



CHEMISTRY

BOOKS - UNIVERSAL BOOK DEPOT 1960

CHEMISTRY (HINGLISH)

BIOMOLECULES AND POLYMER

Ordinary Thinking Objective Question Carbohydrate

1. On heating glucose with Fehling solution. We get a precipitate whose colour is?

A. Yellow

B. Red

C. Black

D. White

Answer: B



Watch Video Solution

2. On hydrolysis of starch, we finally get

A. Glucose

B. Fructose

C. Glucose and fructose

D. Sucrose

Answer: A





[Watch Video Solution](#)

3. Oxidation of glucose is one of the most important reactions in a living cell. What is the number of ATP molecules generated in cells from one molecule of glucose

A. 38

B. 12

C. 18

D. 28

Answer: A



[Watch Video Solution](#)

4. $\alpha - D$ 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 heiacetal ring
- B. number of OH groups
- C. Configuration
- D. Conformation

Answer: C



Watch Video Solution

5. Which of the following is the sweetest sugar?

A. Glucose

B. Fructose

C. Lactose

D. Sucrose

Answer: B



Watch Video Solution

6. Which of the following is correct statement

A. proteins are not amino acids

B. α -hydrogen is present in fructose

C. starch is polymer of α -glucose

D. Amylose is compound of cellulose

Answer: C



Watch Video Solution

7. Glycolysis is

- A. Conversion of glucose to haem
- B. Oxidation of glucose to glutamate
- C. Conversion of pyruvate to citrate
- D. Oxidation of glucose to pyruvate

Answer: D



Watch Video Solution

8. Which functional group participates in the disulphide bond formation in proteins?

A. Thiolactone

B. Thiol

C. Thioether

D. Thioester

Answer: B



Watch Video Solution

9. Fructose reduces Tollens' reagent due to :

A. Asymmetric carbons

B. Primary alcoholic group

C. Secondary alcoholic group

D. Enolisation of fructose followed by conversion to aldehyde by base

Answer: D



Watch Video Solution

10. Which does not mutarotation

A. Sucrose

B. Maltose

C. Glucose

D. Fructose

Answer: A



Watch Video Solution

11. Which one of the following statements is not true regarding (+) lactose

- A. (+)lactose, $C_{12}H_{22}O_{11}$ contains 8-OH groups
- B. on hydrolysis (+) lactose give equal amount of D(+) glucose and D(+) galactose
- C. (+) Lactose is a β -glycoside formed by the union of a D(+) glucose and a molecules of D(+) galactose
- D. (+) lactose is reducing sugar and does not exhibit mutarotation

Answer: D



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. $D(+)$ glucose reacts with hydroxylamine and yields an oxime. The structure of the oxime would be :

A. 

B. 

C. 

D. 

Answer: B



Watch Video Solution

14. Glucose forms many derivatives. The derivative which will help to prove the furanose structure is

A. Acetyl

B. Benzoyl

C. Osazone

D. Isopropylidene

Answer: D



Watch Video Solution

15. It is best to carry out reactions with sugars in neutral or acid medium and not in alkaline medium. This is because in alkaline medium sugars undergo one of the following changes

A. Racemisation

B. Decomposition

C. Inversion

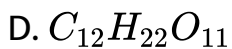
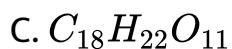
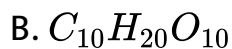
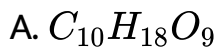
D. Rearrangement

Answer: C::D



Watch Video Solution

16. The commonest disaccharide has the molecular formula



Answer: D



Watch Video Solution

17. Yeast cell derive their energy from glucose by

- A. Glycolysis
- B. Respiration formation
- C. Formation
- D. None of these

Answer: A



Watch Video Solution

18. Methyl- α -*D*-glucoside and methyl- β -*D*-glucoside are:

- A. Epimers
- B. Anomers
- C. Enantiomers
- D. Conformational diastereomers

Answer: B



Watch Video Solution

19. The beta (β) and alpha (α) glucose have different specific rotation. When either is dissolved in water, their specific

rotation changed to reach a certain fixed value. This is called

:-

- A. Epimerisation
- B. Racemisation
- C. Anomerisation
- D. Mutarotation

Answer: D



Watch Video Solution

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

- A. Fructose

B. Starch

C. Glucose

D. Cellulose

Answer: D



Watch Video Solution

21. Glucose gives silver mirror with Tollen's reagent, it shows the presence of

A. An acidic group

B. An alcoholic group

C. A ketonic group

D. An aldehydic group

Answer: A



Watch Video Solution

22. Starch is converted to maltose by

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

Answer: D



Watch Video Solution

23. Glucose had different from fructose is that

- A. Does not undergo hydrolysis
- B. Gives silver mirror with tollen's reagent
- C. Monosaccharide
- D. None of these

Answer: D



Watch Video Solution

24. Which enzyme convertes sucrose into ethanol

- A. Diastase
- B. Invertase

C. Zymase

D. Both (b) and (c)

Answer: D



Watch Video Solution

25. The reagent which forms crystalline osazone derivatives when heated with glucose is?

A. Fehling solution

B. Phenylhydrazine

C. Benedict solution

D. Hydroxylamine

Answer: B



Watch Video Solution

26. Glucose gives many reactions of aldehyde, because

- A. It is hydrolysed to acetaldehyde
- B. It is polyhydroxy ketone
- C. It is a cyclic aldehyde
- D. It is a hemiacetal in equilibrium with its aldehyde form
in solution

Answer: D



Watch Video Solution

27. When copper is heated with conc. HNO_3 it produces?

A. Sucrose nitrate

B. Formic acid

C. Oxalic acid

D. Citric acid

Answer: C



Watch Video Solution

28. Starch is a polymer of

A. Glucose

B. Fructose

C. Both (a) and (b)

D. None of these

Answer: A



Watch Video Solution

29. The ultimate product of oxidation of most of hydrogen and carbon in foodstuffs are

A. H_2O alone

B. CO_2 alone

C. H_2O and CO_2

D. None of these

Answer: C



Watch Video Solution

30. Which of the following monosaccharides is a pentose

A. Galactose

B. Glucose

C. Fructose

D. Arabinose

Answer: D



Watch Video Solution

31. Glucose when treated with CH_3OH in presence of dry HCl gives α - and β -methylglucosides because it contains:

- A. An aldehyde group
- B. A $-CH_2OH$ group
- C. A ring structure
- D. Five hydroxyl groups

Answer: C

 [Watch Video Solution](#)

32. Glucose contains in addition to aldehyde group

- A. One secondary OH and four primary OH groups

- B. One primary OH and four secondary OH groups
- C. Two primary OH and three secondary OH groups
- D. Three primary OH and two secondary OH groups

Answer: B

 [Watch Video Solution](#)

33. The disaccharide present in milk is :

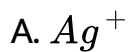
- A. Maltose
- B. Lactose
- C. Sucrose
- D. Cellobiose

Answer: B



Watch Video Solution

34. Benedict solution provides



Answer: C



Watch Video Solution

35. Which of the following statements about ribose is incorrect

A. It is polyhydroxy compound

B. It is an aldehyde sugar

C. It has six carbon atoms

D. It exhibit optical activity

Answer: C

 [Watch Video Solution](#)

36. Starch can be used as an indicator for the detection of traces of

- A. Glucose in aqueous solution
- B. Protein in blood
- C. Iodine in aqueous solution
- D. Urea in blood

Answer: C



Watch Video Solution

37. Glucose cannot be classified as

- A. A hexose
- B. A carbohydrate
- C. An oligosaccharide
- D. An aldose

Answer: C



Watch Video Solution

38. Which of the following is a disaccharide ?

A. Lactose

B. Starch

C. Cellulose

D. Glucose

Answer: A



Watch Video Solution

39. Which carbohydrates is used in silvering of mirrors

A. Sucrose

B. Starch

C. Glucose

D. Fructose

Answer: C



Watch Video Solution

40. Which of the following does not show any reducing test of aldehyde

A. Sucrose

B. Fructose

C. Maltose

D. Lactose

Answer: A



Watch Video Solution

41. Which among the following is the simplest

A. glucose

B. Cellulose

C. Starch

D. None of these

Answer: A



Watch Video Solution

42. The substances that forms the plant cell walls is or which carbohydrates is an essential constituents of plant cells

A. Cellulose

B. Sucrose

C. Vitamins

D. Starch

Answer: A



Watch Video Solution

43. To become a carbohydrate, a compound must contain at least:

- A. 2 carbons
- B. 3 carbons
- C. 4 carbons
- D. 6 carbons

Answer: B



Watch Video Solution

44. Galactose is converted into glucose in

- A. Mouth

B. Stomach

C. Liver

D. Intestine

Answer: C



Watch Video Solution

45. What is an invert sugar ?

A. Isorotatory

B. Dextrorotatory

C. Laevorotatory

D. Optically inactive

Answer: C



Watch Video Solution

46. An example of a disaccharide made up of two units of the same monosaccharides is

A. sucrose

B. maltose

C. lactose

D. none of these

Answer: B



Watch Video Solution

47. Which of the following are the main source of carbohydrates

A. Green plant

B. Fructose

C. Glucose

D. Both (b) and (c)

Answer: A



Watch Video Solution

48. A certain compound gives negative test with ninhydrin and positive test with Benedict's solution. The compound is

- A. A protein
- B. A monosaccharides
- C. A lipid
- D. An amino acid

Answer: B



Watch Video Solution

49. The charging of sugar , when treated with conc. H_2SO_4 , is due to

- A. Oxidation
- B. Reduction
- C. Dehydration

D. Hydrolysis

Answer: C



Watch Video Solution

50. Indigestible carbohydrate, which is also a constituent of our diet, is

A. Cellulose

B. Galactose

C. Maltose

D. Starch

Answer: A



Watch Video Solution

51. The caloric value is maximum in case of

- A. Milk
- B. Proteins
- C. Mineral
- D. Carbohydrates

Answer: D



Watch Video Solution

52. Carbohydrates are stored in human body as

- A. Glucose

B. glycogen

C. Starch

D. Fructose

Answer: B



Watch Video Solution

53. Which set of terms correctly identifies the carbohydrates shown



A. 1,3 and 6

B. 1,3 and 5

C. 2,3 and 5

D. 2,3 and 6

Answer: A



[View Text Solution](#)

54. Pick out the incorrect statements (s) from the following

- (1) Glucose exists in two different crystalline forms, α -D-glucose and β -D-glucose
- (2) α -D-glucose and β -D-glucose are anomers
- (3) α -D-glucose and β -D-glucose are enantiomers
- (4) Cellulose is a straight chain polysaccharide made of only β -D-glucose units
- (5) Starch is a mixture of amylose and amylopectin, both contain unbranched chain α -D-glucose unit

A. 1 and 2

B. 2 and 3

C. 3 and 4

D. 3 and 5

Answer: D



Watch Video Solution

55. The artificial sweetener containing sulphur that has appearance and taste as that of sugar and is stable at cooking temperature is _____ .

