

MS JUNIOR COLLEGE  
Hyderabad

GUESS PAPER - 2  
INTERMEDIATE 2<sup>nd</sup> YEAR  
CHEMISTRY - II

Time: 3 hours

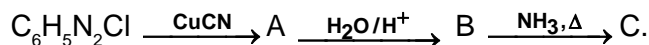
Max.Marks:60

**INSTRUCTIONS:**

1. Q.Nos: 1 - 10 are Very Short Answer Type. Answer them in about 30 words each. Each question carries 2 marks.
2. Q. Nos: 11 - 18 are Short Answer Type. Answer them in 75 - 100 words each. Each question carries 4 marks.
3. Q.Nos: 19 - 21 are Long Answer Type. Answer them in about 300 words each. Each question carries 8 marks.

I. Answer All Questions: (Very Short Answer Type). [10 × 2 = 20]

1. What are isotonic solutions?
2. How is Gibbs energy (G) related to the cell emf (E) mathematically?
3. What is biodegradable polymer? Give one example of biodegradable polyester
4. Write the names of the monomers for the following  
(a) Buna - S (b) Dacron
5.  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  is blue in colour where as anhydrous  $\text{CuSO}_4$  is colourless. Why?
6. What is tailing of mercury? How is it removed?
7. Describe the molecular shape of  $\text{I}_3^-$ .
8. What is blister copper? Why is it so called?
9. Give structure of A, B and C in the following reaction



10. What is stereo chemical result of  $\text{SN}^1$  &  $\text{SN}^2$  reactions.

II. Answer any Six : (Short Answer Type) [6 × 4 = 24]

11. Derive Bragg's equation.
12. If the osmotic pressure of glucose solution is 1.52 bar at 300K. What would be its concentration if  $R = 0.083\text{L bar mol}^{-1} \text{K}^{-1}$ ?
13. What is catalysis? How is catalysis classified? Give two example for each type of catalysis.
14. Explain the purification of sulphide ore by froth floatation method?
15. Explain Werner's theory of coordination compounds with suitable examples.
16. Write notes on antiseptics and disinfectants.
17. Write notes on the functions of different hormones in the body.
18. Give the equations for the preparation of phenol from Cumene.

III. Answer any Two : (Long Answer Type) [2 × 8 = 16]

- 19.a) What are galvanic cell? Explain the working of a galvanic cell with a neat sketch taking Daniel cell as example.  
b) What is "molecularity" of a reaction ? How is it different from the 'order' of a reaction? Name one bimolecular and one trimolecular gaseous reaction?
- 20.a) How is chlorine prepared by electrolytic method? Explain its reaction with  
i) NaOH ii)  $\text{NH}_3$  under different conditions  
b) How are  $\text{XeF}_4$  and  $\text{XeF}_6$  prepared? Discuss their structures?
21. Explain following with examples.  
i) Sandmeyer reaction (ii) Gatterman reaction (iii) Friedel -Crafts reaction (iv) HVZ reaction

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