

Roll No.

Total No. of Pages : 02

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B.Sc. Honours (Microbiology) (Sem-2)
FUNDAMENTALS OF BIOCHEMISTRY

Subject Code : BSMB-203-19

M.Code : 79874

Date of Examination: 30-05-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write Briefly :

- a) Define ionization with suitable examples.
- b) Draw Haworth projection formula for fructose.
- c) What are sphingolipids?
- d) What are galactolipids?
- e) Define proteoglycans with suitable examples.
- f) What are coenzymes?
- g) Enlist any four properties of peptide bond.
- h) Give any two examples of homopolysaccharides.
- i) Differentiate between reducing and non-reducing sugars
- j) What are nucleotides?

SECTION-B

2. Explain in detail stereoisomerism of monosaccharides.
3. Write a detailed note on effect of acid and alkali on DNA.
4. Give detailed classification of lipids.
5. Write a brief note on UV absorption by nucleic acids.
6. Give sources, properties and functions of fat-soluble vitamins.

SECTION-C

7. Classify vitamins. Write a detailed note on coenzymes.
8. Classify carbohydrates and give suitable examples from each class including their chemical structures.
9. Explain the structure of mRNA, tRNA and rRNA.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.