A. Aspartame

B. Saccharin

C. Sucrolose

D. Alitame

Answer: C

 [Watch Video Solution](#)

56. Glucose does not react with

A. Br_2 / H_2O

B. H_2NOH

C. HI

D. $NaHSO_3$

Answer: D

 [Watch Video Solution](#)



Watch Video Solution

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

- A. C_1 of β -D-glucose and C_4 of β -D-galactose
- B. C_1 of β -D-galactose and C_4 of β -D-glucose
- C. C_1 of α -D-galactose and C_4 of β -D-glucose
- D. C_1 of β -D-galactose and C_4 of α -D-glucose

Answer: B



Watch Video Solution

58. The glycosidic linkage involved in linking the glucose units in amylose part of starch is

A. $C_1 - C_4\beta$ linkage

B. $C_1 - C_6\alpha$ linkage

C. $C_1 - C_5\alpha$ linkage

D. $C_1 - C_6\beta$ linkage

Answer: D

 [View Text Solution](#)

59. Which one of the following is laevorotatory

A. glucose

B. Sucrose

C. Fructose

D. None of these

Answer: C



Watch Video Solution

60. Blood sugar is the same as

A. Glucose

B. Galactose

C. Glycogen

D. Fructose

Answer: A



Watch Video Solution

61. If an aqueous solution of glucose allowed to freeze then crystal of which will be separated out first

- A. Glucose
- B. water
- C. both of these
- D. none of these

Answer: B



Watch Video Solution

62. sucrose on hydrolysis gives

- A. Two molecules of glucose
- B. Two molecules of fructose
- C. one molecules each of glucose and fructose
- D. one molecules each of the glucose and mannose

Answer: C



[Watch Video Solution](#)

63. All monosaccharide.....Tollens reagent

- A. Oxidises
- B. Condense with

C. Reduces

D. Add to

Answer: C

 [Watch Video Solution](#)

64. In the following structure,



anomeric carbon is

A. 1

B. 2

C. 3

D. 4

Answer: A



View Text Solution

65. Osazone formation involves only 2 carbon atoms of glucose because of

- A. Chelation
- B. Oxidation
- C. Reduction
- D. Hydrolysis

Answer: B



Watch Video Solution

66. glucose will show mutarotation when solvent is

- A. Acidic
- B. Basic
- C. Neutral
- D. Amphoteric

Answer: C



Watch Video Solution

67. Glucose and fructose form

- A. same osazone
- B. same acid on oxidation

C. same alcohol when reduced

D. different osazone

Answer: A



Watch Video Solution

68. Which one of the following is the reagent used to identify glucose

A. Neutral ferric chloride

B. Chloroform and alcoholic KOH

C. Ammoniacal silver nitrate

D. Sodium ethoxide

Answer: C



View Text Solution

69. 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

70. In polysaccharides, the linkage connecting monosaccharide is called

- A. Glycoside linkage
- B. Nucleoside linkage
- C. Glycogen linkage
- D. Peptide linkage

Answer: A



Watch Video Solution

71. On reduction with Na-Hg and water a carbohydrate gives a mixture of sorbitol and mannitol. The carbohydrate can be

A. Glucose

B. fructose

C. cane sugar

D. lactose

Answer: B



Watch Video Solution

72. Which of the following pentose will be optically active



A. All

B. II and III

C. I

D. II

Answer: A



View Text Solution

73. Which carbohydrate has highest abundance in human blood

A. D-fructose

B. D-glucose

C. Sucrose

D. Lactose

Answer: B



Watch Video Solution

74. Raffinose is a

- A. Trisachharide
- B. Monosaccharide
- C. Disaccharide
- D. None of these

Answer: A



Watch Video Solution

75. Iodine test is shown by

- A. Polypeptide

B. Glycogen

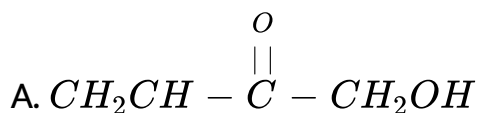
C. Starch

D. Glucose

Answer: C

 [Watch Video Solution](#)

76. Which the one of the following is first member of monosaccharides ?





Answer: B

 [Watch Video Solution](#)

77. Which of the following reduces Tollen's reagent ?

- A. Cane sugar
- B. Starch
- C. Glucose
- D. All of these

Answer: C

 [Watch Video Solution](#)

78. Glucose and fructose are

- A. Isotope
- B. Isotones
- C. Isomers
- D. Homologues of each other

Answer: C



Watch Video Solution

79. 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](#)

80. The two function groups present in a typical carbohydrate are

A. $-OH$ and $-COOH$

B. $-CHO$ and $-COOH$

C. $>C=O$ and $-OH$

D. $-OH$ and $-CHO$

Answer: D



Watch Video Solution

81. Which of the following compound can be detected by Molisch's test?

A. Nitro compounds

B. Sugars

C. Amines

D. Primary alcohols

Answer: B



Watch Video Solution

82. Milk change after digestion into

A. Cellulose

B. Fructose

C. glucose

D. Lactose

Answer: C



Watch Video Solution

83. Which of the following is an example of ketohexose ?

A. Mannose

B. Galactose

C. Maltose

D. Fructose

Answer: D



Watch Video Solution

84. When amylases catalyse the hydrolysis of starch , the final product obtained is chiefly

A. Cellobiose

B. Glucose

C. Maltose

D. Sucrose

Answer: C



Watch Video Solution

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

A. Molisch test

B. biuret test

C. Fehling's test

D. Million's test

Answer: C



Watch Video Solution

86. Which is false

- A. glucose is a disaccharide
- B. starch is a polysaccharide
- C. Glucose and fructose are not anomers
- D. Invert sugar consists of glucose and fructose

Answer: A



Watch Video Solution

87. Glucose and fructose can be distinguished by

- A. Lucas test
- B. Ninhydrin test
- C. Benedict reagent test
- D. All the above

Answer: C



Watch Video Solution

88. Carbohydrates are used by body mainly

- A. for obtaining vitamins
- B. As source of energy

C. for all its developmental needs

D. for building muscles

Answer: B

 [Watch Video Solution](#)

89. Which of the following is the open-chain structure of D-glucose?

A. Penta-acetylene derivative of glucose

B. Cyanohydrin formation with HCN

C. Reaction with Fehling solution

D. Reaction with Tollen's reagent

Answer: A



Watch Video Solution

90. Lactose on hydrolysis gives

- A. Two glucose molecules
- B. Two galactose molecules
- C. A galactose molecule and a fructose molecules
- D. A galactose molecule and a glucose molecule

Answer: D



Watch Video Solution

91. The intermediate compound in the conversion of starch to glucose is:

- A. Lactose
- B. Sucrose
- C. Maltose
- D. Fructose

Answer: C



Watch Video Solution

92. The sugar present in fruits is

- A. Fructose

B. Glucose

C. Sucrose

D. Galactose

Answer: A



Watch Video Solution

93. Invertase bring about the conversion of

A. Starch of glucose

B. Sucrose to glucose and fructose

C. Maltose to glucose

D. Glucose to C_2H_5OH and CO_2

Answer: B



Watch Video Solution

94. An example of non-reducing sugar is

- A. Cane sugar
- B. Fructose
- C. Lactose
- D. Cellobiose

Answer: A



Watch Video Solution

95. Which of the following does not reduce Benedict's solution?

A. Sucrose

B. Aldehyde

C. glucose

D. Fructose

Answer: A



[Watch Video Solution](#)

96. Which of the following is an aldohexose

A. Cellulose

B. Sucrose

C. galactose

D. Raffinose

Answer: C



Watch Video Solution

97. The sugar which is not a disaccharide in the following is :

A. Lactose

B. Galactose

C. Sucrose

D. Maltose

Answer: B



Watch Video Solution

98. An organic compound answers Molisch's test as well as Benedict's test. But it does not answer Scliwanoff's test. Most probably, it is

A. Sucrose

B. Protein

C. Fructose

D. Maltose

Answer: D



Watch Video Solution

99. Pick out the one which does not belong to the family

A. pepsin

B. Cellulose

C. ptyalin

D. lipase

Answer: B



Watch Video Solution

100. Amylopectin is

A. Water soluble

B. Water insoluble

C. forms colloidal solution with water

D. Both (b) and (c)

Answer: B



Watch Video Solution

101. A diabetic person carries a packet of glucose with him always because

A. glucose increases the blood sugar level slowly

B. glucose reduces the blood sugar level

C. glucose increases the blood sugar level almost instantaneously

D. Glucose reduces the blood sugar level slowly

Answer: C

 [Watch Video Solution](#)

102. Sucrose is not a reducing sugar since

A. It is chemically stable

B. it contains no free aldehyde or keto group adjacent to a CH_2OH group

C. It is built up of a fructose unit

D. it is optically active

Answer: B





[Watch Video Solution](#)

103. Saccharin , an artificial sweetener , is manufactured from

A. Cellulose

B. Toluene

C. Cyclohexane

D. Starch

Answer: B



[Watch Video Solution](#)

104. Ribose and 2-deoxyribose can be differentiated by

A. Fehling's reagent

B. Tollen's reagent

C. Barfoed's reagent

D. Osazone formation

Answer: D



Watch Video Solution

105. Glucose and mannose are :

A. Epimers

B. Anomers

C. ketohexoses

D. Disaccharides

Answer: A



Watch Video Solution

106. In fructose the possible optical isomers are

A. 12

B. 8

C. 16

D. 4

Answer: B



Watch Video Solution

107. Diabetes is detected usingby testing urine of patients

- A. Fehling's solution
- B. Tollen's reagent
- C. Benedict's solution
- D. Baeyer's reagent

Answer: C



Watch Video Solution

108. A carbohydrate is treated with α -naphthol and cone. H_2SO_4 . What colour will be formed at the junction of two liquids?

