



CHEMISTRY

BOOKS - TARGET CHEMISTRY (HINGLISH)

BIOMOLECULES

Classical Thinking

1. _____ are major source of energy

A. Carbohydrates

B. Proteins

C. Fats

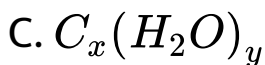
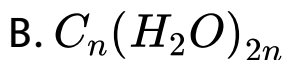
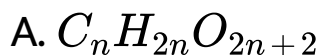
D. Vitamins

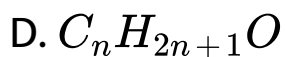
Answer: A



Watch Video Solution

2. The earliest general molecular formula for carbohydrates can be represented as _____.





Answer: C



Watch Video Solution

3. A carbohydrate which cannot be hydrolysed to simpler compounds, is called

- A. polysaccharide
- B. trisaccharide
- C. disaccharides
- D. monosaccharide

Answer: D



Watch Video Solution

4. Monosaccharides containing a $-CHO$ group are known as _____.

A. aldones

B. aldoses

C. epimers

D. osazones

Answer: B



Watch Video Solution

5. The compound which has five carbon atoms with -CHO group is _____.

A. aldopentose

B. ketopentose

C. aldohexose

D. ketohexose

Answer: A



Watch Video Solution

6. Ketohexoses do NOT contain_____.

A. – CHO group

B. – OH group

C. – CH_2OH group

D. None of these

Answer: A



Watch Video Solution

7. The letter D in carbohydrates represent its_____.

A. direct synthesis

B. laevorotation

C. mutarotation

D. configuration

Answer: D



Watch Video Solution

8. Which of the following does NOT yield two monosaccharide units on hydrolysis?

A. Lactose

B. Ribose

C. Maltose

D. Sucrose

Answer: B



Watch Video Solution

9. Which of the following is an example of polysaccharide(polymer of monosaccharides)?

A. Cane sugar

B. Starch

C. Glucose

D. Maltose

Answer: B



Watch Video Solution

10. Which of the following is not sugar ?

A. Sucrose

B. Starch

C. Fructose

D. Glucose

Answer: B



Watch Video Solution

11. The carbohydrates which reduce Tollen's reagent and fehling's solution are termed as _____ sugars.

A. non-reducing

B. reducing

C. oxidizing

D. anodizing

Answer: B



Watch Video Solution

12. Cane sugar on hydrolysis gives

A. glucose and maltose

B. glucose and lactose

C. glucose and fructose

D. only glucose

Answer: C



Watch Video Solution

13. During the preparation of glucose from starch
chalk powder is added to the reaction mixture

to_____.

- A. accelerate the rate of reaction
- B. decolourise the filtrate
- C. neutralise excess of sulphuric acid
- D. obtain crystals of glucose

Answer: C



Watch Video Solution

14. Glucose contains_____.

- A. five hydroxy(-OH) groups
- B. four secondary alcoholic groups
- C. one primary alcoholic group and one aldehydic group
- D. all of these

Answer: D



Watch Video Solution

15. Oxidation product of glucose with bromine water is _____.

A. sorbitol

B. gluconic acid

C. glutamic acid

D. saccharic acid

Answer: B



Watch Video Solution

16. On acetylation with acetic anhydride, glucose gives

A. glucose acetate

B. glucose triacetate

C. glucose pentaacetate

D. glucose diacetate

Answer: C



Watch Video Solution

17. Glucose is found to exist in two different crystalline forms α and β called _____

A. anomers

B. epimers

C. enantiomers

D. metamers

Answer: A



Watch Video Solution

18. The structure of glucose in Haworth projection formula is

A. 

B. 

C. 

D. 

Answer: D



View Text Solution

19. Maltose is made up of

- A. α -D-glucopyranose
- B. α and β -D- glucopyranose
- C. glucose and fructose
- D. fructose only

Answer: A



Watch Video Solution

20. Cellobiose is obtained by partial hydrolysis of_____.

A. starch

B. cellulose

C. glucose

D. monosaccharide

Answer: B



[Watch Video Solution](#)

21. The disaccharide present in milk is :

A. Sucrose

B. lactose

C. maltose

D. ketose

Answer: B



[Watch Video Solution](#)

22. Which of the following carbohydrate is an essential constituent of plant cell?

A. starch

B. cellulose

C. sucrose

D. glucose

Answer: B



Watch Video Solution

23. Glycogen is a _____.

- A. polysaccharide found in both animals and plants
- B. polysaccharide found in plants
- C. polysaccharide found in animals
- D. polysaccharide found in honey

