

## Biomolecules

1. Which sugar is present in RNA?

- (a) Glucose
- (b) Fructose
- (c) D-Ribose
- (d) D-2-Deoxyribose

**Answer: (d) D-2-Deoxyribose**

2. Glucose reacts with hydroxylamine to form an oxime. This confirms the presence of

- (a) straight chain of six carbon atoms
- (b) carbonyl group
- (c) primary alcoholic group
- (d) secondary alcoholic group

**Answer: (b) carbonyl group**

3. Which of the following amino acid is neutral?

- (a) Aspartic acid
- (b) Glycine
- (c) Lysine
- (d) Arginine

**Answer: (b) Glycine**

4. The symbols D and L in the name of Carbohydrate represents

- (a) Dextro rotatory nature
- (b) Laevo rotatory nature
- (c) The relative configuration of a particular isomer
- (d) The optical activity of compounds

**Answer: (c) The relative configuration of a particular isomer**

5. Vitamin A is

- (a) Retinol
- (b) Ascorbic acid
- (c) Thiamine
- (d) Calciferol

**Answer: (a) Retinol**

6. Which of the following is/are example(s) of denaturation of protein?

- (a) Coagulation of egg white
- (b) Curding of milk
- (c) Clotting of blood
- (d) Both (a) and (b)

**Answer: (d) Both (a) and (b)**

7.The reagent used for obtaining osazone derivatives of fructose is

- (a)  $\text{NH}_2\text{OH}$
- (b)  $\text{NH}_2\text{-NH}_2$
- (c)  $\text{NH}_2\text{-NHC}_6\text{H}_5$
- (d) 2,4-DNP

**Answer:(c) $\text{NH}_2\text{-NHC}_6\text{H}_5$**

8.Nucleotides are joined together by

- (a) Glycosidic linkage
- (b) Peptide linkage
- (c) Hydrogen bonding
- (d) Phosphodiester linkage

**Answer:(d) Phosphodiester linkage**

9.A secondary structure of protein is stabilized by

- (a) H-bond
- (b) peptide bond
- (c) ionic bond
- (d) disulphide bond

**Answer:(a) H-bond**

10.Scurvy is caused due to deficiency of

- (a) Vitamin B1
- (b) Vitamin B2
- (c) Ascorbic acid
- (d) Glutamic acid

**Answer:(c) Ascorbic acid**

11.How many amino acids are present in insulin?

- (a) 25
- (b) 20
- (c) 51
- (d) 52

**Answer: (c) 51**

12.Which of the following reagents does not react with glucose?

- (a)  $\text{NH}_2\text{OH}$
- (b)  $\text{HCN}$
- (c) 2,4–DNP reagent
- (d)  $\text{Br}_2$  water

**Answer:(c) 2,4–DNP reagent**

13.Which among the following is a water-soluble vitamin?

- (a) Vitamin C
- (b) Vitamin D
- (c) Vitamin A
- (d) Vitamin E

**Answer:(a) Vitamin C**

14.What are the hydrolysis products of lactose?

- (a)  $\beta$ -D-galactose and  $\beta$ -D-Glucose
- (b)  $\alpha$ -D-Glucose and  $\alpha$ -D-Glucose
- (c)  $\alpha$ -D-Glucose and  $\beta$ -D-Fructose
- (d) None of these

**Answer:(a)  $\beta$ -D-galactose and  $\beta$ -D-Glucose**

15.Which of the following is incorrect for glucose?

- (a) It contains four  $>\text{CHOH}$  groups
- (b) It contains one  $-\text{CH}_2\text{OH}$  group
- (c) It contains one  $-\text{CHO}$  group
- (d) It contains one  $>\text{C}=\text{O}$  group

**Answer:(d) It contains one  $>\text{C}=\text{O}$  group**