# UCH/CT/5010

## B.Sc. DEGREE EXAMINATION, APRIL 2020 III Year V Semester Organic Chemistry - I

### Time : 3 Hours

Max.marks :60

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

#### Answer any **TEN** questions

- 1. Give Wolf Kishner reduction.
- 2. How is Ketone reduced with LAH?
- 3. What is the importance of active methylene group?
- 4. What is meant by Tautomerism?
- 5. What do you mean by the term Conformers?
- 6. Show one example for erythro and threo representations.
- 7. What are Enantiomers?
- 8. What are the conditions for optical activity?
- 9. Define Racemisation.
- 10. Give two preparations of Furan.
- 11. What happens when nitro compound is treated with acid?
- 12. Give the synthetic application of Diazonium salt.

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

Answer any **FIVE** questions

- 13. Write a note on a) MPV reduction b) Wittig reaction.
- 14. Give the preparation and properties of malonic ester.
- 15. Write a note on Keto-Enol Tautomerism.
- 16. Explain the conformational analysis of ethane.
- 17. Discuss Cahn Ingold-prelog rules.
- 18. Explain Walden Inversion.
- 19. Explain the aromaticity of hetrocyclic compounds.

## Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

- 20. Discuss the mechanism of the following: a) Aldol condensation b) Cannizaro reaction
- 21. Discuss the synthetic uses of Acetoacetic ester.
- 22. Explain the conformation of cyclohexane.
- 23. a) Explain any two resolution methods. b) Discuss the geometrical isomerism in maleic and fumaric acids.
- 24. a) Explain the synthesis of Isoquinoline. b) Give the preparation, properties and uses of Diazoacetic ester.

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