

D 73254

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Name.....

Reg. No.....

**FIRST SEMESTER B.A./B.Sc. DEGREE EXAMINATION
NOVEMBER 2019**

(CUCBCSS—UG)

Bio-chemistry

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 glycosidic – OH group of sugars react with alcohol to form _____.
2. Name a test that can differentiate a reducing sugar from a non-reducing one.
3. The alcoholic component present in phospholipid is _____.
4. Name the nitrogenous base present only in DNA.
5. The process of precipitating proteins by using neutral salt is called _____.
6. Name an essential fatty acid.
7. The mucopolysaccharide seen in vitreous humor of eye is _____.
8. Name a test answered only by aromatic amino acids.
9. The basic ring structure present in a steroid is _____.

(9 × 1 = 9 marks)

Section B

Answer any seven questions.

Each question carries 3 marks.

10. What are mucopolysaccharides ? Give two examples.
11. Draw the structures of pyrimidine bases present in RNA.
12. Define isoelectric pH. Draw the zwitter ion form of any one amino acid.
13. List out the functions of phospholipids.
14. Draw the structure of *t*-RNA.

Turn over

15. Define Iodine number and Acid Number and write their significance.
16. How are amino acids classified based on their metabolic fate ?
17. Illustrate the formation of a peptide bond and mention the characteristic features of the bond.

(7 × 3 = 21 marks)

Section C

Answer any four questions.

Each question carries 5 marks.

18. Explain the characteristic features of protein denaturation.
19. Draw the structure of lactose, sucrose, adenine, guanine and hyaluronic acid.
20. Give a brief account of a prokaryotic cell.
21. Discuss about the colour reactions of amino acids.
22. Explain the classification of fatty acids.

(4 × 5 = 20 marks)

Section D

Answer any one question.

The question carries 10 marks.

23. Give a detailed account of classification of carbohydrates.
24. Discuss in detail the structural features of RNA and DNA.

(1 × 10 = 10 marks)