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Reg. No.:....

Name:.....

III Semester B.Sc. Degree (CBCSS-Reg./Sup./Imp.)

Examination, November - 2019

(2014 Admn. Onwards)

CORE COURSE IN BIOCHEMISTRY

3B03 BCH: BIOMOLECULES

Time: 3 Hours

Max. Marks: 40

SECTION-A

Answer All the questions. Each carries one mark.

 $(4 \times 1 = 4)$

- 1. What are epimers?
- 2. What is lodine number?
- 3. What are fibrous proteins?
- 4. What is enthalpy?

Answer any Seven questions Each question carries two marks. (7×2=14)

5. Define mutarotation.

- 6. Differentiate between cellulose and starch.
- 7. What is a disaccharide? Give two examples.
- 8. What are the functions of fatty acids?
- 9. What are non essential amino acids?
- 10. What are the features of a peptide bond?
- 11. What are steroids?
- 12. Write down the single letter abbreviation of Tryptophan and Cystine.
- 13. Discuss on phosphodiester bond.
- 14. Define the standard free energy change of a chemical reaction.

P.T.O.



SECTION-C

Answer any Four questions. Each question carries three marks.(4×3=12)

- 15. Discuss on hetero polysaccharides.
- 16. Write short notes on chitin and insulin.
- 17. Briefly explain "Storage and membrane lipids".
- 18. What are the general reactions of amino acids?
- 19. Write short notes on protein sequencing.
- 20. Give a short notes on the energy flow in biological systems.

SECTION-D

Answer any Two questions. Each question carries five marks. (2×5=10)

- 21. What are the different types of isomerism exhibited by carbohydrates?
- 22. Write an essay on the classification of lipids.
- 23. Discuss on the structural organization of proteins.
- 24. Write an essay on the structure of nucleic acids.