

Question Bank

Program: CH

Semester: Third

Name of course: Technology of Inorganic Chemicals

Course code: 22314

Unit Test 1

Chapter 1-Inorganic Acids (12 marks)

2 marks question

1. Write the method to dry air in sulfuric acid
2. List industrial uses of phosphoric acid (two).
3. Write the method to concentrate nitric acid.
4. List industrial uses of sulfuric acid (two).
5. Explain economics of phosphoric acid.
6. Draw PFD of hydrochloric acid by synthesis process.

4 marks question

7. Draw PFD of sulfuric acid manufacturing by DCDA process.
8. Explain manufacturing of nitric acid by oxidation of ammonia.
9. Explain recovery and use of process heat in nitric acid process.
10. Draw PFD of manufacturing of phosphoric acid by sulfuric acid leaching.

Chapter 2 Ammonia based fertilizers (12 marks)

2 marks question

11. Write properties and uses of ammonia(two each)
12. Explain working of ammonia converter.
13. Draw PFD of ammonium phosphate manufacturing.
14. List industrial applications of urea (two)

4 marks question

15. Explain manufacturing process of urea.
16. Draw PFD of urea manufacturing process.
17. Explain manufacturing process of ammonium nitrate. Write its two uses.
18. Explain manufacturing process of ammonia.

Chapter 3 Phosphorus based fertilizers (12 marks)

2 marks question

19. Differentiate between yellow and red phosphorus.
20. Draw PFD of triple super phosphate
21. Write economics of phosphorus manufacturing

22. Explain conversion of yellow to red phosphorus.

4 marks question

23. Explain manufacturing of superphosphate with neat flow diagram.

24. Explain manufacturing of phosphorous.

25. Write economics of single and triple super phosphosphate.