# B.Sc. DEGREE EXAMINATION, APRIL 2020 II Year III Semester Biochemistry

Time: 3 Hours Max.marks:75

### **Section A** $(10 \times 2 = 20)$ Marks

### Answer any **TEN** questions

- 1. Define enzymes. Give two examples
- 2. What are prosthetic groups. Give two examples.
- 3. Give two general reactions of monosaccharide.
- 4. What is electron transport chain?
- 5. Define denaturation.
- 6. What is meant transamination?
- 7. Name the unsaturated fatty acids
- 8. Define ketogenesis.
- 9. What are nucleic acids?
- 10. Give the structure of purines and pyrimidines.
- 11. What is meant by nucleotides?
- 12. Draw the structure of an amino acid.

## **Section B** $(5 \times 5 = 25)$ Marks

## Answer any **FIVE** questions

- 13. Explain any five classification of enzymes.
- 14. Briefly explain glycolysis.
- 15. Explain urea cycle.
- 16. Enumerate on the steps for  $\beta$ -oxidation of fatty acids.
- 17. Explain biosynthesis of cholesterol.
- 18. Write short notes on galactosemia and fructosuria.
- 19. Enumerate on the basic concepts on nutrigenomics.

## **Section C** $(3 \times 10 = 30)$ Marks

### Answer any **THREE** questions

- 20. Describe the role of vitamin B complex as co-enzymes.
- 21. Explain TCA cycle in detail.
- 22. Discuss on the types of protein structures.
- 23. Elaborate on the biosynthesis of fatty acids
- 24. Describe the inborn errors of protein metabolism

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