UCH/CT/6014

B.SC. DEGREE EXAMINATION,APRIL 2018
III YEAR - VI SEMESTER
Core Major - Paper XIV - ORGANIC CHEMISTRY - II

Time : 3 Hours **Max.marks :60**

Section A $(10 \times 1 = 10 marks)$

Answer any **TEN** questions

1. Define the term Auxochrome.
2. What do you understand by the term chromophore?
3. Draw the structure of alanine.
4. Mention any two amino acids which are referred as essential amino acid.
5. Define the term mutarotation.
6. What is meant by the term epimerzation.
7. State isoprene rule.
8. What are Vitamins?
9. Give two examples for intramolecular rearrangement.
10. Define intramolecular rearrangement.
11. Define the term peptide.
12. Bring out any one differences between DNA and RNA.

Section B $(5 \times 4 = 20 marks)$

Answer any **FIVE** questions

13. How do you prepare methyl orange from suphanilic acid?
14. Explain the secondary structure of protein.
15. Draw the pyranose structure of glucose and furanose.
16. Write the synthesis of citral.

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17. Discuss the various steps associated with the mechanism of pinacol-pinacolone rearrangement.
18. Describe the steps that are involved in the synthesis of ascorbic acid.
19. Explain the mechanism of Benzilic acid rearrangement.

Section C $(3 \times 10 = 30 marks)$

Answer any **THREE** questions

20. Write the preparation and two applications of malachite green and alizarin.
21. Give a brief account of the structure of DNA with three of its biological functions.
22. Explain the structure of sucrose and starch with a diagram.
23. Elucidate the structure of piperine.
24. Describe the mechanism of Beckmann and Hoffmann rearrangement.