

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 - III

20UNDAT3003 - Fundamentals of Biochemistry

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

**Section A**

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

1. Classify enzymes with appropriate examples.
2. Describe Fructosuria. What are the dietary interventions required to treat it?
3. Sketch the pathway which helps in the generation of glucose from non-carbohydrate sources.
4. Illustrate any one model of the mechanism of action of enzymes.
5. Explain the nutritional classification of fats.
6. Predict the fate of carbon skeleton of aminoacids.
7. Explain the biological functions of nucleic acids.
8. Differentiate between deamination and transamination

**Section B**

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

9. Describe the pathway for glucose oxidation.
10. Relate the three levels of protein structure.
11. Examine the inter relationship between carbohydrate, fat and protein metabolism.
12. Relate the role of B vitamins on enzyme activity.
13. Deduce the pathway involved in the biosynthesis of Cholesterol.

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