RAC Important Questions

- 1. Explain Bell Coleman cycle with the help of p-v diagram.
- 2. Explain the effects of sub cooling with the help p-h diagram.
- 3. Explain flooded evaporator with the help of p-h diagram.
- 4. Explain domestic Electrolux system with the help of sketch.
- 5. Write the properties of an ideal refrigerant.
- 6. Differentiate between COP and efficiency.
- 7. What is the unit of refrigeration and how it can be found?
- 8. Define specific heat.
- 9. Explain the effects of sub-cooling with the help of p-h diagram.
- 10. What are the desirable properties of an ideal refrigerant?
- 11. Write short note on R-12 and R-22 as a refrigerant.
- 12. Write short notes on:
 - Specific humidity and relative humidity.
 - Room sensible heat factor.
 - Thermostatic expansion valve.
- 13. Draw the layout of modern air-conditioning system.
- 14. Differentiate between a refrigerator and a heat pump with line diagram.
- 15. Drive the relation for clearance volumetric efficiency and also show the same on P-V.
- 16.Draw the labeled psychrometric chart and explain briefly.
- 17. Give functions and classification of refrigerants.
- 18. Explain the thermostatic expansion valve and give applications of various expansion valves.
- 19. Describe how heat lead in an air conditioning plant is calculated.
- 20. State merits and demerits of air refrigeration system.
- 21. Differentiate between free and forced condensers.
- 22. Explain the significance of various lines on a psychometric chart.

23.Explain the working of actual vapor compression cycle on T-S diagram.

24. Describe a simple vapor compression cycle giving its flow diagram.

25. Explain how suction pressure and discharge pressure affect the performance of vapor compression system.

26. Write the difference between Primary and Secondary refrigerants.

27. Give the chemical formula of R-11, R-22, R-12, ammonia and water.

28. Explain various lubrication systems and explain them.