

Part- A : one mark questions

1. How many number of atoms per unit cell are present in bcc structure ? 1
2. Which out of the two is more basic Ammonia or aniline? 1
3. Write chemical name of vitamin D. 1
4. Give any one example of a biopolymer. 1
5. Which type of drug is chloroquine 1

Part- B : Two marks questions

6. Give reason why trichloro acetic acid has more acidic character than monochloro acetic acid
2
 7. A solid AB has NaCl structure. If the radius of cation (A^+) is 170 pm, calculate the maximum possible value of the radius of anion (B^-)
2
 8. Discuss oxidation of secondary alcohols 2
 9. Phenol has higher boiling point than toluene. Why ?
2
- or
- What is williamson's synthesis. Give an example. 1+1=2
 10. Discuss briefly Hell Volhard Zelinsky reaction. 2
 11. Convert propanone to propene 2
 12. List any two biological functions of Carbohydrates. 2
 13. What are tranquilizers ? Give an example. 1+1=2

Part- C : Three marks questions

14. An element having density 11.2 g cm^{-3} forms a fcc lattice with edge length of $4 \times 10^{-8} \text{ cm}$. Calculate the atomic mass of the element .

3

15. Describe Hinsberg's test to distinguish between primary , secondary and tertiary amines.

3

or

Write down : (i) Carbylamine reaction

1+1+1=3

(ii) Diazotisation reaction

(iii) Mendius reduction

16. Write down polymerization reactions for the following Polymers:

(i) Teflon (ii) Nylon- 66 (iii) Buna- s

1+1+1=3

17.(a) Write down following reactions

(i) Finkelstein reaction

(ii) Wurts fittig reaction

(iii) Sandmeyer reaction

1+1+1=3

(b) The para isomer of dichlorobenzene has higher melting point than the ortho and meta isomers. Why ?

2

or

(a) Why aryl halides are less reactive than alkyl halides ?

3

(b) Give any two differences between SN^1 and SN^2 reactions.

2