A. Blue

B. Violet

C. Green

D. Red

Answer: B



Watch Video Solution

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

A. disaccharide

B. monosaccharide

C. polysaccharide

D. trisaccharide

Answer: B



Watch Video Solution

110. In the viscope process the solvent for cellulose consists of

- A. Ether and alcohol
- B. Copper sulphate and ammonia
- C. sodium hydroxide and carbon disulphide
- D. Acetic acid and acetic anhydride

Answer: C



Watch Video Solution

111. Glucose in blood can be quantitatively determined with

- A. Tollen reagent
- B. Benedict solution
- C. Alkaline iodine solution
- D. Bromine water

Answer: A



Watch Video Solution

112. On hydrolysis , which produces only glucose

- A. Galactose

B. maltose

C. Sucrose

D. None

Answer: B



Watch Video Solution

113. Cellulose is soluble in

A. Ammoniacal cupric hydroxide solution

B. organic solvents

C. Water

D. None of these

Answer: A



Watch Video Solution

114. Which of the following is incorrect for glucose

A. it contains four $-CHOH$ group
|

B. it contains one ketone group

C. It contains one $-CH_2OH$ group

D. It contains one $-CHO$ group

Answer: B



Watch Video Solution

115. When sucrose is heated to 483 K temperature, it loses water and forms a brown amorphous substance called

- A. Aspartame
- B. Caramel
- C. Alitame
- D. Sucrose

Answer: B

 [Watch Video Solution](#)

116. Gun-cotton is

- A. Nitrosucrose

B. Nitrocellulose

C. Nitroglucose

D. Nitropicrin

Answer: B



Watch Video Solution

117. Amide group is present in

A. Lipids

B. Carbohydrates

C. Amino acids

D. Proteins

Answer: D



Watch Video Solution

118. Which of the following is a carbohydrate

A. Leucine

B. Albumin

C. Inulin

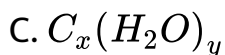
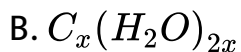
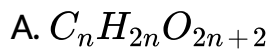
D. Maltase

Answer: C



Watch Video Solution

119. General formula for the carbohydrates is



D. none of these

Answer: C



Watch Video Solution

120. In the 'glycolipids', the two sugars known to occur are glucose and

A. fructose

B. Lactose

C. galactose

D. Sucrose

Answer: C



Watch Video Solution

121. The 'epimerisation' involves

A. Change in configuration

B. Addition of one more 'C'

C. Subtraction of a 'C'

D. Conversion of -CHO to -C=O

Answer: A



Watch Video Solution

122. The compound which does not contain an asymmetric carbon atom is

A. Glycoaldehyde

B. Glyceraldehyde

C. Glucose

D. Galactose

Answer: A



Watch Video Solution

123. Which of the following sign indicate that the sugar is actually 'dextrorotatory'

A. —

B. +

C. R-

D. All of these

Answer: B



[Watch Video Solution](#)

124. The standard compound for determination of configuration in the 'sugar chemistry' is

- A. Glycoaldehyde
- B. Glyceraldehyde
- C. Glucose
- D. Fructose

Answer: B



Watch Video Solution

125. Sugars are

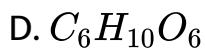
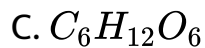
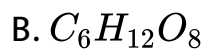
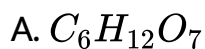
- A. Optically active polyhydroxy aldehydes
- B. Optically active polyhydroxy ketones
- C. Optically active polyhydroxy aldehydes or ketones

D. polyhydroxy aldehydes or ketones which may or may not be optically active

Answer: D

 [Watch Video Solution](#)

126. Molecular formula of pentahydroxy acid obtained when glucose is oxidised with Br_2 water is



Answer: A



Watch Video Solution

127. The calorific values of fats, carbohydrates and proteins vary in the order

A. *Fats* > *Carbohydrates* > Proteins

B. *Fats* > proteins > *carbohydrates*

C. *Carbohydrates* > proteins > *Fats*

D. Proteins > *Carbohydrates* > *fats*

Answer: A



Watch Video Solution

128. Gun-cotton is obtained when conc. Nitric acid reacts with

A. Glycerine

B. Glycol

C. Cellulose

D. Starch

Answer: C



Watch Video Solution

129. The letter 'D' in carbohydrates represents

A. Its direct synthesis

B. its dextrorotation

C. its mutarotation

D. its configuration

Answer: D

 [Watch Video Solution](#)

130. The hydrolysis of sucrose produce a mixture which is

A. Laevorotatory

B. Dextrorotatory

C. Equally both (+) and (-)rotatory

D. Optically inactive

Answer: A

 [Watch Video Solution](#)



Watch Video Solution

131. Sucrose contains which of the following groups

A. $-CHO$

B. $>C=O$

C. both (a) and (b)

D. none of these

Answer: D



Watch Video Solution

132. which is used in motion picture films

A. cellulose acetate

B. glucose acetate

C. starch acetate

D. sucrose acetate

Answer: A



Watch Video Solution

133. Artificial silk is a

A. polyamides

B. polyesters

C. polyacids

D. polysaccharides

Answer: D



Watch Video Solution

134. Assertion: Proteins on hydrolysis produce amino acids.

Reason : Amino acids contain NH_2 and $-COOH$ groups

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false
- D. if the assertion and reason both are false

Answer: B



[Watch Video Solution](#)

135. Assertion : sucrose is known as invert sugar

Reason : sucrose is a disaccharide

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false
- D. if the assertion and reason both are false

Answer: D



[Watch Video Solution](#)

136. Assertion : Glycosides are hydrolysed in acidic conditions.

Reason : Glycosides are acetals

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false
- D. if the assertion and reason both are false

Answer: D



Watch Video Solution

137. Assertion : Sucrose is a non – reducing sugar.

Reason : It has glycosidic linkage.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false
- D. if the assertion and reason both are false

Answer: A



Watch Video Solution

138. Assertion : The specific rotation of a freshly prepared solution of α -glucose decreases from $+112^\circ$ to 52.7° while that of β glucose increases from $+19^\circ$ to 52.7° .

Reason: The change in specific rotation of an optically active compound with time to an equilibrium value is called mutarotation.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false
- D. if the assertion and reason both are false

Answer: B



Watch Video Solution

139. Assertion : Milion's test is a test to identify carbohydrates.

Reason: Milions' reagent is solution of mercurous nitrate and mercuric nitrate in nitric acid contaning little nitrous acid.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false
- D. if the assertion and reason both are false

Answer: D



[View Text Solution](#)

140. Assertion: A solution of sucrose in water is dextrorotatory but on hydrolysis in presence of little hydrochloric acid, it becomes laevorotatory.

Reason: Sucrose on hydrolysis gives unequal amounts of glucose and fructose as.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false
- D. if the assertion and reason both are false

Answer: C



Watch Video Solution

141. Assertion : Treatment of D-glucose with alkali affords an equilibrium , D-fructose and starting substance D-glucose,

Reason: The reaction involves an intermediate in which hybridization of C_2 change from sp^3 to sp^2

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false
- D. if the assertion and reason both are false

Answer: A



Watch Video Solution

Ordinary Thinking Proteins Amino Acids And Enzymes

1. Insulin is

- A. An amino acid
- B. Protein
- C. A carbohydrate
- D. A lipid

Answer: B



Watch Video Solution

2. By the action of enzymes, the rate of biochemical reaction

A. Decreases

B. Increases

C. Does not change

D. Either (a) or (C)

Answer: B



Watch Video Solution

3. Secondary structure of proteins refers to

- A. Mainly denatured protein and structure of prosthetic groups
- B. Three dimensional structure, specially the bond between amino acids residues that are distant from each other in the polypeptide chain
- C. linear sequence of amino acid residues in the polypeptide chain
- D. Regular folding patterns of continuous portions of the polypeptide chain

Answer: D



Watch Video Solution

4. of the following statements about enzymes which ones are true

(i) Enzymes lack in nucleophilic groups

(ii) Enzymes are highly specific both in binding chiral substrates and in catalyzing their reactions.

(iii) Enzymes catalyse chemical reactions by lowering the activation energy

(iv) Pepsin is a proteolytic enzymes

A. (i) and (iv)

B. (i) and (iii)

C. (ii),(iii) and (iv)

D. (i)

Answer: C

 [View Text Solution](#)

5. Enzymes in the living systems

- A. Provide energy
- B. Provide immunity
- C. Transport oxygen
- D. Catalyse biological process

Answer: D

 [Watch Video Solution](#)

6. Haemoglobin is

- A. An enzymes
- B. A globular protein
- C. A vitamin
- D. A carbohydrate

Answer: B



Watch Video Solution

7. The number of essential amino acids in man is

- A. 8
- B. 10
- C. 18
- D. 20

Answer: B



Watch Video Solution

8. The antibodies are

- A. Carbohydrate
- B. Globular protein
- C. Immunoglobulins
- D. Cellulose compounds

Answer: C



Watch Video Solution

9. Proteins are built up of

A. Dicarboxylic acids

B. Amino acids

C. Alcohols

D. Hydroxy acids

Answer: B



Watch Video Solution

10. Enzymes are made up of

A. Carbohydrate

B. Edible proteins

C. Nitrogen containing carbohydrates

D. Proteins with specific structure

Answer: D

 [Watch Video Solution](#)

11. The helical structure of protein is stabilised by:

A. Peptide bonds

B. Dipeptide bonds

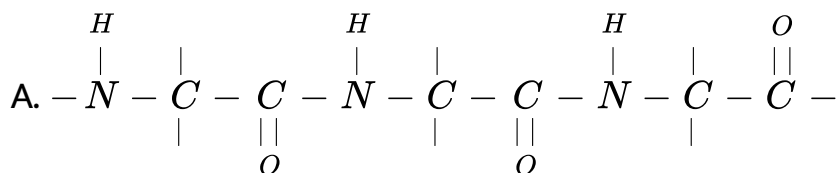
C. Hydrogen bond

D. Vander waal's force

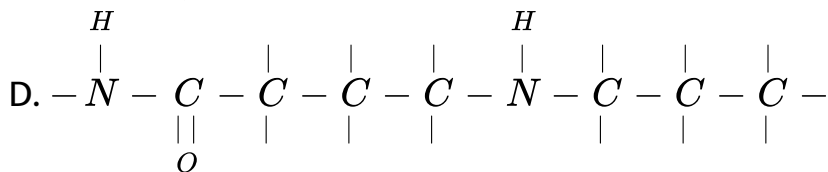
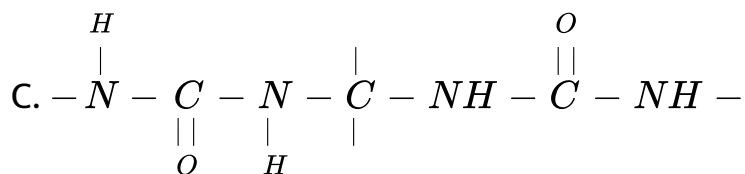
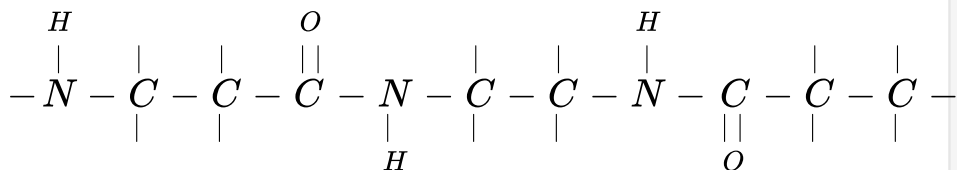
Answer: C

 [Watch Video Solution](#)

12. Which of the following represents a peptide chain ?



B.



