

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) Milion,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. $(6 \times 1 = 6)$

- 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. $(8 \times 4 = 32)$

- 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. $(2 \times 8 = 16)$

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