SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS) (Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai — 600 044. B.Sc. END SEMESTER EXAMINATIONS APRIL-2022 SEMESTER - VI 17UCHCT6014 - Organic Chemistry - II

Total Duration : 3 Hrs.

Total Marks : 60

Section A

Answer any **SIX** questions $(6 \times 5 = 30 \text{ Marks})$

- 1. What happens when ethanol is treated with Conc. H_2SO_4 at room temperature and at 0°C? Explain with equations.
- 2. Write a note on : Iso-electric Point of amino acids.
- 3. How will you convert an aldohexose into an aldopentose?
- 4. How will you synthesize Coniine from α -picoline?
- 5. Write a note on sigmatropic rearrangement with an example.
- 6. What happens when 2,3 dimethyl -2,3 but anediol is treated with mineral acid? Explain with equation.
- 7. Discuss the types of nucleic acids and their components.
- 8. Predict the product when Quinones is treated with (a)1,3 Butadiene (b) HCl

Section B

Answer any **THREE** questions $(3 \times 10 = 30 \text{ Marks})$

- 9. a. Distinguish Acetaldehyde and acetone .
 - b. Discuss the mechanism of Aldol condensation.
- 10. a. Briefly discuss the primary structure of proteins.
 - b. How are $\alpha\text{-amino}$ acids prepared? Discuss the important reactions of $\alpha\text{-amino}$ acid.
- 11. a. Deduce the cyclic structure of D-Glucose.
 - b. Briefly explain the reactions and structure of sucrose.
- 12. Explain in detail about the structural elucidation of Citral.
- 13. Explain with mechanism
 - (i) Benzilic acid rearrangement (ii) Beckmann rearrangement
