

Roll No.

Subject : Basic Chemistry

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple Choice Questions. All Questions are compulsory. (6x1=6)

Q.1 Proteins are _____ in nature.

- a) Acidic b) Basic
c) Neutral d) Amphoteric

Q.2 Functional group for alcohol is.

- a) CHO b) OH
c) COOH d) COC

Q.3 Which sugar is present in milk.

- a) Glucose b) Maltose
c) Lactose d) None of these

Q.4 Biochemical nature of enzymes are.

- a) Carbohydrate b) Protein
c) Lipid d) Inorganic

Q.5 On hydrolysis triglycerides give rise to

- a) Glycerol+Fatty acid b) Glycerol+glucose
c) Glycerine+trioses d) Glucose+fatty acid

Q.6 Various amino acids combined to form_____.

- a) Cholesterol b) Starch
- c) Protein d) Wax

Section-B

Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)

Q.7 How many carbon atoms are present in ribose?

Q.8 Define phospholipids.

Q.9 Amines are (Acidic/Basic) in nature.

Q.10 What is Schiff reagent?

Q.11 What is cofactor in a enzyme?

Q.12 Which functional group is present in $\text{CH}_3\text{CHOHCH}_3$?

Section-C

Note: Short answer type Question. Attempt any eight questions out of Ten Questions. (8x4=32)

Q.13 Discuss the method of preparation of ethyl alcohol.

Q.14 Write short note on maltose sugar.

Q.15 Write down biological functions of phospholipids.

Q.16 Write down difference between enzymes and chemical catalyst.

Q.17 Write down properties of ethanal.

Q.18 Layout classification of lipids.

Q.19 Differentiate between globular protein and fibrous protein.

Q.20 Explain effect of temperature of enzyme activity.

Q.21 Write short note on composition and sources of carbohydrate.

Q.22 Explain secondary structure of proteins.

Section-D

Note: Long answer questions. Attempt any two question out of three Questions. (2x8=16)

Q.23 Write down preparation properties and uses of glycerol.

Q.24 Write a short note on important monosaccharides, disaccharides and polysaccharides.

Q.25 Write short note on :-

- a) Fatty acid
- b) Precipitation of proteins
- c) Competitive inhibitors of enzyme
- d) Essential amino acid