

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. Chemistry - END SEMESTER EXAMINATIONS APRIL - 2024

SEMESTER - VI

20UCHCT6014 - Organic Chemistry-II

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

1. Explain the term end group analysis.
2. Describe the structures of DNA and RNA.
3. Predict the osazone formation from glucose with mechanism.
4. Prepare sucrose from cane sugar and give any two reactions of sucrose.
5. Classify various molecular rearrangement reactions with proper examples.
6. Predict the reaction route to convert the following:
(i) glucose from arabinose (ii) mannose from glucose
7. Classify proteins based on their physiological functions.
8. Solve the mechanism of pinacol-pinacolone rearrangement reaction.

Section C

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

9. Describe the Merrifield's method for the synthesis of a tripeptide on a solid support.
10. Solve the primary and secondary structures of proteins.
11. Determine the configuration of glucose.
12. Apply Haworth projection formula to distinguish the structure of starch and cellulose. Mention their uses.
13. Recommend suitable mechanisms for the following rearrangement reactions
(i) Beckmann (ii) Hoffmann