Answer: A

13. The correct statement in respect of protein haemoglobin is that it

- A. Acts as an oxygen carrier in the blood
- B. Forms antibodies and offers resistance to disease
- C. Functions as a catalyst for biological reactions
- D. Maintains blood sugar level

Answer: A



Watch Video Solution

14. Which one of the following is a peptide hormone ?

- A. Thyroxin

B. Adrenaline

C. Glucagon

D. Testosterone

Answer: C

 [Watch Video Solution](#)

15. During the process of digestion, the proteins present in food materials are hydrolysed to amino acids. The two enzymes involved in the process



Amino acids, are respectively.

A. Pepsin and Trypsin

B. Invertase and Zymase

C. Amylase and Maltase

D. Diastase and lipase

Answer: A



Watch Video Solution

16. Which one of the following statement is incorrect about enzyme catalysis ?

A. Enzymes are mostly proteinous in nature

B. Enzyme action is specific

C. enzymes are denaturated by ultraviolet rays and at high temperature

D. Enzymes are least reactive at optimum temperature

Answer: D

 [Watch Video Solution](#)

17. Proteins are hydrolysed by enzymes into

A. Dicarboxylic acids

B. Hydroxy acids

C. Amino acids

D. Aromatic acids

Answer: C

 [Watch Video Solution](#)

18. Which α amino acids can cross link peptide chains

- A. Serine
- B. Cysteine
- C. Glutamine
- D. Tyrosine

Answer: B



Watch Video Solution

19. Among the following, the achiral amino acids is

- A. 2-ethylalanine
- B. 2-methylglycine

C. 2-hydroxymethyl serine

D. Tryptophan

Answer: C



Watch Video Solution

20. Which of the following proteins destroy the antigen when it enters in body cell ?

A. Antibodies

B. Insulin

C. Chromoprotein

D. Phosphorotein

Answer: A



Watch Video Solution

21. Which of the following biomolecules is insoluble in water?

A. α -Keratin

B. Haemoglobin

C. Ribonuclease

D. Adenine

Answer: A



Watch Video Solution

22. Which of the following statements is true for protein synthesis (translation)?

- A. Amino acids are directly recognized by m-RNA
- B. The third base of the codon is less specific
- C. Only one codon codes for an amino acid
- D. Every t-RNA molecule has more than one amino acid attachment site

Answer: B



Watch Video Solution

23. Among the following L-serine is

A. 

B. 

C. 

D. 

Answer: C



View Text Solution

24. Lysine is least soluble in water in the pH range:

A. 3 to 4

B. 5 to 6

C. 6 to 7

D. 8 to 9

Answer: C



Watch Video Solution

25. Proteins can be denatured by

A. carbon dioxide

B. carbon monoxide

C. Heat

D. Oxygen

Answer: C



Watch Video Solution

26. Albumin protein are most abundant in

A. Meat

B. Milk

C. Egg

D. Soyabean

Answer: C



Watch Video Solution

27. Dialysis can separate

A. Glucose and fructose

B. Glucose and sucrose

C. Glucose and NaCl

D. glucose and proteins

Answer: D



Watch Video Solution

28. The 10 % energy transfer law of food chain was given by

A. Stanley

B. Weismann

C. Lindemann

D. Tansley

Answer: C





Watch Video Solution

29. Which of the following is a conjugated protein?

- A. Glycoprotein
- B. Phosphoprotein
- C. Chromoprotein
- D. All of these

Answer: D



Watch Video Solution

30. Excess of Na^+ ions in our system causes

- A. High B.P.

B. Low B.P.

C. Diabetes

D. Anaemia

Answer: A



Watch Video Solution

31. The optically inactive amino acid is

A. Lysine

B. Glycine

C. Arginine

D. Alanine

Answer: B



Watch Video Solution

32. Which synthesis was done by Stainley Millar

A. Amino acids

B. Protein

C. Virus

D. Vitamin

Answer: A



Watch Video Solution

33. The end product of protein digestion is :

- A. Amino acid
- B. Glucose
- C. Glycerol
- D. Oxalic acid

Answer: A



Watch Video Solution

34. The enzyme ptylin used for digestion of food is present in
:

- A. Saliva

B. Blood

C. Intestine

D. Adrenal glands

Answer: A



Watch Video Solution

35. Proteins when heated with cone. HNO_3 gives a yellow colour. This is

A. Oxidising test

B. Xanthoprotic test

C. Hoppe's test

D. Acid-base test

Answer: B



Watch Video Solution

36. The metal present in blood is

A. Al

B. Mg

C. Cu

D. Fe

Answer: D



Watch Video Solution

37. Which amino acids has an aromatic ring ?

A. Alanine

B. Glycine

C. Tyrosine

D. Lysine

Answer: C



Watch Video Solution

38. Which is an essential constituent of a diet?

A. Starch

B. Glucose

C. Carbohydrate

D. Protein

Answer: D

 [Watch Video Solution](#)

39. The functional group, which is found in amino acid is

A. $-COOH$ group

B. $-NH_2$ group

C. $-CH_3$ group

D. Both (a) and (b)

Answer: D

 [Watch Video Solution](#)

 [Watch Video Solution](#)

40. The monomer unit of polyethene is:

- A. Amino acid
- B. Glucose
- C. Nucleoside
- D. Nucleotide

Answer: A

 [Watch Video Solution](#)

41. Which of the following is a protein

- A. Pepsin

B. Adrenaline

C. ATP

D. Glutamine

Answer: A



Watch Video Solution

42. Which of the following tests is not used for testing proteins :

A. Milion's test

B. Molisch's test

C. Biuret test

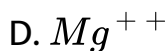
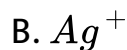
D. Ninhydrin test

Answer: B



Watch Video Solution

43. Which of the following ions can cause coagulation of proteins ?



Answer: B



Watch Video Solution

44. α – Helix is found in

A. DNA

B. RNA

C. Lipid

D. Protein

Answer: D



[Watch Video Solution](#)

45. Identify the incorrect statement

A. An octa deca peptide contains 18 amino acid residues
and 17 peptid bonds

B. Addition of an inert gas into a system in thermodynamic equilibrium for the dissociation of PCl_5 shifts

C.

D.

Answer: D



[View Text Solution](#)

46. The pH value of the solution in which a particular amino acid does not migrate under the influence of electric field is called the:

A. Eutectic point

B. Yielding

C. Neutralisation point

D. Effusion

Answer: D



Watch Video Solution

47. The process by which protein synthesis takes place based on genetic information is called

A. Translation

B. Transcription

C. Replication

D. Messenger hypothesis

Answer: A



Watch Video Solution

48. Which of the following is not essential amino acid

A. Valine

B. Lysine

C. Histidine

D. Glycine

Answer: D



Watch Video Solution

49. Denaturation of proteins

- A. Disrupts the primary or secondary or tertiary structure of protein
- B. Disrupts the secondary and tertiary structure only
- C. disrupts all the primary, secondary and tertiary and even the quaternary structure of protein
- D. Will not affect the original biological activity

Answer: D



Watch Video Solution

50. An acidic amino acid among the following is

A. Glycine

B. Valine

C. Proline

D. Leucine

Answer: D



View Text Solution

51. Proteins contains

A. C,H,O and N

B. Only C and H

C. Cl,H and O

D. All of these

Answer: A



Watch Video Solution

52. A codon has a sequence of A, and specific a particular B that is to be incorporated into C. what are A,B,C

- A. A B C
3 bases amino acid carbohydrate
- B. A B C
3 acids carbohydrate protein
- C. A B C
3 bases protein amino acid
- D. A B C
3bases amino acid protein

Answer: D



Watch Video Solution

53. 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: D



Watch Video Solution

54. Which of the following elements is present in insulin

- A. Na

B. Zn

C. Li

D. None of these

Answer: B



Watch Video Solution

55. The pK_{a1} and pK_{a2} of an amino acid are 2.3 and 9.7 respectively. The isoelectric point of the amino acid is:

A. 12

B. 7.4

C. 6

D. 3.7

Answer: C



Watch Video Solution

56. Hydrolysis of proteins give

- A. α -amino acid only
- B. β -amino acids only
- C. γ -amino acids only
- D. mixture of all i.e. α , β and γ -amino acids

Answer: A



Watch Video Solution

57. Enzymes are

A. Living organisms

B. Dead organisms

C. Complex nitrogenous substances produced in living cells

D. None of these

Answer: C



Watch Video Solution

58. Pepsin enzyme hydrolyses

A. Proteins to amino acids

- B. Fats to fatty acids
- C. Glucose to ethyl alcohol
- D. Polysaccharides to monosaccharide

Answer: A



Watch Video Solution

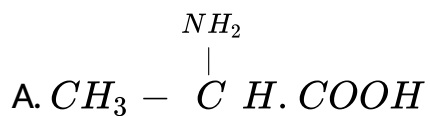
59. Which of the following is not a function of proteins?

- A. Nails formation
- B. Skin formation
- C. Muscle formation
- D. Providing energy for metabolism

Answer: D

 [Watch Video Solution](#)

60. The structural formula of an amino acid, isoleucine is



B. 

C. 

D. 