Answer: C



Watch Video Solution

24. The polysaccharide used in the manufacture of paper is

A. Cellulose

B. Starch

C. Glycogen

D. all of these

Answer: A



Watch Video Solution

25. Proteins are high molecular weight polymers mainly containing the elements_____.

A. C,H,N

B. C,H,O

C. C,H,I

D. C,H,N,O,S

Answer: D



Watch Video Solution

26. The compound which does NOT show amino acid group is_____.

A. glycine

B. valine

C. aniline

D. alanine

Answer: C



Watch Video Solution

27. In which amino acid, the side group R, is -CH_3 ?

A. Glycine

B. valine

C. Lysine

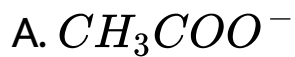
D. Alanine

Answer: D



Watch Video Solution

28. Which one of the following is a Zwitter ion?



Answer: B



Watch Video Solution

29. Zwitter ion is a _____

A. cation

B. anion

C. dipolar ion

D. radical ion

Answer: C



Watch Video Solution

30. Which molecule is eliminated due to the combination of two molecules of amino acids?

A. H_2O

B. NH_3

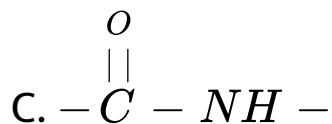
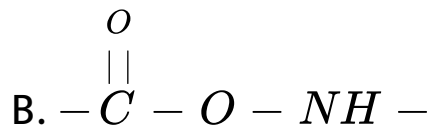
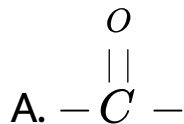


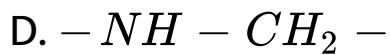
Answer: A



Watch Video Solution

31. Peptide linkage is





Answer: C



Watch Video Solution

32. Which of the following is a fibrous protein?

A. Insulin

B. Haemoglobin

C. Keratin

D. Albumin

Answer: C



Watch Video Solution

33. Which of the following is fibrous protein in tendons?

A. Keratin

B. Myosin

C. Fibroin

D. Collagen

Answer: D



Watch Video Solution

34. Proteins by action of heat and chemical reagents like alcohol form _____.

- A. simple proteins
- B. denatured proteins
- C. conjugated proteins
- D. amino acids

Answer: B



Watch Video Solution

35. Which of the following statement is TRUE ?

- A. Enzyme have names ending in ese .
- B. Enzymes are highly specific in their action.
- C. Enzymes are living organisms.
- D. Enzymes get activated on heating

Answer: B



Watch Video Solution

36. Lipids are define on the basis of _____ which is used in their isolation.

- A. chemical property
- B. physical property
- C. biological property
- D. geological property

Answer: B



Watch Video Solution

37. Lipids are classified as

- A. complex lipids and simple lipids
- B. complex lipids and conjugated lipids
- C. complex lipids and fibrous lipids
- D. complex lipids and globular lipids

Answer: A



Watch Video Solution

38. Lipids associate with sugar to form _____

A. glycolipids

B. fatty acids

C. steroids

D. terpenes

Answer: A



Watch Video Solution

39. Steroids are simple lipids containing a nucleus of _____ rings.

A. two

B. three

C. four

D. five

Answer: C



Watch Video Solution

40. Terpenes consists of _____ units .

A. steroid

B. amino acid

C. isoprene

D. glucose

Answer: C



Watch Video Solution

41. Steroids which aid digestions of fat in intestine are _____

A. adrenal hormones

B. bile acids

C. lanosterols

D. mycosterols

Answer: B



Watch Video Solution

42. Lipids can combine with proteins to form

A. glycoprotein

B. prostaglandin

C. lipoprotein

D. cargophyllene

Answer: C



Watch Video Solution

43. Which of the following stimulate uterine contractions during child birth ?

A. Prostaglandins

B. Thyroxines

C. Androgens

D. Estrogens

Answer: A



Watch Video Solution

44. The part of the body organs where hormones are produced are called

A. receptors

B. targets

C. effectors

D. duct

Answer: C



Watch Video Solution

45. Adrenaline and nor-adrenaline are hormones derived from _____

A. peptides

B. amino acid

C. steroids

D. carbohydrates

Answer: B



Watch Video Solution

46. Sex hormones are _____

A. amino acids derivatives

B. proteins

C. peptides

D. steroids

Answer: D



Watch Video Solution

47. Vitamin A,E and K are _____

A. water soluble

B. oil or fat soluble

C. both (A) and (B)

D. insoluble

Answer: B



Watch Video Solution

48. Vitamin B_1 is _____

A. riboflavin

B. cobalamin

C. thiamine

D. pyridoxine

Answer: C



Watch Video Solution

49. Deficiency of which vitamin can cause pellagra ?

A. Vitamin B_6

B. Vitamin C

C. Vitamin B_{12}

D. Vitamin B_3

Answer: D



Watch Video Solution

50. Which of the following compounds is responsible for the transmission of heredity characters?

A. Mitochondria

B. DNA

C. Glucose

D. Haemoglobin

Answer: B



Watch Video Solution

51. Which of the following is not present in a nucleotide?

A. Cytosine

B. Guanine

C. Adenine

D. Tyrosine

Answer: D



Watch Video Solution

52. Starch and cellulose have same

- A. chemical formula
- B. physical formula
- C. empirical formula
- D. structural formula

