K21U 0865

IV Semester B.Sc. Degree (CBCSS - Sup./Imp.) Examination, April 2021 (2014-'18 Admissions)

COMPLEMENTARY COURSE IN CHEMISTRY 4C04CHE(BS) : Chemistry (For Biological Sciences)

Time: 3 Hours

Max. Marks: 32

SECTION - A

Answer all questions. Each question carries 1 mark:

 $(1 \times 5 = 5)$

- 1. What are anomers?
- 2. What is meant by codon?
- 3. What are epimers?
- 4. Give two examples for hormones.
- 5. Give the structure of Vitamin A.

SECTION - B

Answer any four questions. Each question carries 2 marks :

 $(2 \times 4 = 8)$

- 6. What is meant by Sorenson formalin titration?
- 7. How are Vitamins classified?
- 8. How can you convert glucose into fructose?
- 9. Explain the importance of Ca in biological systems.
- 10. What happens when isoquinoline is oxidized with alkaline KMnO₄?
- 11. Give a test for DNA.

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SECTION - C

Answer any three questions. Each question carries 3 marks :

 $(3 \times 3 = 9)$

- 12. Explain the following:
 - a) Mutarotation
 - b) Epimer.
- 13. Explain the effect of hydrogen bonding in biological systems.
- 14. Give structures of adrenalin, thyroxene, cortisone.
- 15. Explain the seperation of aminoacids.
- 16. Explain the role of Hb in oxygen transport.

SECTION - D

Answer any two questions. Each question carries 5 marks:

 $(2 \times 5 = 10)$

- 17. Write notes on:
 - a) Michaelis Menton theory
 - b) Enzyme deficiency desease.
- 18. a) Explain the sodium potassium pump.
 - b) Explain the role of metals in medicine.

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- 19. Discuss the preparation and reactions of pyridine.
- 20. Discuss the structure of proteins.