Answer: C

 [View Text Solution](#)

61. The main structural feature of proteins is:

- A. The ester linkage
- B. The ether linkage
- C. The peptide linkage
- D. All of these

Answer: C

 [Watch Video Solution](#)

62. Hair, finger,nails, hoofs, etc. are all made of:

- A. Iron
- B. Fat

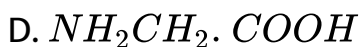
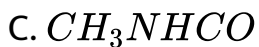
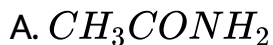
C. Vitamin

D. Protein

Answer: D

 [Watch Video Solution](#)

63. Which one of the following is amino acids



Answer: D



 Watch Video Solution

64. The most Important energy carries for the cell reaction is

A. AMP

B. ATP

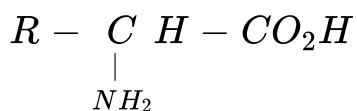
C. ADP

D. UDP

Answer: B

 Watch Video Solution

65. For α -amino acids having the structure



Which of the following statements are true

(A) Water solubility is maximum at a pH when concentration of anion and cation are equal

(B) They give ninhydrin test

(C) On reacting with nitrous acid give off N_2

A. All

B. B and C

C. A and B

D. A

Answer: B



Watch Video Solution

66. Which of the following statements about proteins is not true

- A. Amino acids residues join together to make a protein molecule
- B. Protein are polymers with formula $(C_6H_{10}O_5)_n$
- C. Eggs are rich in protein
- D. Pulses are good source of proteins

Answer: B



Watch Video Solution

67. The example of a protein is

A. Narvone

B. Lacithin

C. Cellulose

D. Insulin

Answer: D



Watch Video Solution

68. Which of the following is used to build and repair body tissues

A. Cane sugar

B. fructose

C. Protein

D. Glucose

Answer: C



Watch Video Solution

69. Metabolic function in human bodies is carried out by

A. Lipids

B. Peptides

C. Nucleic acids

D. Enzymes

Answer: D



Watch Video Solution

70. Chlorophyll contains :

A. Fe

B. Na

C. Mg

D. Zn

Answer: C



Watch Video Solution

71. Amino acids have peptide linkage which is

A. $-CO - NH -$

B. $-C - NH_2$

C. $SO - NH -$

D. $-CO - N -$

Answer: A

 [Watch Video Solution](#)

72. Identify the correct statement regarding enzymes

A. Enzymes are specific biological catalysts that cannot be poisoned

B. Enzymes are normally heterogenous catalyse that are very specific in their action

C. Enzymes are specific biological catalysts that can normally function at very high temperature ($T \sim 1000$)

K)

D. Enzymes are specific biological catalysts that possess well defined active sites

Answer: D

 [Watch Video Solution](#)

73. The Secondary structure of a proteins refers to ?

- A. α -helical backbone
- B. hydrophobic interactions
- C. sequence of α -amino acids
- D. Fixed configuration of the polypeptide backbone

Answer: D

 [Watch Video Solution](#)

74. Which one of the following statements is correct

- A. All amino acids except lysine are optically active
- B. All amino acids are optically active
- C. All amino acids are except glycine are optically active
- D. All amino acids except glutamic acids are optically active

Answer: C

 [Watch Video Solution](#)

75. Which of the following set consists only of essential amino acids

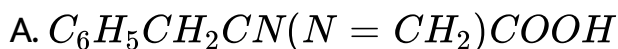
- A. Alanine, tyrosine, cystine
- B. Leucine, lysine, tryptophan
- C. Alanine, glutamine, lysine
- D. Leucine, proline, glycine

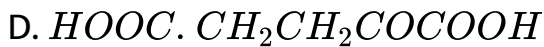
Answer: B



Watch Video Solution

76. Which compound can exist in a dipolar (zwitter ion) state





Answer: B



Watch Video Solution

77. The reaction involving breaking of complex compounds into simpler ones is called

A. Catabolism

B. Anabolism

C. Fermentaiton

D. Metabolism

Answer: A



Watch Video Solution

78. Cellulose is not digestible by human beings due to the absence of cellulose hydrolysing enzyme called

A. Cellulose

B. Zymase

C. Invertase

D. Ureas

Answer: A



Watch Video Solution

79. Pick out wrong combination

A. $Fe^{+2} \rightarrow$ haemoglobin

B. $Mg^{2+} \rightarrow$ photosynthesis

C. $Se^{2+} \rightarrow$ Kreb cycle

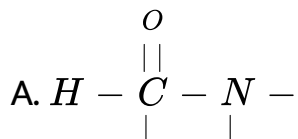
D. $Co^{+2} \rightarrow$ vitamin B-1,2

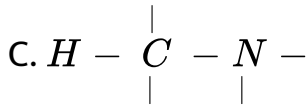
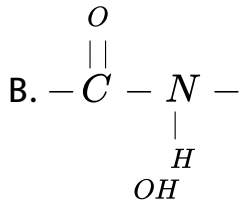
Answer: C



Watch Video Solution

80. Which is the correct representation of peptide bond?





D. none of these

Answer: B

 [Watch Video Solution](#)

81. The molecular weight of protein is

A. < 10000

B. > 10000

C. > 1000

D. > 1000 and < 10000

Answer: B



Watch Video Solution

82. Which of the following is not a classification of proteins

A. Enzymes

B. Antibodies

C. Antigens

D. Hormones

Answer: C



Watch Video Solution

83. The protein that is a structural material is

- A. Albumin
- B. Oxytocin
- C. Haemoglobin
- D. Keratin

Answer: D



Watch Video Solution

84. Enzymes belong to which class of compounds?

- A. Polysaccharides
- B. Polypeptides

C. Polynitrogen heterocyclic compound

D. Hydrocarbons

Answer: B



Watch Video Solution

85. Which of the following enzymes is not useful in the digestion of proteins

A. Chymotrypsin

B. Pepsin

C. Trypsin

D. Lipase

Answer: D

 [Watch Video Solution](#)

86. Amino acids usually exist in the form of Zwitter ions. This mean that they consist of

- A. The basis group $-NH_2$ and the acidic group $-COOH$
- B. The basic group $-NH_3^+$ and the acidic group $-CO_2$
- C. The basic group $-CO_2^-$ and the acidic group NH_3^+
- D. No acidic or basic group

Answer: C

 [Watch Video Solution](#)

87. Test used to identify peptide linkage in protein is:

A. Borsche's test

B. Molisch's test

C. Ninhydrin test

D. Biuret test

Answer: D



Watch Video Solution

88. A nonopeptide contains peptide linkages.

A. 10

B. 8

C. 9

D. 18

Answer: B



Watch Video Solution

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

A. Lysine

B. Serine

C. Cystine

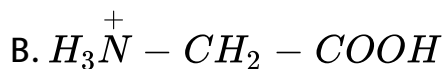
D. Tyrosine

Answer: C



 Watch Video Solution

90. At pH 4, glycine exists as



Answer: B

 Watch Video Solution

91. The number of disulphide linkage present in insulin are

A. 3

B. 4

C. 1

D. 2

Answer: D



Watch Video Solution

92. There are 20 naturally occurring amino acids. The maximum number of tripeptides that can be obtained is

A. 6470

B. 7465

C. 5360

D. 8000

Answer: D



Watch Video Solution

93. The tripeptide is written as Glycine-Alanine-Glycine. The correct structure of the tripeptide is

A. 

B. 

C. 

D. 

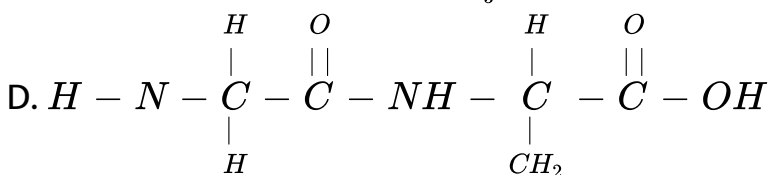
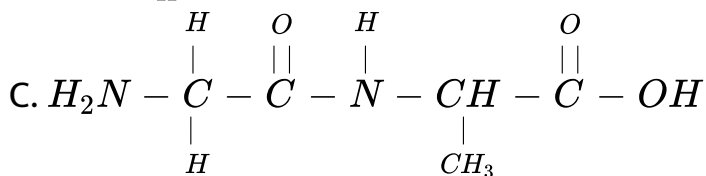
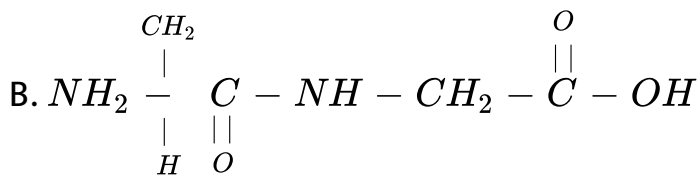
Answer: C



Watch Video Solution

94. The correct structure of the dipeptide gly-ala is

A. 



Answer: C

 [Watch Video Solution](#)

95. Which of the following is a globular protein?

A. Keratin

B. Insulin

C. Collagan

D. Myoglobin

Answer: D



Watch Video Solution

96. Which amino acid has imidazole ring

A. alanine

B. Leucine

C. Tyrosine

D. Histidine

Answer: D



Watch Video Solution

97. Sanger's reagent is used for the identification of:

- A. C-terminal amino acid a peptide chain
- B. N-terminal amino acid of peptide chain
- C. Molecular mass of protein
- D. Secondary structure of Protein

Answer: B



Watch Video Solution

98. Simplest amino acid is

- A. Alanine
- B. Lysine
- C. Histidine
- D. Glycine

Answer: D



Watch Video Solution

99. Out of the following the best category of proteins is

- A. polyamides
- B. Polythioethers

C. Glycerides

D. Polysaccharides

Answer: A



Watch Video Solution

100. Which of the following combines with haemoglobin of the blood to form carboxyhaemoglobin?

A. CO

B. CO_2

C. HCOOH

D. H_2CO_3

Answer: A



Watch Video Solution

101. Which of the following amino acid is neutral?

A. Glycine

B. Aspartic acid

C. Lysine

D. Arginine

Answer: A



Watch Video Solution

102. Name a protein which is insoluble in water.

- A. Fibrous proteins
- B. Globular proteins
- C. both (a) and (b)
- D. None of these

Answer: A

 [Watch Video Solution](#)

103. Irreversible precipitation of proteins is called

- A. Denaturation
- B. Hydrolysis

C. Rearrangement

D. Electrophoresis

Answer: A



Watch Video Solution

104. The proteins with a prosthetic group are called

A. Pseudo

B. complex proteins

C. Conjugated proteins

D. Polypeptides

Answer: C





[Watch Video Solution](#)

105. The prosthetic group of haemoglobin is

A. Porphin

B. Haem

C. Globin

D. Globulin

Answer: B



[Watch Video Solution](#)

106. Amino acids are

A. Liquids

B. Volatile solids

C. Non-volatile crystalline compounds

D. Mixture of amines and acids

Answer: C



Watch Video Solution

107. Isoelectric point is a

A. Specific temperature

B. Suitable concentration of amino acid

C. Hydrogen ion concentration that does not allow migration of amino acid under electric field

D. Mp of an amino acid under the influence of electric field

Answer: C

 [Watch Video Solution](#)

108. pH in stomach is approximately

A. 7

B. 2

C. 6.5

D. 10

Answer: B



109. Read the following statements carefully

- (A) Albumin is a simple protein
- (B) The amino acid alanine contains an acidic side chain
- (C) Insulin is a hormone
- (C) Muscles contain the protein keratin

A. A,B

B. C,D

C. A,C

D. B,D

Answer: D

110. Assertion : Glycine is amphoteric in nature .

Reason: Glycine contain both acid and basis group.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the corret explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: A