Answer: C



Watch Video Solution

53. Naturally occurring glucose is called _____

A. dextrose

B. galactose

C. fructose

D. lactose

Answer: A



Watch Video Solution

54. Which of the following is an example of aldohexose ?

A. Ribose

B. Fructose

C. Erythrose

D. Glucose

Answer: D



Watch Video Solution

1. The complex lifeless organic substances which build up living organisms and are required for their growth and maintenance are

A. Grignard reagents

B. fibres

C. biomolecules

D. polymers

Answer: C



Watch Video Solution

2. Which of the following is INCORRECT about proteins ?

A. Proteins are nitrogeneous substances

B. Some of the proteins are enzymes

C. Proteins play an important role in proper functioning of the living beings.

D. Proteins synthesize RNA and DNA present in the nucleus of cell.

Answer: D



Watch Video Solution

3. A carbohydrate consists of _____

A. C and O

B. C, H and O

C. C,H,N and O

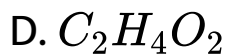
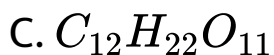
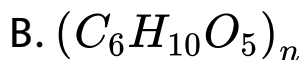
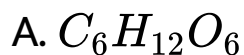
D. C and H

Answer: B



Watch Video Solution

4. Which of the following is NOT a carbohydrates ?



Answer: D



Watch Video Solution

5. Which of the following monosaccharide is a pentose ?

A. Erythrulose

B. Glucose

C. Fructose

D. Ribose

Answer: D



Watch Video Solution

6. In the preparation of glucose from sucrose, on hydrolysis with hydrochloric acid, the alcoholic medium is necessary to _____

- A. get glucose in higher percentage than fructose
- B. separate the products effectively
- C. get more yield of products
- D. make the reaction faster

Answer: B



View Text Solution

7. How many monosaccharide units does lactose yield on hydrolysis?

A. zero

B. one

C. three

D. two

Answer: D



Watch Video Solution

8. The carbohydrates which serves as reserve glucose in body is _____

A. Sucrose

B. Starch

C. lactose

D. glycogen

Answer: D



Watch Video Solution

9. Choose the CORRECT statement about proteins

- A. They are nitrogenous organic compounds of high molecular weights.
- B. They on hydrolysis by enzyme give amino acids
- C. Many of them are enzymes
- D. all of these

