

D 93903

(Pages : 3)

Name.....

Reg. No.....

**FIRST SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2020**

Biochemistry

BCH 1C 01—BIOCHEMISTRY—I

(2019 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A

*Answer all questions.
Each question carries 1 mark.*

1. The 4-epimer of glucose is _____.
(a) Fructose. (b) Mannose.
(c) Galactose. (d) Xylose.
2. Denaturation of protein will not affect the _____ level of its structural organization.
3. Name Sangers reagent.
4. The mucopolysaccharide which is present in synovial fluid is _____.
5. Name two essential fatty acids.
6. A steroid that is seen in fungi is _____.
7. Which among the following is used to check rancidity of fat and oils :
(a) Iodine value. (b) Saponification value.
(c) RM value. (d) Acid value.
8. The base equivalence in DNA was proposed by _____.
9. Name the nitrogenous base present in the phospholipid Cephalin.

(9 × 1 = 9 marks)

Turn over

Section B

*Answer at least **six** questions.*

Each question carries 3 marks.

All questions can be attended.

Overall Ceiling 18.

10. Explain mutarotation.
11. List out the acidic and basic amino acids.
12. Draw the structure of sucrose, lactose and maltose.
13. Illustrate the formation of a tripeptide bond.
14. Write the chemistry behind Biuret reaction.
15. Write about any three colour reactions of amino acids.
16. Define iodine value and saponification value. Mention their significance.
17. Differentiate between a nucleoside and nucleotide with a suitable example using diagram.

(6 × 3 = 18 marks)

Section C

*Answer at least **three** questions.*

Each question carries 7 marks.

All questions can be attended.

Overall Ceiling 21.

18. Discuss about the different bonds responsible for maintaining the structure of a protein.
19. Write about the different types of RNA.
20. What are the different types of sugar acids and how are they formed ?
21. Explain how Edman's reagent is used for protein sequencing.
22. Write about protein precipitation reactions.

(3 × 7 = 21 marks)

Section D

*Answer any **one** question.*

The question carries 12 marks.

23. Give a detailed account of different types of polysaccharides.
24. Discuss in detail the Watson and Crick model of DNA.

(1 × 12 = 12 marks)