

1st Year / MLT**Subject : Basic Chemistry**

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Starch is an example of which carbohydrate.
- a) Monosaccharide b) Disaccharide
c) Oligosaccharide d) Polysaccharides
- Q.2 IUPAC name of $\text{CH}_3\text{-CH}_2\text{O-CH}_2\text{-CH}_3$ is
- a) Butan-2-ol b) Ethoxyethane
c) Butan-2-one d) Methylopropanone
- Q.3 Molecular formula of cholesterol is
- a) $\text{C}_{15}\text{H}_{31}\text{COOH}$ b) $\text{C}_{27}\text{H}_{45}\text{OH}$
c) $\text{C}_6\text{H}_{12}\text{O}_6$ d) $\text{C}_{30}\text{H}_{62}\text{NH}_3$
- Q.4 Proteins do not give colour reaction with.
- a) Million,s reagent
b) Xanthoproteic reagent
c) Biuret reagent
d) Schiff's reagent

- Q.5 Activity of enzyme is maximum at pH.
a) Low b) High
c) Optimum d) No effect
- Q.6 In cane sugar which carbohydrate is present.
a) Glucose b) Fructose
c) Lactose d) Sucrose

SECTION-B

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

- Q.7 Write one use of alcohol.
Q.8 Write one example of heteropolysaccharide.
Q.9 Define phospholipid.
Q.10 What is basic unit of protein.
Q.11 Give an example of hydrolase group of enzyme.
Q.12 At which pH point the net charge on protein molecule is zero.

SECTION-C

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

- Q.13 Differentiate between simple proteins and conjugated proteins.

- Q.14 Write any four uses of diethyl ether.
Q.15 Differentiate between aldehyde and ketone groups.
Q.16 Write short note on lactose sugar.
Q.17 Explain general formula of triglycerides.
Q.18 Write down functions of proteins.
Q.19 Write any four properties of enzymes.
Q.20 Why cellulose is not digested by humans.
Q.21 What are primary, secondary and tertiary amines.
Q.22 Explain mechanism of enzyme activity.

SECTION-D

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

- Q.23 Classify protein on basis of structure and also discuss clinical importance of it.
Q.24 Give two methods of preparation of methanol, its properties and its uses.
Q.25 Write short note on
a) glycosidic linkage
b) peptide linkage
c) ester linkage