Answer: D



Watch Video Solution

10. Amino acids are _____

A. liquids

B. volatile solids

C. non-volatile crystalline compounds

D. mixture of amines and acids

Answer: C



Watch Video Solution

11. The compounds with formula

$NH_2 - CH(R) - COOH$ may behave _____

A. only as an acid

B. only as a base

C. both as an acid and a base

D. neither as an acid nor a base

Answer: C



Watch Video Solution

12. A zwitter ion is _____

A. a positively charged ion without a metal atom in it

B. a negatively charged ion without metal atom in it

C. a doubly charged ion

D. a heavy ion with a small charge on it

Answer: C



Watch Video Solution

13. The difference in proteins is due to

A. nature of amino acids

B. number of amino acids

C. sequence of amino acids

D. all of these

Answer: D



Watch Video Solution

14. Which of the following enzymes : reaction pairing is INCORRECT ?

A. Catalase: Decomposition of H_2O_2 .

B. Carbonic anhydrase : Reaction of CO_2 with water in human body .

C. Amylase : Hydrolysis of cellulose .

D. Maltase : Hydrolysis of maltose .

Answer: C



Watch Video Solution

15. Which of the following is an INCORRECT match ?

A. Cholesterol -zoosterol

B. Sitosterol-phytosterol

C. Estradiol- mycosterol

D. Lanosterol-zoosterol

Answer: C



Watch Video Solution

16. Which of the following is CORRECT about terpenes?

A. Terpenes are saturated hydrocarbons.

B. Monoterpenes contain 1 carbon atom in them.

C. Vitamin A is a derivative of terpenes.

D. β -Carotene is an example of diterpenes.

Answer: C



Watch Video Solution

17. Which of the following lipid is NOT a component of cell membrane ?

A. glycolipids

B. Phospholipids

C. Cholesterol

D. Cholic acid

Answer: D



Watch Video Solution

18. Which of the following pair is INCORRECT ?

A. β -Carotene: Oil of turpentine

B. Geraniol : Oil of roses

C. Zingiberene : oil of ginger

D. Squalene: shark liver oil

Answer: A



Watch Video Solution

19. Which of the following is NOT TRUE about hormones?

A. Hormones are the secretions of endocrine glands.

B. Hormones are easily diffusible and have high molecular weight.

C. Hormones are produced in very small amounts.

D. Insulin is a peptide hormone.

Answer: B



Watch Video Solution

20. Which of the following is a female sex hormone?

A. Adrenaline

B. Thyroxine

C. Testosterone

D. Estrogen

Answer: D



Watch Video Solution

21. Which of the following is NOT a sex hormone ?

A. Estrogen

B. Progesterone

C. Androgens

D. Adrenaline

Answer: D



Watch Video Solution

22. Which of the following compounds is NOT a vitamin ?

A. Nicotinamide

B. Thiamine

C. Testosterone

D. Riboflavin

Answer: C



Watch Video Solution

23. Bleeding gums is generally associated with a deficiency of _____

A. thiamine

B. ascorbic acid

C. folic acid

D. vitamin E

Answer: B



Watch Video Solution

24. Which of the following set of bases is present both in DNA and RNA ?

A. Adenine , uracil , thymine

B. Adenine, guanine, cytosine

C. Adenine, guanine, uracil

D. Adenine, guanine, thymine

Answer: B



Watch Video Solution

25. Which of the following statements about the assembly of nucleotides in a molecule of deoxyribonucleic acid is correct?

A. A pentose of one unit connects to a pentose of another

B. A pentose of one unit connects to the base of another .

C. A phosphate of one unit connects to a pentose of another .

D. A phosphate of one unit connects to the base of another .

Answer: C



Watch Video Solution

26. Which among the following is CORRECT ?

A. Base - phosphoric acid unit is called nucleoside

B. Phosphoric acid-sugar unit is called nucleotide .

C. Sugar -phosphoric acid unit is called nucleoside

D. Base-sugar-phosphoric acid unit is called nucleotide.

Answer: D



Watch Video Solution

27. Which of the following statement regarding RNA is WRONG ?

- A. It has a single strand .
- B. It does not undergo replication .
- C. It has no pyrimidine base .
- D. It controls the synthesis of proteins.

Answer: C



Watch Video Solution

28. Which type of isomerism is exhibited by the compounds obtained on hydrolysis of sucrose ?

- A. Optical isomerism
- B. Position isomerism
- C. Chain isomerism
- D. Functional group isomerism

Answer: D



Watch Video Solution

29. Which of the following statement is NOT CORRECT ?

- A. Glycine forms zwitter ion.
- B. Phospholipids are the major constituents of cell membranes.
- C. All carbohydrates have sweet taste .
- D. Nucleic acids are biopolymers.

Answer: C



Watch Video Solution

30. What is NOT TRUE for carbohydrates ?

A. General formula is $C_x(H_2O)_y$.

B. Glucose is the most common monomer of carbohydrates .

C. Fructose is the sweetest of all sugars .

D. Carbohydrates do not conjugate with lipids.

Answer: D



Watch Video Solution

31. Which of the following is a protein ?

A. Rayon

B. Natural silk

C. Terrycot

D. Nylon

Answer: B



Watch Video Solution

32. The protein which maintains blood sugars level in the human body is _____

- A. haemoglobin
- B. estrogen
- C. insulin
- D. progesterone

Answer: C



Watch Video Solution

33. Carbohydrates are _____

- A. hydrates of carbon
- B. polyhydroxy aldehydes or ketones
- C. polyhydroxy acid compounds
- D. polyhydroxy amino compounds

Answer: B



Watch Video Solution

34. The animal glycolipids that are found in plasma membranes of neural tissues and are abundant in myelin sheath of neurons is _____

A. nucleosides

B. erythrosides

C. cerebroside

D. nucleotides

Answer: C



Watch Video Solution

Competitive Thinking

1. Identify the monosaccharide containing only one asymmetric carbon atom in its molecule.

A. Ribulose

B. Ribose

C. Erythrose

D. Glyceraldehyde

Answer: D



Watch Video Solution

2. Raffinose is _____

- A. trisaccharide
- B. disaccharide
- C. monosaccharide
- D. polysaccharide

Answer: A



Watch Video Solution

3. The number of secondary alcohol groups present in glucose is/are _____

A. 3

B. 4

C. 2

D. 1

Answer: B



Watch Video Solution

4. Glucose has _____ functional group.

- A. aldehydic
- B. aldehydic and alcoholic
- C. alcoholic
- D. ketonic and alcoholic

Answer: B



Watch Video Solution

5. During conversion of glucose into glucose cyanohydrin which functional group/ atom of glucose is replaced ?

A. Hydrogen

B. Aldehydic group

C. Primary alcoholic group

D. Secondary alcoholic group

Answer: B



Watch Video Solution

6. Glucose reacts with _____

A. Schiff's reagent

B. phenylhydrazine

C. $NaHSO_3$

D. $Br_2 + H_2O$

Answer: D



Watch Video Solution

7. Glucose on oxidation with bromine water yields gluconic acid. This reaction confirms the presence

of

- A. six carbon atoms linked in straight chain
- B. secondary alcoholic group in glucose
- C. aldehyde group in glucose
- D. primary alcoholic group in glucose.