Watch Video Solution

111. Assertion: Proteins on hydrolysis produce amino acids.

Reason : Amino acids contain NH_2 and $-COOH$ groups

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: B



Watch Video Solution

112. Assertion: All amino acids exist as Zwitter ions.

Reason: Amino acids have both $-NH_2$ and $-COOH$ group

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: A



Watch Video Solution

113. Assertion : Haemoglobin is an oxygen carrier.

Reason : Oxygen binds as O_2 to Fe of haemoglobin.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: C



Watch Video Solution

114. Assertion: Disruption of the natural structural of a protein is called denaturation.

Reason: The change in colour and apperance of egg during cooking is due to denaturation.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the corret explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: B



Watch Video Solution

115. Assertion: Valine is an essential amino acids

Reason: The lack of essential amino acids in the diet causes Kwashiorkor.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: B



Watch Video Solution

116. Assertion: Solubilities of proteins is minimum at the isoelectronic point.

Reason: At isoelectronic point , protein molecules behaves as a zwitter ion.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the corret explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: D



Watch Video Solution

117. Assertion : Amino acids are soluble in benzene and ether

Reason: Amino acids does not exist as zwitter ion.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the corret explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: D



Watch Video Solution

118. Assertion: α -amino acids exist as dipolar ions or zwitter ion.

Reason: α -amino acids are the building blocks of proteins.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: B



Watch Video Solution

119. Which of the following statement 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

120. The difference between amylose and amylopectin is

A. Amylopectin have $1 \rightarrow 4\alpha$ -linkage and $1 \rightarrow 6\alpha$ -linkage

B. Amylose have $1 \rightarrow 4\alpha$ -linkage and $1 \rightarrow 6\beta$ -linkage

C. Amylopecting have $1 \rightarrow 4\alpha$ -linkage and $1 \rightarrow 6\beta$ -
linkage

D. Amylose is made up of glucose and galactose

Answer: A



Watch Video Solution

121. Which of the following compounds can form a Zwitter ion ?

A. Aniline

B. Acetanilide

C. Benzoic acid

D. glycine

Answer: D



Watch Video Solution

Ordinary Thinking Fats And Lipids

1. Phospholipids are esters of glycerol with

A. Three phosphate groups

B. Three carboxylic acid residues

C. Two carboxylic acid residues and one phosphate group

D. One carboxylic acid residues and two phosphate groups

Answer: C



Watch Video Solution

2. Which is not a macromolecule?

A. DNA

B. Starch

C. Palmitate

D. Insulin

Answer: C



Watch Video Solution

3. The waxes are long chain compounds of fatty acids, which belong to the class of

A. Esters

B. Ethers

C. Alcohols

D. Acetic acid

Answer: A



Watch Video Solution

4. Which of the following gives maximum energy in metabolic process?

A. Proteins

B. Carbohydrates

C. Lipids

D. Vitamins

Answer: C



Watch Video Solution

5. The energy change produced by the combustion of food is called 'calorific value'. The highest calorific value is given by

A. Proteins

B. Fats

C. Carbohydrates

D. Vitamins

Answer: B



Watch Video Solution

6. Which of the following compounds donot belong to the lipids

A. Fats

B. Amino Acids

C. Phosphlipids

D. Carbohydrates

Answer: B::D



Watch Video Solution

7. A distinctive and characteristic functional group of fat is

- A. An ester group
- B. An peptide group
- C. A ketonic group
- D. An alcoholic group

Answer: A



Watch Video Solution

8. Oleic, stearic, palmitic acids are

- A. Fatty acids

B. Amino acids

C. Nucleic acids

D. Essential acid

Answer: A



Watch Video Solution

9. Hydrolytic reaction of fats with caustic soda is known as ____.

A. Acetylation

B. Carboxylation

C. Saponification

D. Esterification

Answer: C



Watch Video Solution

10. In the following which is not glyceride

A. Fats

B. Oils

C. Phospholipids

D. Soaps

Answer: D



Watch Video Solution

11. The most important food reserves of animals and plants are

A. Carbohydrates

B. Proteins

C. Vitamins

D. Fats

Answer: D



Watch Video Solution

12. Iodine value is related to

A. Fats and oils

B. Alcohols

C. Esters

D. Hydrocarbons

Answer: A



Watch Video Solution

13. Oils and fats are jointly called

A. Lipids

B. Soaps

C. Proteins

D. Polymers

Answer: A



Watch Video Solution

14. An example of a lipid is

A. Lard

B. Keratin

C. Glutathione

D. Oxytocin

Answer: A



Watch Video Solution

15. Fat consists of

- A. Monohydroxy carboxylic acid
- B. Monohydroxy aliphatic carboxylic acid
- C. Monohydroxy aliphatic, saturated carboxylic acid
- D. Dihydroxy aliphatic carboxylic acid

Answer: C



Watch Video Solution

16. An example for a saturated fatty acid , present in nature is

- A. Oleic acid
- B. Linoleic acid

C. Linolenic acid

D. Palmitic acid

Answer: D



Watch Video Solution

17. Acrolein test is positive for

A. Polysaccharides

B. Proteins

C. Oils and fats

D. Reducing sugars

Answer: C





[Watch Video Solution](#)

18. Tripalmitin is

- A. A protein
- B. An enzyme
- C. A lipid
- D. A carbohydrate

Answer: C



[Watch Video Solution](#)

19. On hydrolusis, all lipids yield

- A. Monocarboxylic acids

B. Monohydric alcohols

C. Monohaloalkanes

D. Enzymes

Answer: A



Watch Video Solution

20. The 'acid value' of an oil or fat is measured in terms of weight of

A. NH_4OH

B. NaOH

C. KOH

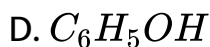
D. CH_3COOH

Answer: C



Watch Video Solution

21. The "saponification value " of an oil or fat is measured in term of



Answer: C



Watch Video Solution

22. The 'iodine value' of oil indicates

- A. Its boiling point
- B. Inflammability
- C. Unsaturation present in acid contains
- D. Solubility of salt in oils

Answer: C



Watch Video Solution

23. Hardening of oils is caused by

- A. H_2
- B. N_2

C. O_2

D. CO_2

Answer: A



Watch Video Solution

24. Which of the following is obtained when an oil is hydrolysed with alkali

A. Fat

B. Wax

C. Soap

D. Vitamin

Answer: C



Watch Video Solution

25. Which of the following indicates the number of free -OH groups in an oil or fat

- A. Iodine value
- B. Acid value
- C. Acetyl value
- D. Saponification value

Answer: B



Watch Video Solution

26. Cell membrane contains

A. Alternate layers of phospholipid and coline

B. Double layers of phospholipid

C. Double layers of phospholipid with polar ends projected outside

D. Double layers of phospholipid with polar ends projected inside

Answer: B



Watch Video Solution

27. Assertion. Carboxypeptidase is an exopeptidase.

Reason. It cleaves the N-terminal bond.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: C

 [Watch Video Solution](#)

Ordinary Thinking Vitamins Hormones And Nucleic Acid

1. The pairs of bases in DNA are held together by

- A. Hydrogen bonds
- B. Ionic bonds
- C. Phosphate groups
- D. Deoxyribose groups

Answer: A



Watch Video Solution

2. In DNA, the complementary bases are :

- A. Uracil and adenine, cytosine and guanine
- B. Adenine and thymine, guanine and cytosine
- C. Adenine and thymine, guanine and uracil
- D. Adenin and guanine, thymine and cytosine

Answer: B



Watch Video Solution

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

- A. Vander Waal's forces
- B. Dipole-dipole interaction
- C. Hydrogen bonding
- D. Electrostatic attractions

Answer: C



Watch Video Solution

4. 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

5. The human body does not produce.

- A. Homones

B. Enzymes

C. DNA

D. Vitamins

Answer: D



Watch Video Solution

6. RNA and DNA are chiral molecules, their chirality is due to

A. L- sugar component

B. Chiral bases

C. Chiral phosphate ester units

D. D- sugar Component

Answer: D



Watch Video Solution

7. Which one of the following vitamins is water-soluble?

A. Vitamin B

B. Vitamin E

C. Vitamin K

D. Vitamin A

Answer: A



Watch Video Solution

8. Which of the following is an amine hormone ?

A. Insulin

B. Progesterone

C. Thyroxin

D. Oxypurin

Answer: C



Watch Video Solution

9. The segment of *DNA* which acts as the instrumental manual for the synthesis of the protein is:

A. Nucleoside

B. Nucleotide

C. Ribose

D. Gene

Answer: D



Watch Video Solution

10. Which of the following hormones contains iodine ?

A. Insulin

B. Testosterone

C. Adrenalin

D. Thyroxin

Answer: D



Watch Video Solution

11. 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

12. Deficiency of vitamin B_1 causes the disease :

A. Beri- beri

B. Scurvy

C. Rickets

D. Anaemia

Answer: A



Watch Video Solution

13. Which of the following hormones is produced under the conditions of stress which stimulate glycogenolysis in the liver of human beings ?

A. Adrenaline

B. Estradiol

C. Thyroxine

D. Insulin

Answer: A



Watch Video Solution

14. 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

15. Acquired immunodeficiency syndrome (AIDS) is

- A. Killer T-cells
- B. Reduction in number of helper T-cells
- C. An autoimmune disease
- D. Inability of body to produce interferons

Answer: B



Watch Video Solution

16. Thymine is

- A. 5-methyluracil
- B. 4- methyluracil
- C. 3-methyluracil
- D. 1-methyluracil

Answer: A



Watch Video Solution

17. The pair in which both the species have iron is:

- A. Nitrogenase, cytochromes
- B. Carboxypeptidase, haemoglobin

C. Haemoglobin, nitrogenase

D. Haemoglobin, cytochromes

Answer: D



Watch Video Solution

18. The first Hormone chemically synthesised in the laboratory is

A. Cortisone

B. Insulin

C. Adrenaline

D. Estrone

Answer: B



Watch Video Solution

19. The deficiency of vitamin *C* casuse:

A. Scurvy

B. Rickets

C. Phthrohea

D. Pernicious Anaemia

Answer: A



Watch Video Solution

20. The structure of DNA is

- A. Linear
- B. Single helix
- C. Double helix
- D. Triple helix

Answer: C



Watch Video Solution

21. Which of the following is not true about vitamins

- A. They are vital for life
- B. They help in digestion

C. They were named by "Funic"

D. Their deficiency causes diseases

Answer: B



Watch Video Solution

22. Blood calcium is increased by administration of

A. Glucagon

B. Calcitonin

C. Thyroxine

D. Parathormone

Answer: D





[Watch Video Solution](#)

23. The best source of vitamin A is :

- A. Beans
- B. Pulses
- C. Orange
- D. Carrot

Answer: D



[Watch Video Solution](#)

