

Question Bank for 1st unit test

Class:CH4G

Sub:PUT(17425)

Chapter 1(20marks)

3 marks question

1. Define temporary hardness and permanent hardness of water.
2. Define the following units of hardness a)ppm b)mg/l
3. Give any 3 functions of lime in lime soda process.
4. Give the functions of soda ash in lime soda process.
5. Define osmosis and reverse osmosis
6. What are zeolites. Give 1 eg of natural zeolite
7. How foaming can be avoided in boilers.
8. How priming can be avoided in boilers

4 marks question

9. Compare permutit process and lime soda process based on the following points
a) residual hardness b) Na salts c)water containing suspended matter d) treatment of acidic water.
10. Explain hot lime soda process.
11. Explain reverse osmosis for desalination of water.
12. Explain methods for removing scales.
13. Explain boiler corrosion caused by dissolved oxygen.
14. How dissolved oxygen can be removed from water?

Chapter 2(20marks)

3 marks question

15. Define wet steam and dry steam.
16. Define dryness fraction and superheated steam.
17. Compare fire tube and water tube boiler based on the following points
 - a) furnace position b)drum size c)heating area utilization d)use of fuel
18. Explain boiler act with respect to duties of inspector.

4 marks question

- 19 Give the function of water level indicator and air preheater in a boiler
20. Explain working of fluidized boiler.
- 21 Draw the diagram of Cochran boiler and mark the parts
22. Give the classification of boiler based on tube contents and explain them
23. Give the function of steam trap and economizer in a boiler.
24. Explain working of water level indicator.
25. Draw the diagram of air preheater and mark the parts.

Question Bank for 2nd unit test

Class:CH4G

Sub:PUT(17425)

Chapter 3(24marks)

1. Define tons of refrigeration and COP.
2. Give 6 properties of ideal refrigerant.
3. Draw the diagram of vapour compression refrigeration system.
4. Give the classification of refrigerants with eg
5. What is R-22 refrigerant
6. What is CFC refrigerant. Give eg
7. What is HCFC refrigerant? Give eg.
8. What is HFC refrigerant? Give eg
9. Explain vapour compression refrigeration system
10. In an absorption type refrigeration system, heating, cooling and refrigeration takes place at 100°C , 20°C and -5°C respectively. Find theoretical COP
11. Write industrial application of refrigeration
12. Write down important properties of CO_2 as refrigerant
13. Write down important properties of NH_3 as refrigerant
14. Define secondary refrigerant. Give eg

Chapter 4(6marks)

15. Explain methods to get instrument air.
16. Give the uses of process air

Chapter 5(4marks)

17. Give 4 advantages of thermic fluid over steam.
18. Explain the property of any one thermic fluid
19. Explain the working of thermic fluid heater

Chapter 6(16marks)

20. Define absolute humidity, relative humidity, dry bulb temperature, humid volume
21. Draw the diagram of forced draft cooling tower and mark the parts
22. Draw the diagram of induced draft cooling tower and mark the parts
23. Explain evaporative cooling
24. Explain the parts of a cooling tower.
25. Explain the use of humidity chart.