

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 NOVEMBER-2022

SEMESTER - II

**20UFMAT2002 - Allied Chemistry-II**

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

### Section A

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

1. Define mutarotation and show the cyclic ring structures of  $\alpha$  and  $\beta$ -D glucose.
2. How will you convert glucose to fructose.
3. Prepare a dipeptide Gly-Ala using Bergman method.
4. Differentiate DNA from RNA.
5. Explain analgesics and antipyretics with examples.
6. Discuss the types, causes and treatment for diabetes.
7. Describe the crystallization process.
8. With neat diagram explain the principles and applications of thin layer chromatograph.

### Section B

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

9. Classify carbohydrates and show the open chain and ring structure of fructose.
10. Distinguish proteins from nucleic acids based on their composition and biological functions.
11. Compare and contrast local and general anesthetics.
12. With neat diagram explain steam distillation method.
13. Deduce the applications of chromatography methods.

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