24. The base present in DNA, but not in RNA is

- A. Guanine

B. Adenine

C. Uracil

D. Thymine

Answer: D



Watch Video Solution

25. Ascorbic acid is .

A. VITAMIN

B. OIL

C. Protein

D. Carbohydrate

Answer: A



Watch Video Solution

26. An alteration in the base sequence of nucleic acid molecule is:

- A. Replication
- B. Mutation
- C. Duplication
- D. Dislocation

Answer: B



Watch Video Solution

27. Biotin is an organic compound present in yeast. Its deficiency in diet causes dermatitis and paralysis. It is also known as:

- A. Vitamin H
- B. Vitamin B_3
- C. Vitamin B_{12}
- D. Vitamin D

Answer: A



Watch Video Solution

28. Which one of the following is a non-steroidal hormone

- A. Estradiol
- B. Prostaglandin
- C. Progesterone
- D. Estrone

Answer: B



Watch Video Solution

29. If one strand of DNA has the sequence ATGCTTGA, the sequence in the complimentary strand would be

- A. TCCGAAC
- B. TACGTAGT
- C. TACGAACT

D. TAGCTAGT

Answer: C



Watch Video Solution

30. RNA is different from DNA because RNA contains

- A. Ribose sugar and thymine
- B. Ribose sugar and uracil
- C. Deoxyribose sugar and thymine
- D. Deoxyribose sugar and uracil

Answer: B



Watch Video Solution

31. The vitamin that is not soluble in water is

A. Vitamin B_1

B. Vitamin B_2

C. Vitamin B_6

D. Vitamin D

Answer: D



Watch Video Solution

32. Anaemia is caused by the deficiency of vitamin

A. B_6

B. B_1

C. B_2

D. B_{12}

Answer: D



Watch Video Solution

33. The transfer RNA anticodon for the messenger RNA codon G-C-A is

A. C-G-U

B. G-C-U

C. U-G-C

D. G-U-C

Answer: A



Watch Video Solution

34. The base adenine occurs in

- A. DNA only
- B. RNA only
- C. DNA and RNA both
- D. Protein

Answer: C



Watch Video Solution

35. Which base is not present in nucleic acids?

A. Cytosine

B. Adenine

C. Thymine

D. Guanidine

Answer: D



Watch Video Solution

36. Which of the following is not present in nucleic acids

A. Uracil

B. 2- aminopyridine

C. Thymine

D. Adenine

Answer: B



Watch Video Solution

37. Vitamin B_1 is:

A. Riboflavin

B. Cobalamin

C. Thiamine

D. Pyriodoxine

Answer: C





[Watch Video Solution](#)

38. DNA contains the sugar

- A. Deoxyribose
- B. Ribose
- C. D- fructose
- D. D- glucose

Answer: A



[Watch Video Solution](#)

39. Which of the following is not a sex hormone?

- A. Testosterone

B. Estrone

C. Estradiol

D. Cortisone

Answer: D



Watch Video Solution

40. Mutation of DNA occurs due to changes in the sequence of one of the following

A. Bases

B. Ribose units

C. Phosphate units

D. Sugar units

Answer: A



Watch Video Solution

41. Nucleic acid are polymers of

A. Nucleosides

B. α - amino acids

C. Nucleotides

D. Glucose

Answer: C



Watch Video Solution

42. Vitamin A is present in

- A. Cod liver oil
- B. Carrot
- C. Milk
- D. In all of these

Answer: D



Watch Video Solution

43. Which of the following is not a constituent of RNA

- A. Ribose
- B. Phosphate

C. Adenine

D. Phyridine

Answer: D



Watch Video Solution

44. Deficiency of which vitamin causes rickets

A. Vitamin- D

B. Vitamin -B

C. Vitamin- A

D. Vitamin- K

Answer: A





[Watch Video Solution](#)

45. Purine derivative among the following bases is

A. Guanine

B. Cytosine

C. Thymine

D. Uracil

Answer: A



[Watch Video Solution](#)

46. 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

47. 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](#)

48. The pyrimidine bases present in *DNA* are:

A. Cytosine and adenine

B. Cytosine and guanine

C. Cytosine and thymine

D. Cytosine and uracil

Answer: C

 [Watch Video Solution](#)

 Watch Video Solution

49. The presence or absence of hydroxy group on which carbon atom of sugar differentiates *RNA* and *DNA*.

A. 1st

B. 2nd

C. 3rd

D. 4th

Answer: B

 Watch Video Solution

50. Codon is present in

A. t- RNA

B. m- RNA

C. r- RNA

D. All of these

Answer: B



Watch Video Solution

51. The chemical name of vitamin C is_____.

A. Ascorbic acis

B. Folic acid

C. Nicotinic acid

D. Tartaric acid

Answer: A



Watch Video Solution

52. The function of DNA in an organism is

- A. To assist in the synthesis of RNA molecule
- B. To store information of heredity characteristics
- C. To assist in the synthesis of proteins and polypeptides
- D. All of these

Answer: D



Watch Video Solution

53. Vitamin B_6 is known as

- A. Pyridoxin
- B. Thiamine
- C. Tocopherol
- D. Riboflavin

Answer: A



Watch Video Solution

54. The double helical structure of DNA was proposed by

- A. Watson and Crick
- B. Meicher

C. Emil Fischer

D. Khorana

Answer: A



Watch Video Solution

55. The tripeptide Hormone present in most living cells is...

A. Glutathione

B. Glutamine

C. Oxytocin

D. Ptyalin

Answer: A





[Watch Video Solution](#)

56. A nucleoside on hydrolysis gives

- A. A heterocyclic base and orthophosphoric acid
- B. An aldopentose, a heterocyclic base and orthophosphoric acid
- C. An aldopentose and a heterocyclic base
- D. An aldopentose and orthophosphoric acid

Answer: C



[Watch Video Solution](#)

57. Which of the following is not present in nucleotide?

A. Cytosine

B. Guanine

C. Adenine

D. Tyrosine

Answer: D



Watch Video Solution

58. Which of the following biomolecules contains non-transition metal ion ?

A. Vitamin B12

B. Chlorophyll

C. Haemoglobin

D. Insulin

Answer: B



Watch Video Solution

59. Which of the following statements is not correct ?

A. Allergic conditions are cured by anti-histamines

B. Hormones are continuously produced but not stored in
the body

C. The function of the white blood cells is to protect the
body against infection

D. Catabolism involves degradation of molecules

Answer: B



Watch Video Solution

60. Which of the following vitamins has isoprene units in its structure

A. Vitamin A

B. Vitamin C

C. Vitamin B_2

D. Vitamin D

Answer: A



Watch Video Solution

61. 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

62. Deficiency of Vitamin H causes

- A. Skin diseases
- B. Scurvy
- C. Burning of eyes
- D. Anaemia

Answer: A



Watch Video Solution

63. Which vitamin is not obtained from plants

- A. Thiamine
- B. Cyanocobalamine

C. Pyriodoxine

D. a- Tocopherol

Answer: B



Watch Video Solution

64. Which one is found in ATP ribonucleotide

A. Guanine

B. Uracil

C. Adenine

D. None of these

Answer: C





[Watch Video Solution](#)

65. Which of the following proteins acts as a messenger in living system

- A. Hormone
- B. Enzyme
- C. Protective protein
- D. Transport protein

Answer: A



[Watch Video Solution](#)

66. Assertion : DNA molecules and RNA molecules are found in the nucleus of cell.

Reason : On heating, enzymes do not lose their specific activity.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: D



Watch Video Solution

67. Assertion(A): Activity of an enzyme is pH dependent.

Reason(R): Change in pH affects the solution of the enzyme in water.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: B



Watch Video Solution

68. Assertion : Sequence of bases in DNA is TGAACCCTT and sequence of bases in m-RNA is CATTAAACC.

Reason: In DNA nitrogeneous bases have hydrogen bonds.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the corret explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: D



Watch Video Solution

69. Assertion: ATP molecules are energy rich molecules.

Reason: ATP consists of a purine base adenine, pentose sugar ribose and a string of three phosphate groups.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If the assertion and the reason both are false.

Answer: B



Watch Video Solution

Ordinary Thinking Classification On Polymers

1. Which of the following is not an example of addition polymer?

- A. Terylene
- B. Polypropylene
- C. Polyethylene
- D. Polystyrene

Answer: A



[Watch Video Solution](#)

2. $\sim [NH(CH_2)NHCOC(CH_2)_4CO] \sim$ is a

A. Thermosetting polymer

B. Homopolymer

C. Copolymer

D. Addition polymer

Answer: C

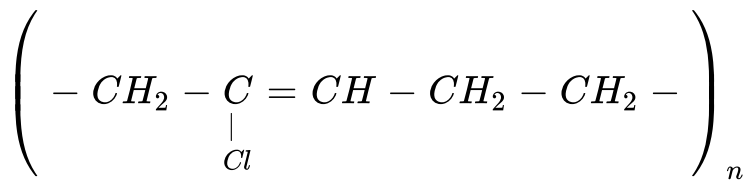


[Watch Video Solution](#)

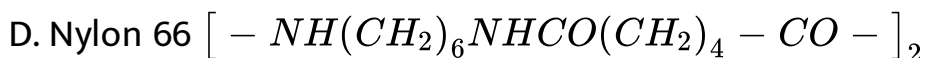
3. Structures of some common polymers are given. Which one is not correctly represented?

A. Teflon ($-CF_2 - CF_2 -$)_n

B. Neoprene



C. 



Answer: B



[Watch Video Solution](#)

4. Which one of the following is not a condensation polymer?

A. Melamine

B. Glyptal

C. Dacron

D. Neoprene

Answer: D



Watch Video Solution

5. Nylon is an example of

A. Polythene

B. Polyesters

C. Polysaccharide

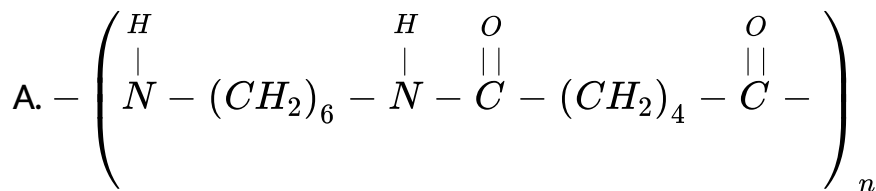
D. Polyamide

Answer: D

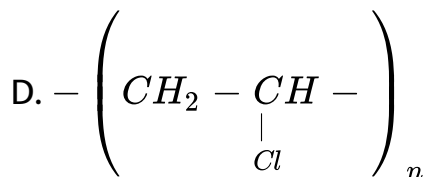
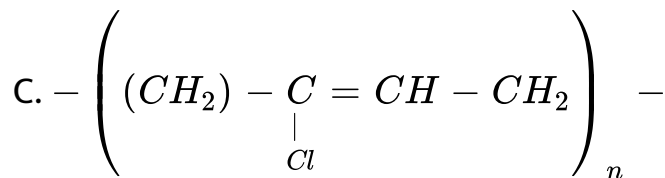


Watch Video Solution

6. Which one of the following is an example of a thermosetting polymer?



B. 