Answer: C



Watch Video Solution

8. The term anomer of glucose refers to

- A. isomers of glucose that differ in configuration at carbons one and four (C-1 and C-4)
- B. a mixture of (D)-glucose and (L)-glucose
- C. enantiomers of glucose
- D. isomers of glucose that differ in configuration at carbon one (C-1)

Answer: D



Watch Video Solution

9. $\alpha - D$ glucose and $\beta - D$ -glucose differ from each other due to the difference in one of the carbon atoms, with respect to its.

A. size of hemiacetal ring

B. number of OH groups

C. configuration

D. conformation

Answer: C



Watch Video Solution

10. Which of the following is sweetest sugar ?

A. Glucose

B. Fructose

C. lactose

D. Sucrose

Answer: B



Watch Video Solution

11. The number of atoms in the cyclic structure of D-fructose is _____

A. 5

B. 6

C. 4

D. 7

Answer: A



Watch Video Solution

12. Which one of the following sets of monosaccharides forms sucrose ?

A. α -D-Galactopyranose and α -D-glucopyranose

B. α -D-Glucopyranose and β -D-fructofuranose

C. β -D-Glucopyranose and α -D-fructofuranose

D. α -D-Glucopyranose and β -D-fructopyranose

Answer: B



Watch Video Solution

13. Amylopectin is

A. water soluble

B. water insoluble

C. forms colloidal solution with water

D. soluble in all solvents.

Answer: B



Watch Video Solution

14. On hydrolysis of starch, we finally get

A. glucose

B. Fructose

C. glucose and fructose

D. Sucrose

Answer: A



Watch Video Solution

15. Which one given below is a non – reducing sugar ?

A. Glucose

B. Sucrose

C. maltose

D. lactose

Answer: B



Watch Video Solution

16. The CORRECT statement of the following is

A. in maltose , linking between C-1 to C-2 is of

α -D-glucopyranose

B. in cellobiose, linking between C-1 to C-4 is of

β -D-glucopyranose

C. in sucrose , linking between C-1 to C-4 is of

α -D-glucopyranose

D. in lactose , linking between C-1 to C-4 is of α

-D-galactopyranose

Answer: B



Watch Video Solution

17. Which one of the following has two $\alpha - D -$ glucose units ?

A. Maltose

B. Sucrose

C. Cellulose

D. lactose

Answer: A



Watch Video Solution

18. Which amino acids has an aromatic ring ?

A. Alanine

B. Glycine

C. Tyrosine

D. Lysine

Answer: C



Watch Video Solution

19. Thiol group is present in

A. Cytosine

B. Cystine

C. Cysteine

D. Methionine

Answer: C



Watch Video Solution

20. An example of a sulphur containing amino acid is_____.

A. lysine

B. serine

C. cysteine

D. tyrosine

Answer: C



Watch Video Solution

21. The structural formula of an amino acid isoleucine is _____.



Watch Video Solution

22. Which of the following amino acids is basic in nature?

A. Valine

B. Tyrosine

C. Arginine

D. Leucine

Answer: C



Watch Video Solution

23. The amino acid which is basic in nature is

A. histidine

B. tyrosine

C. proline

D. valine

Answer: A



Watch Video Solution

24. Which of the following amino acid is neutral?

A. Glycine

B. Aspartic acid

C. Lysine

D. Arginine

Answer: A



Watch Video Solution

25. Which of the following statements is CORRECT?

A. All amino acid except lysine are optically active.

B. All amino acids are optically active.

C. All amino acids except glycine are optically active.

D. All amino acids except glutamic acids are optically active.

Answer: C



Watch Video Solution

26. In a protein molecule various amino acids are linked together by

A. peptide bond

B. dative bond

C. α -glycosidic bond

D. β -glycosidic bond

Answer: A



Watch Video Solution

27. Which part of the protein molecule is responsible for function and activity of the proteins?

A. Secondary structure

B. Peptide bond

C. Primary structure

D. Binding sites

Answer: B



Watch Video Solution

28. Which of the following structures represents the peptide chain?

A. 

B. 

C. 

D. 

