20UNDAT3003

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 NOVEMBER -2023 SEMESTER - III

20UNDAT3003 - Fundamentals of Biochemistry

Total Duration: 2 Hrs 30 Mins. Total Marks: 60

Section B

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

- 1. Classify enzymes.
- 2. Differentiate between prosthetic group and co-enzyme.
- 3. Illustrate the structures of fructose and maltose.
- 4. Describe the significance of gluconeogenesis.
- 5. Explain the reactions of transamination and decarboxylation.
- 6. Discuss about the Classification of aminoacid based on the fate of their carbon skeleton.
- 7. Describe ketogenesis.
- 8. Write a note on (i) fructosuria (ii) alkaptonuria

Section C

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

- 9. Describe the different mechanisms of actions of enzymes.
- 10. Sketch the glycolytic pathway and relate with the energy production.
- 11. Elaborate the urea pathway.
- 12. Describe the biosynthesis of cholesterol.
- 13. Appraise on the inter relationship between carbohydrate, fat and protein metabolism.
