

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. (CND)- END SEMESTER EXAMINATIONS APRIL-2023

SEMESTER - III

20UNDAT3003 - Fundamentals of Biochemistry

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

1. Distinguish between Co-enzymes and Prosthetic groups with an example each.
2. Explain the mechanism of action of enzymes.
3. Name and write the reaction by which pyruvate is converted to acetyl CoA.
4. Sketch the structures of sucrose and fructose.
5. Justify the following statements:
(i) Amino acids are called as ampholytes.
(ii) Hydrogen bonds are important for the function of proteins
6. Classify lipids.
7. Write the structure of AMP and Guanine.
8. Describe the different types of galactosemia.

Section C

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

9. (i) Define enzymes.
(ii) Describe the factors affecting enzyme activity
10. Describe the Krebs's cycle.
11. Relate the different levels of organization of protein structure.
12. Illustrate the biosynthesis of cholesterol.
13. Appraise the interrelationship between carbohydrate, fat and protein metabolism.