Answer: A



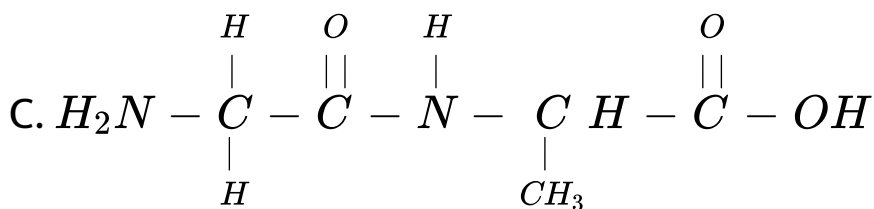
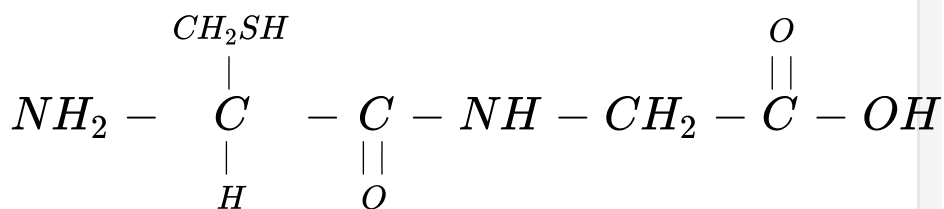
Watch Video Solution

29. The CORRECT structure of dipeptide gly-ala is

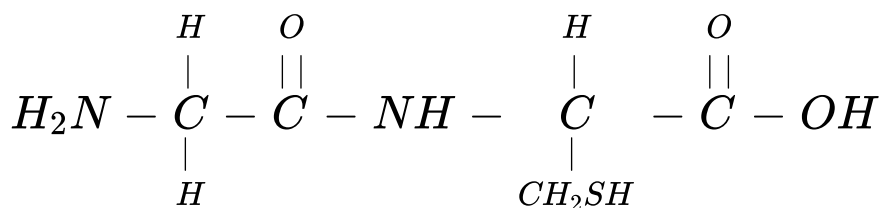
_____.

A. 

B.



D.



Answer: C



Watch Video Solution

30. Which of the following proteins is globular?

A. Collagen

B. Albumin

C. Myosin

D. Fibroin

Answer: B



Watch Video Solution

31. Haemoglobin is *a / an*

A. Enzyme

B. globular protein

C. vitamin

D. carbohydrate

Answer: B



Watch Video Solution

32. Hair contains which type of protein?

A. Yeast

B. Keration

C. Haemoglobin

D. myco protein

Answer: B



Watch Video Solution

33. The secondary structure of protein refers to :

A. α -helical backbone

B. hydrophobic interactions

C. sequence of α - amino acids

D. fixed configuration of the polypeptide backbone

Answer: A



Watch Video Solution

34. The helical structure of protein is stabilized by

A. ether bonds

B. Peptide bonds

C. dipeptide bonds

D. hydrogen bonds

Answer: D



Watch Video Solution

35. Tertiary structure of proteins represents_____.

A. sequence of amino acids

B. shape of protein molecule

C. folding of polypeptide chains

D. association of acid chains

Answer: C



Watch Video Solution

36. Proteins can be denatured by

A. carbon dioxide

B. carbon monoxide

C. heat

D. oxygen

Answer: C



Watch Video Solution

37. Insulin production and its action in human body are responsible for the level of diabetes.

This compound belongs to which of the following categories:

