

B.Sc. (C.B.C.S. Pattern) Sem-II
Microbiology Paper-I (General Biochemistry)

P. Pages : 2

Time : Three Hours



GUG/W/19/11588

Max. Marks : 50

Notes : 1. All questions are compulsory and carry equal marks.

1. Write about different types of bonds with their importance. 10

OR

a) Explain the concept of pH. 2½

b) Explain the condition of cell in hypotonic solution. 2½

c) Write about structure of atom. 2½

d) Explain D and L isomer with example. 2½

2. Describe in detail the classification of proteins. 10

OR

a) Explain the general structure of amino acid. 2½

b) Classify the amino acids based on R group. 2½

c) Write about tertiary structure of protein. 2½

d) Give the biological function of protein. 2½

3. Give the classification of lipid. Write about different types of phospholipid. 10

OR

a) Describe the structure of anyone disaccharide.

b) Explain the structure of cellulose.

c) Write about structure of triglyceride.

d) Give the outline of classification of carbohydrate.

4. Describe the structure of r-RNA and discuss its different types. 10

OR

a) Write about pentose sugar of DNA.

- b) Explain the structure of purine and pyrimidine.
- c) Draw a well labelled diagram of t-RNA.
- d) Explain the structure of m-RNA.

5. Attempt any 10 questions.

- a) What is atomic mass unit? 1
- b) What is tonicity? 1
- c) What is solvent? Give example. 1
- d) Give example of biological buffer system. 1
- e) What is uncommon amino acid? Give example. 1
- f) Give the example of Sulphur containing amino acid. 1
- g) What is mutarotation? 1
- h) What is raffinose? 1
- i) What is Glycolipid? 1
- j) What is the distance between two bases in DNA? 1
- k) What is nucleoside? 1
- l) What is the function of m-RNA. 1
