

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

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

Subject Code : BSMB-203-19

M.Code : 79874

Date of Examination : 06-07-22

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 Enantiomers.
- b) Draw the structure of Guanine and Uracil.
- c) Define essential and non-essential amino acids.
- d) Difference between enzymes and coenzymes.
- e) Give examples of reducing and nonreducing sugars.
- f) Explain phosphoglycerides.
- g) What is the effect of acid and alkali on DNA?
- h) Name the identification tests that are used for non-reducing sugars.
- i) Define lipid micelles.
- j) Explain flavin nucleotide.

SECTION-B

2. What are enzymes? Explain their category with examples.
3. How peptide bond is formed between two amino acids? Discuss the characteristics of peptide bond.
4. Classify carbohydrates and detail the properties of disaccharides.
5. Write a short note on prostaglandins.
6. Write a note on Coenzymes of Riboflavin and Niacin.

SECTION-C

7. Discuss in detail about the structures of mRNA, tRNA and rRNA and UV absorption by nucleic acid.
8. Give structural features and classification, notation, physical and optical properties of proteins.
9. Explain in detail about the Watson-Crick model of DNA and different forms of DNA.

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.