

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.(NFSMD) END SEMESTER EXAMINATIONS NOVEMBER -2023

SEMESTER - III

**21UFMAT3003 - Nutritional Biochemistry**

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

### Section B

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

1. Define and classify enzymes.
2. Describe the factors affecting enzyme activity.
3. Classify carbohydrates.
4. Relate the various methods by which blood glucose homeostasis occurs.
5. Explain oxidative deamination and transamination reactions with one example each.
6. Give the classification of lipids.
7. Illustrate  $\beta$ -Oxidation of fatty acids with a neat flow chart.
8. Illustrate the different types of DNA structures and their properties.

### Section C

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

9. Associate the flow of electrons through the mitochondrial membrane to the release of energy from reducing equivalents.
10. Infer the role of TCA cycle in the production of energy.
11. Relate the different levels of protein organization to the three dimensional structure.
12. Describe the reactions involved in the synthesis of cholesterol.
13. Evaluate the inter relationship between carbohydrate, fat and protein metabolism.

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