CHEMISTRY (XII)

CHAPTER 05 (Halogens and Noble gases)

Short Questions:

- 1. What is structural formula of Teflon? Mention its two uses.
- 2. The elements of group VIIIA are called Nobel gases. Comment.
- 3. How halogen acids are iodized in water?
- 4. Arrange the following oxyacids in the increasing order of acid strength. HClO₄, HClO₃, HClO₂, HOCl
- **5.** Why bleaching powder shows bleaching action?
- **6.** Write four uses of halogens.
- 7. Write disproportionation reaction of chlorine.
- **8.** Write the reaction of NaOH with Cl₂ in cold state.

OR

How NaOH reacts with Cl₂ in cold and hot state?

OR

Write down reactions of chlorine with cold and hot NaOH.

9. Why HF is a weaker acid than other halogen acids?

OR

Why HF is a weaker acid than other HCl?

- **10.** Why solubility of noble gases increases down the group?
- **11.** What are Freons and Teflon?
- **12.** Describe two uses of helium.

OR

Write two uses of each helium and argon.

- **13.** Write any two uses of krypton?
- 14. Why the elements of VIA other than oxygen show more than two oxidation states?
- **15.** What is iodized salt?

OR

What is iodized salt? Write its function.

- **16.** On what basis perchloric acid is considered a valuable analytical reagent?
- **17.** Why iodine has metallic luster?
- **18.** Give peculiar behaviour of fluorine?
- **19.** What is meant by Available chlorine? How quality of bleaching powder is tested?
- **20.** What factors affect the oxidizing power of halogens?
- 21. What is iodex and tincture of iodine?

CHAPTER 15 (Common Chemical Industries in Pakistan)

Short Questions:

- **1.** How paper industry can be made progressive in Pakistan?
- **2.** Give any four important (essential) qualities of a good fertilizer.
- **3.** Classify elements essential for plant growth.
- **4.** Give significance of potash fertilizer?
- **5.** Enlist the steps involved in the manufacture of urea.
- **6.** Write a note on diammonium phosphate.
- 7. Give preparation of Portland cement as carried out by Joseph Aspdin, Why it is named so?
- **8.** Distinguish micronutrients and macronutrients for plants.
- **9.** What are micronutrients?
- **10.** Give reactions of preparation of urea by using NH₃ and CO₂.
- **11.** Write down four characteristic features for a good fertilizer.
- **12.** What are essential nutrient elements? Why are they needed?
- **13.** How ammonium nitrate is prepared? Describe the process.
- **14.** Give the important qualities of fertilizer.
- **15.** Give different zones in the rotary kiln and their temperature ranges.
- **16.** What is clinker formation?

- 17. What are fertilizers?
- 18. Why is there a need for fertilizers?
- **19.** Give any four important qualities of fertilizers.
- 20. Name the essential constituents of cement?
- **21.** Why wet cleaning is done in paper manufacture.
- **22.** Write down two woody and two non-woody raw materials for paper pulp manufacture.
- 23. Name two woody and two non-woody raw materials.
- 24. Which types of woody raw materials are used in paper industry?
- 25. What reactions take place in decomposition zone during manufacturing of cement?
- **26.** What do you mean by prilling of urea?
- 27. What do you mean by setting of cement?
- 28. Why is cement known as Portland cement?
- **29.** Write down digestion process for the preparation of pulp.
- **30.** Define DAP. Write reaction for its preparation.
- **31.** What is the chemical composition of a good Portland cement?
- **32.** Why lignin is removed from pulp?
- **33.** What are the prospects of paper industry in Pakistan?