and 40^0C. what is the maximum C.O.P possible? If the actual C.O.P is 75% of maximum, calculate the actual refrigeration effect produced per kWh and capicity of system
4. Write thr application of refrigeration and air-conditioning
5. Explain the simple vapour compression refrigeration cycle with the help of diagram
6. Explain the principle parts of simple vapour compression refrigeration system
7. Explain the use of following in vapour compression refrigeration system
    a. Flash chamber
    b. Accumulator
    c. Driver loop
8. Write the property of R-717.
9. Write the property of an ideal refrigerant
10. Explain domestic Electrolux refrigeration system with diagram
11. Write the advantages of solar power refrigeration system over vapour compression refrigeration system
12. Explain the working of reciprocating compressor
13. Explain roller type rotary compressor with diagram
14. Compare water cool and air cooled condenser
15. Explain flooded type evaporator with diagram
16. Explain high side float valve with the help of diagram
17. Explain sensible cooling
18. Explain adiabatic chemical dehumidification
19. Explain cooling with dehumidification
20. Explain factor involve in complete air conditioning
21. Explain window type air conditioning
22. Write the advantages and disadvantages of split air conditioner
23. Explain automobile air conditioning