A. An enzyme

B. A hormone

C. A co-enzyme

D. An antibiotic

Answer: B



Watch Video Solution

38. The human body does not produce:

A. Hormones

B. Enzymes

C. DNA

D. vitamin

Answer: D



Watch Video Solution

39. This is NOT a water soluble vitamin:

A. D

B. C

C. B_1

D. Folic acid

Answer: A



Watch Video Solution

40. Which of the vitamins given below is water soluble ?

A. Vitamin C

B. Vitamin D

C. Vitamin E

D. Vitamin K

Answer: A



Watch Video Solution

41. Which of the following is not a fat soluble vitamin?

A. Vitamin E

B. Vitamin A

C. Vitamin B complex

D. Vitamin D

Answer: C



Watch Video Solution

42. Vitamin A is present in_____.

A. cod liver oil

B. carrot

C. milk

D. all of these

Answer: D



Watch Video Solution

43. The deficiency of this vitamin makes it difficult to see in dim light:

A. A

B. B

C. C

D. D

Answer: A



Watch Video Solution

44. The Deficiency of Vitamin B1 causes _____.

A. beriberi

B. scurvy

C. rickets

D. anaemia

Answer: A



Watch Video Solution

45. Cheilosis and digestive disorders are due to the deficiency of

A. thiamine

B. ascorbic acid

C. riboflavin

D. pyridoxine

Answer: C



Watch Video Solution

46. The chemical name of vitamin C is _____.

A. ascorbic acid

B. folic acid

C. nicotinic acid

D. tartaric acid

Answer: A



Watch Video Solution

47. The deficiency of vitamin C causes

A. scurvy

B. rickets

C. pyorrhea

D. pernicious anaemia

Answer: A



Watch Video Solution

48. Deficiency of which vitamin causes degeneration of spinal cord ?

A. E

B. K

C. B_{12}

D. A

Answer: C



Watch Video Solution

49. In nucleic acids, the sequence is

A. Base - phosphate- sugar

B. phosphate-base-sugar

C. sugar-base-phosphate

D. Base-sugar-phosphate

Answer: D



Watch Video Solution

50. Nucleic acid are polymers of

A. nucleosides

B. α -amino acids

C. nucleotides

D. glucose

Answer: C



Watch Video Solution

51. Purine derivative among the following bases is

A. guanine

B. cytosine

C. thymine

D. uracil

Answer: A



Watch Video Solution

52. The pyrimidine bases present in DNA are

- A. Cytosine and guanine
- B. Cytosine and thymine
- C. Cytosine and uracil
- D. Cytosine and adenine

Answer: B



Watch Video Solution

53. In DNA the complementary base pairs are_____.

A. A and T, G and C

B. G and A, T and C

C. A and T, G and U

D. A and A, C and G

Answer: A



Watch Video Solution

54. What type of sugar molecule is present in DNA ?

A. D-3-Deoxyribose

B. D-ribose

C. D-2-Deoxyribose

D. D-glucopyranose

Answer: C



Watch Video Solution

55. The structure of DNA is

A. linear

B. single helix

C. double helix

D. triple helix

Answer: C



Watch Video Solution

56. The reason for double helical structure of *DNA* is the operation of:

- A. van der Waal,s forces
- B. dipole-dipole interaction
- C. hydrogen bonding
- D. electrostatic attractions

Answer: C



Watch Video Solution

57. Which carbon atom of deoxyribose sugar in

DNA does not contain $-\overset{\text{H}}{\underset{\text{H}}{\text{C}}}-\text{OH}$ bond ?

A. C_5

B. C_3

C. C_2

D. C_1

Answer: C



Watch Video Solution

58. The correct statement regarding *RNA* and *DNA*, respectively is :

A. The sugar component in RNA is arabinose
and the sugar component in DNA is ribose

B. The sugar component in RNA is 2,-
deoxyribose and the sugar component in
DNA is arabinose

C. The sugar component in RNA is arabinose
and the sugar component in DNA is
2,deoxyribose

D. The sugar component in RNA is ribose and the sugar component in DNA is 2'-deoxyribose

Answer: D



Watch Video Solution

59. In both *DNA* and *RNA*, the heterocyclic base and phosphate ester linkages are at:

A. C_5 and C_2 respectively of the sugar molecule

B. C_2 and C_5 respectively of the sugar molecule

C. C_1 and C_5 respectively of the sugar molecule

D. C_5 and C_1 respectively of the sugar molecule

Answer: C



Watch Video Solution

60. DNA multiplication is called

A. translation

B. transduction

C. transcription

D. replication

Answer: D



Watch Video Solution

61. The central dogma of molecular genetics states that the genetic information flows from

A. DNA _____ RNA _____ Carbohydrates

B. amino acids_____Proteins_____DNA

C. DNA_____Carbohydrates_____Proteins

D. DNA_____RNA_____Proteins

Answer: D



Watch Video Solution

62. To detect the reducing and non reducing sugar, which of the following test is used?

A. Molisch test

B. Biuret test

C. Fehlings test

D. Millons Test

Answer: C



Watch Video Solution

63. A molecule of stachyose contains how many carbon atoms?

A. 6

B. 12

C. 18

D. 24

Answer: D



Watch Video Solution

64. Which of the following compounds is found abundantly in nature?

A. Fructose

B. Starch

C. Glucose

D. Cellulose

Answer: D



Watch Video Solution

65. Which of the following statements is not correct?

A. Ovalbumin is a simple food reserve in egg-white.

B. Blood proteins thrombin and fibrinogen are involved in blood clotting.

C. Denaturation makes the proteins more active.

D. Insulin maintains sugar level in the blood of a human body.

Answer: C



Watch Video Solution

66. Which one of the following is laevorotatory

A. Glucose

B. Sucrose

C. Fructose

D. None of these

Answer: C



Watch Video Solution

67. The hormone that helps in the conversion of glucose into glycogen is:

A. adrenaline

B. insulin

C. cortisone

D. bile acids

Answer: B



Watch Video Solution

68. In DNA the consecutive deoxynucleotides are connected via_____.

A. phospho diester linkage

B. phospho monoester linkage

C. phospho triester linkage

D. amide linkage

Answer: A



Watch Video Solution

69. The number of amino acids and number of peptide bonds in a linear tetrapeptide (made of different amino acids) are respectively_____.

