

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 APRIL-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. Explain the mechanism of action of enzymes.
2. Discuss the role of high energy compounds with an example.
3. Describe Gluconeogenesis.
4. Classify proteins based on their structure.
5. Predict the fate of amino group and carbon skeleton of amino acids.
6. Deduce the following
  - i. Cholesterol      a. High levels may lead to CVD
  - ii. HDL              b. Transports triglycerides to the tissues
  - iii. VLDL            c. Scavenges cholesterol back to liver
  - iv. Chylomicrons   d. Important constituent of membranes
  - v. LDL                e. Lowest density
7. Relate the role of insulin in regulating carbohydrate metabolism.
8. Sketch and explain the structure of tRNA.

### Section C

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

9. Show the different types of enzyme inhibition.
10. Describe the Krebs's cycle.
11. Relate the different levels of organization of protein structure.
12. Illustrate the biosynthesis of fatty acids.
13. Appraise the interrelationship between carbohydrate, fat and protein metabolism.

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