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 21UFMAT3003 - Nutritional Biochemistry

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

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

- 1. Explain the classification of enzymes with examples.
- 2. Describe the mechanism of glucose homeostasis in blood.
- 3. Relate the abilities of insulin and glucagon to regulate carbohydrate metabolism.
- 4. Explain the nutritional classification of aminoacids.
- 5. Explain the classification of lipids.
- 6. Give the reactions of urea cycle.
- 7. Describe the types, structure and functions of RNA.
- 8. Differentiate between the different high energy compounds.

Section B

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

- 9. Describe the pathway for glucose oxidation.
- 10. Relate the hierarchy of protein structure to their structure.
- 11. Examine the inter relationship between carbohydrate, fat and protein metabolism.
- 12. Relate the reactions of electron transport chain to the number of ATP produced.
- 13. Compare the pathways of anabolism and catabolism of fatty acids.

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 21UFMAT3003 - Nutritional Biochemistry

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

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

- 1. Explain the classification of enzymes with examples.
- 2. Describe the mechanism of glucose homeostasis in blood.
- 3. Relate the abilities of insulin and glucagon to regulate carbohydrate metabolism.
- 4. Explain the nutritional classification of aminoacids.
- 5. Explain the classification of lipids.
- 6. Give the reactions of urea cycle.
- 7. Describe the types, structure and functions of RNA.
- 8. Differentiate between the different high energy compounds.

Section B

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

- 9. Describe the pathway for glucose oxidation.
- 10. Relate the hierarchy of protein structure to their structure.
- 11. Examine the inter relationship between carbohydrate, fat and protein metabolism.
- 12. Relate the reactions of electron transport chain to the number of ATP produced.
- 13. Compare the pathways of anabolism and catabolism of fatty acids.