A. 4 and 4

B. 5 and 5

C. 5 and 4

D. 4 and 3

Answer: D



Watch Video Solution

70. What is the volume of water consumed during acid hydrolysis of 1.368 kg of sucrose ?

A. 0.072 dm^3

B. 0.720 dm^3

C. 0.18 dm^3

D. 0.018 dm^3

Answer: A



Watch Video Solution

71. In which of the following compound all the monosaccharide units are NOT joined by C-1-O-C-4 chain?

A. Maltose

B. lactose

C. Cellulose

D. Amylopectin

Answer: D



Watch Video Solution

72. Identify the nucleoside from the following:

A. 

B. 

C. 

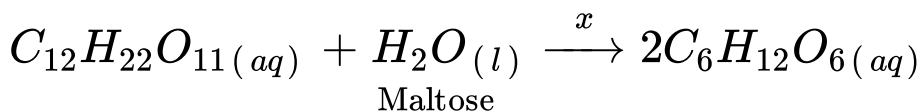
D. 

Answer: A



Watch Video Solution

73. Which if the following enzyme catalyst (X) is used in the conversion of maltose to glucose?



- A. Invertase
- B. Zymase
- C. Diastase
- D. Maltase

Answer: D



74. Glycogen is _____.

A. a polymer of -----D-glucose units

B. a structural polysaccharide

C. structurally very much similar to amylopectin

D. structurally similar to amylopectin but extensively branched

Answer: D



Watch Video Solution

75. What is grape sugar?

A. Starch

B. glucose

C. Fructose

D. Sucrose

Answer: B



Watch Video Solution

76. What is the bond between monosaccharides in starch?

- A. Glycosidic
- B. Peptide
- C. phosphodiester
- D. Ester

Answer: A



Watch Video Solution

77. This vitamin is available to vegetarians:

A. A

B. B_{12}

C. B_2

D. C

Answer: B



Watch Video Solution

78. How many chiral carbons are there in $\beta - D - (+) - \text{glucose}$?

A. 5

B. 6

C. 3

D. 4

Answer: A



Watch Video Solution

1. Vitamin B_{12} contains metal_____.

A. Ca (II)

B. Zn (II)

C. Fe (II)

D. Co (III)

Answer: D



Watch Video Solution

2. The linkage between the two monosaccharide units in lactose is _____.

A. C_1 of $\beta - D$ -glucose and C_4 of $\beta - D -$
glucose

B. C_1 of $\beta - D$ -galactose and
 C_4 of $\beta - D -$ glucose

C. C_1 of $\alpha - D$ -galactose and
 C_4 of $\beta - D -$ glucose

D. C_1 of $\beta - D$ -galactose and
 C_4 of $\alpha - D -$ glucose

Answer: B



Watch Video Solution

3. Cellulose upon acetylation with excess acetic anhydride/ H_2SO_4 (catalytic) gives cellulose triacetate whose structure is

A. 

B. 

C. 

D. 

Answer: A



Watch Video Solution

4. Which of the following deos NOT show any reducing test of aldehyde?

A. Sucrose

B. Fructose

C. maltose

D. None of these

Answer: A



Watch Video Solution

5. The number of optical isomers of glucose are

_____.

A. 8

B. 16

C. 6

D. 2

Answer: B



Watch Video Solution

6. The common feature amongst nucleus, chloroplast and mitochondria is _____.

A. DNA

B. lamellae

C. cell wall

D. cristae

Answer: A



Watch Video Solution

7. Amino acids usually exist in the form of Zwitter ions. This means that they consist of

A. the basic group $-NH_2$ and the acidic group

$-COOH$

B. the basic group $-NH_3^+$ and the acidic

group $-CO_2^-$

C. the acidic group $-CO_2^-$ and the basic

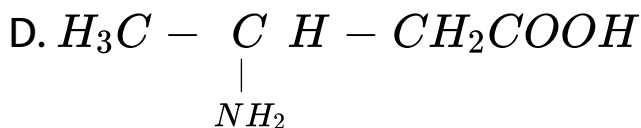
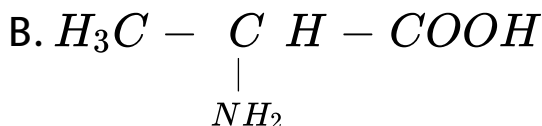
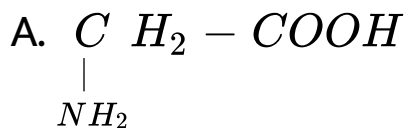
group NH_3^+

D. neither an acidic nor a basic group

Answer: C



8. Which of the following is not an α -amino acid?



Answer: D

9. The number of sp^3 and sp^2 hybridized C - atoms in glucose are respectively

A. 5 and 1

B. 1 and 5

C. 4 and 2

D. 2 and 4

Answer: A



Watch Video Solution

10. The presence or absence of hydroxy group of sugar which differentiates RNA and DNA is on _____ carbon atom.

A. 1st

B. 2nd

C. 3rd

D. 4th

Answer: B



Watch Video Solution