B.Sc. DEGREE EXAMINATION, NOVEMBER 2019 II Year III Semester Biochemistry

Time : 3 Hours

Max.marks:75

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

Answer any **TEN** questions

- 1. Define Biochemistry.
- 2. Define Co-enzymes.
- 3. What are disaccharides and oligosaccharides?
- 4. Define glycolysis.
- 5. Define Essential amino acids & non essential amino acids.
- 6. What are peptides?
- 7. Define ketogenesis.
- 8. What are Essential and Non essential fatty acids?
- 9. What are nucleic acids?
- 10. What is aminoaciduria?
- 11. Define gluoconeogenesis.
- 12. What is denaturation and precipitation of proteins?

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

Answer any **FIVE** questions

- 13. Explain the role of B-vitamins as co-enzymes.
- 14. Explain HMP pathway.
- 15. Explain the determination of amino acid sequence.
- 16. Give the classification of fats.
- 17. Explain β oxidation of fatty acids.
- 18. Classify enzymes.
- 19. What is transamination and deamination? Brief on it.

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

Answer any **THREE** questions

- 20. Explain the mechanism of enzyme action and what are the factors affecting enzymatic activity.
- 21. Explain TCA cycle along with the ATP molecules produced.
- 22. Elaborate on Urea cycle and what is the fate of carbon skeleton of amino acids?
- 23. Explain the biosynthesis of cholesterol and its metabolism.
- 24. Explain the inborn errors of metabolism- fructosuria, galactosemia, PKU and alkaptonuria.

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