

202 MCQs Mids BIO

Q

Glucose residues in amylose are linked by_____.

α (1,4) linkage

β (1,4) linkage

α (1,6) linkage

None of these

Q

The number of carbon atoms in lysine is_____.

4

6

8

10

Q

If the carbonyl group is present at the end of the monosaccharide then it is called_____.

Acid anhydride

Aldose

Ketose

None of these

Q

The number of stereoisomers for a molecule containing only one chiral carbon is_____.

16

2

4

8

Q

Seminal fluid is rich in_____.

Fructose

Lactose

Xylose

Arabinose

Q

Which of the following glycosidic linkage exists between two glucose units of maltose?

alpha 1,4

beta 1,4

alpha 1,6

alpha1,4 and alpha 1,6

VU NET

Q

Amino sugar is formed by the replacement of the hydroxyl group at ----- of the parent monosaccharide with amino group.

C-1

C-2

C-3

C-6

Q

Which one of the following is a structural homopolysaccharide?

Cellulose

Starch

Glycogen

All of these

Q

Which one of the following amino acids is not specified by three letter codon?

Serine

Proline

Selenocysteine

Methionine

Q:

Acid dissociation constants are designated as_____.

PKa

K

Pa

None of these

Q

The pI of glutamate is_____.

1.2

5.6

3.22

6.7

Q

Which of the following amino acid is negatively charged at physiological pH?

Aspartate

Lysine

Alanine

Proline

VU NET

Q

Which of the following refers to particularly stable arrangements of amino acid residues giving rise to recurring structural patterns?

Primary structure

Secondary structure

Tertiary structure

Quaternary structure

Q

Keratin is present in_____.

Hair

Nail

Hoof

All of these

Q

Which of the following amino acid is involved in the hydrophobic interactions in the tertiary structure of protein?

Phenylalanine

Cysteine

Glycine

None of these

Q

The free energy of a protein molecule is influenced by_____.

Hydrophobicity

hydrogen bonds

electrostatic interactions

All of these

Q

Which of the following diseases is caused by protein misfolding?

Alzheimer's disease

Huntington's disease

Parkinson's disease

All of these

Q

Iron is a_____.

non-metal

metalloid

transition metal

halogen

VU NET

Q
Myoglobin can bind _____ molecules of oxygen.

One

Two

Three

Four

Q

The partial pressure of oxygen (pO₂) in lungs is about _____.

30 mmHg

50 mmHg

100 mmHg

200 mmHg

Q

In sickle cell anemia, Glutamate is replaced with _____.

Arginine

Alanine

Methionine

Valine

Q

Oxy hemoglobin dissociation curve describe the relationship of -----

Available Oxygen

Amount of carbon dioxide carried by hemoglobin

Fibrinogen

Oxy-hemoglobin curve stability

Q

Which one of the following is made up of two molecules of glucose?

Maltose

Starch

Cellulose

Amylose

Q

Which bond exists between the carbonyl group and oxygen of a hydroxyl group in ring structure of glucose?

Ionic

Covalent

hydrophobic interaction

both ionic and covalent

VU NET

Q

In Benedict test, the formation of cuprous oxide is indicated by the formation of_____.

blue ppt

silver mirror

red ppt

none of these

Q

Glucose 6 Phosphate is formed by the addition of phosphate group to C6 of glucose by _____linkage.

Ether

Ester

Ionic

none of these

Q

E. coli convert lactose of milk to lactic acid by action of_____.

Beta galactosidase

Amyloglucosidase

Alpha amylase

Maltase

Q

At any pH above pI, glycine has a net_____charge and will move towards the_____.

negative, anode

negative, cathode

positive, anode

positive, cathode

Q

Which of the following amino acids contain two COOH groups?

Alanine

Glutamate

Glycine

Valine

Q

Which of the following amino acid is positively charged at physiological pH?

Lysine

Aspartate

Tyrosine

Alanine

VU NET

Q

Peptide bond is _____ linkage between two amino acids.

Ester

Amide

Ether

None of these

Q

Which of the following shows the greatest tendency to form α helices in most experimental model systems?

Glycine

Alanine

Proline

Serine

Q

Immunoglobulin G (IgG) consists of _____.

Two heavy chains and two light chains

Four heavy chains

Four light chains

None of these

Q

The free energy of a protein molecule is influenced by _____.

Hydrophobicity

hydrogen bonds

electrostatic interactions

All of these

Q

Proteins are denatured by _____.

Temperature

Ph

organic solvents

temperature, pH, organic solvents

Q

About _____ of amino acid residues in the myoglobin are found in alpha helices.

98%

78%

27%

10%

VU NET

Q

Hemoglobin is found exclusively in_____.

white blood cells

red blood cells

platelets

platelets and white blood cells

Q

The partial pressure of oxygen (pO₂) in lungs is about_____.

30 mmHg

50 mmHg

100 mmHg

200 mmHg

Q

In sickle cell anemia, Glutamate is replaced with_____.

Alanine

Methionine

Valine

Arginine