Answer: B



Watch Video Solution

7. Which of the following is a thermosetting plastic ?

- A. PVC
- B. PVA
- C. Bakelite
- D. Perspex

Answer: C



Watch Video Solution

8. Which of the following polymer is an example of fibre ?

- A. Silk
- B. Dacron
- C. Nylon-66
- D. All of these

Answer: D



Watch Video Solution

9. Which of the following is a biodegradable polymer?

A. Cellulose

B. polythene

C. Polyvinyl chloride

D. Protein

Answer: A



Watch Video Solution

10. Which of the following is not an example of natural polymer?

A. Wool

B. Silk

C. Leather

D. Nylon

Answer: D



Watch Video Solution

11. Which of the following is not a natural polymer?

A. Cellulose

B. Protein

C. PVC

D. Nucleic acid

Answer: D



Watch Video Solution

12. Which of the following is not an example of condensation polymer :-

A. Nylon-6

B. Phenyl vinyl chloride

C. Bakelite

D. Buna -N

Answer: D



Watch Video Solution

13. Which of the following is not a natural polymer?

A. Cellulose

B. Protein

C. PVC

D. Nucleic acid

Answer: C



Watch Video Solution

14. Which of the following is bio-degradable polymer?

- A. Nylon-6
- B. Phenyl vinyl chloride
- C. Bakelite
- D. Buna-N

Answer: A

 [Watch Video Solution](#)

15. Which of the following is not correct regarding terylene?

- A. Step-growth polymer
- B. Synthetic fibre

C. Condensation polymer

D. It is also called dacron

Answer: D

 [Watch Video Solution](#)

16. A thermoplastic among the following is:

A. Bakelite

B. Polystyrene

C. Terylene

D. Urea-formaldehyde resin

Answer: B

 [Watch Video Solution](#)

 [Watch Video Solution](#)

17. Which is not a polymer?

A. Sucrose

B. Enzyme

C. Starch

D. Teflon

Answer: A

 [Watch Video Solution](#)

18. Which of the following is not a condensation polymer?

A. Nylon-66

B. Nylon 6

C. Dacron

D. Buna-s

Answer: D



Watch Video Solution

19. Natural rubber is

A. polyester

B. polyamide

C. polyisoprene

D. ALL CIS-polysaccharide

Answer: C



Watch Video Solution

20. Which polymers occur naturally?

- A. Starch and nylon
- B. Starch and cellulose
- C. Proteins and nylon
- D. proteins and PVC

Answer: B



Watch Video Solution

21. Which of the following is not a synthetic polymer?

A. polyethylene

B. PVC

C. Nylon

D. Cellophane

Answer: D



Watch Video Solution

22. On the basis of the mode of their formation the polymers can be classified:

A. As addition polymers only

B. As condensation polymers only

C. As copolymers

D. Both as addition and condensation polymers

Answer: D



Watch Video Solution

23. Which of the following is not a polymer?

A. Teflon

B. Petroleum

C. Cellulose

D. Natural rubber

Answer: B



Watch Video Solution

24. Which of the following is synthetic rubber?

A. Buna-S

B. Neoprene

C. both (a) and (b)

D. None of these

Answer: C



Watch Video Solution

25. Which of the following is not an example of condensation polymer :-

- A. Nylon
- B. Bakelite
- C. Urea -formaldehyd resin
- D. All of these

Answer: D

 [Watch Video Solution](#)

26. The polymer containing strong intermolecular forces, e.g., hydrogen bonding is:

A. Natural rubber

B. Teflon

C. Nylon-66

D. Polystyrene

Answer: C



Watch Video Solution

27. An example of chain growth polymer is _____.

A. Nylon-66

B. Bakelite

C. Terylene

D. Teflon

Answer: D



Watch Video Solution

28. Natural rubber is which type of polymer?

A. Condensation polymer

B. Addition polymer

C. Co-ordination polymer

D. None of these

Answer: B



Watch Video Solution

29. Polyethylene is

- A. Random copolymer
- B. Homopolymer
- C. Alternate copolymer
- D. Crosslinked copolymer

Answer: B



Watch Video Solution

30. Which of the following is a linear polymer?

- A. Amylopectin
- B. Glycogen

C. starch

D. Amylose

Answer: D



Watch Video Solution

31. Nylon is not a

A. Condensation polymer

B. polyamide

C. Copolymer

D. homopolymer

Answer: D





[Watch Video Solution](#)

32. The condensation polymer among the following is:

- A. Protein
- B. PVC
- C. Polyethene
- D. Rubber

Answer: A



[Watch Video Solution](#)

33. Which of the following polymer form net like structure ?

- A. polyethene

B. butyl rubber

C. polystyrene

D. melamine polymer

Answer: D



Watch Video Solution

34. Thermoplastics are

A. Linear polymer

B. Highly cross-linked

C. both (a) and (b)

D. Crystalline

Answer: A



Watch Video Solution

35. Cis-1,4-polyisoprene ' is

- A. Thermoplastic
- B. Thermosetting plastic
- C. Elastic (rubber)
- D. Resin

Answer: C



Watch Video Solution

36. Shellac' secreted by lac insect is

- A. Natural plastic
- B. Natural resin
- C. Natural elastic
- D. Any of these

Answer: B

 [Watch Video Solution](#)

37. Which of the following is not a polymer?

- A. Gun cotton
- B. Perspex

C. Shellac (eg.lac shellac)

D. Wax (eg. Bees wax)

Answer: D



Watch Video Solution

38. Melmoware are

A. Thermosetting

B. Thermoplastic

C. both (a) and (b)

D. None of these

Answer: A





[Watch Video Solution](#)

39. Which of the following is a synthetic polymer?

- A. Low density polymer
- B. Polyesters
- C. High density polymer
- D. Nylon

Answer: A



[Watch Video Solution](#)

40. Which is the monomer of polypeptide

- A. Propene

B. Butadiene

C. Adipic acid

D. Amino acid

Answer: D



Watch Video Solution

41. Which of the following is an addition polymer?

A. Glucose

B. Polyethylene

C. Ethylene

D. Terylene

Answer: B



Watch Video Solution

42. Polythene is

- A. Thermoplastic
- B. Thermosetting
- C. both (a) and (b)
- D. None of these

Answer: A



Watch Video Solution

43. Bakelites are

A. Rubber

B. Rayon

C. Resins

D. Plasticisers

Answer: C



Watch Video Solution

44. Which of the following is a step-growth polymer?

A. polyisoprene

B. polythene

C. Nylon

D. Polyacrylonitrile

Answer: C

 [Watch Video Solution](#)

45. Regarding cross-linked or network polymers, which of the following statements is incorrect ?

- A. They contain covalent bonds between various linear polymer chains
- B. They are formed from bi-and tri-functional monomers
- C. Example are bakelite and melamine

D. They contain strong covalent bonds in their polymer chains

Answer: D

 [Watch Video Solution](#)

Ordinary Thinking General Methods Of Preparation And Mechanisms Of Polymerisation

1. The compound required for the formation of a thermosetting polymer with formaldehyde is

A. Benzene

B. Phenyl amine

C. Benzaldehyde

D. Phenol

Answer: D



Watch Video Solution

2. Name the compound/compounds used in the preparation of nylon-66 .

- A. Hexamethyl diamine and Adipic acid
- B. Adipic acid and ethylene glycol
- C. Adipic acid and hexamethylene diamine
- D. Dimethyl terephthalate and ethylene glycol

Answer: C



Watch Video Solution

3. The straight chain polymer is formed by

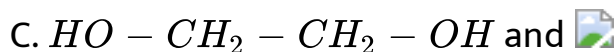
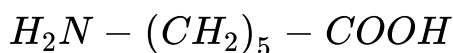
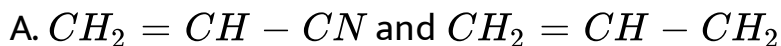
- A. Hydrolysis of $(CH_3)_3SiCl$ followed by condensation polymerisation
- B. Hydrolysis of CH_3SiCl_3 followed by condensation polymerisation
- C. Hydrolysis of $(CH_3)_4Si$ by addition polymerisation
- D. Hydrolysis of $(CH_3)_2SiCl_2$ followed by condensation polymerisation

Answer: D



Watch Video Solution

4. Which one of the following sets forms the biodegradable polymer?



Answer: B

 [Watch Video Solution](#)

5. Which of the following organic compounds polymerizes to form the polyester Dacron ?

- A. Terephthalic acid and ethylene glycol
- B. Benzoic acid and para $HO - (C_6H_4) - OH$
- C. Propylene and para $HO - (C_6H_4) - OH$
- D. Benzoic acid and ethanol

Answer: A



Watch Video Solution

6. Teflon is a polymer, monomer of which is:

- A. Monofluoroethene
- B. Difluoroethane
- C. Trifluoroethene
- D. Tetrafluoroethene

Answer: D



Watch Video Solution

7. Nylon-6 is made from

A. Butadiene

B. Chloroprene

C. Adipic acid

D. Caprolactum

Answer: D



Watch Video Solution

8. Orlon has a unit:

- A. Vinyl cyanide
- B. Acroein
- C. Glycol
- D. Isoprene

Answer: A



Watch Video Solution

9. Buna-S is a polymer of :

- A. Butadiene only
- B. Butadiene and styrene

C. Styrene only

D. Butadiene and nitril

Answer: B

 [Watch Video Solution](#)

10. PVC is prepared by the polymerisation of

A. Ethylene

B. 1-chloropropene

C. Propene

D. 1-chloroethene

Answer: D

 [Watch Video Solution](#)



[Watch Video Solution](#)

11. Terylene is the polyester of:

- A. Ethylene glycol and terephthalic acid
- B. Melamine and formaldehyde
- C. Vinyl chloride and formaldehyde
- D. Hexamethylene diamine and adipic acid

Answer: A



[Watch Video Solution](#)

12. The common acid used in the manufacture of rayon and plastics is

- A. Methanoic acid
- B. Ethanoic acid
- C. Propanoic acid
- D. Butanoic acid

Answer: B



Watch Video Solution

13. The catalyst used for the polymerization of olefins is:

- A. Ziegler Natta catalyst
- B. Wilkinson's catalyst
- C. Pd-catalyst
- D. Zeise's salt catalyst

Answer: A



Watch Video Solution

14. Match the following correctly



A. (A)-iv,(B)-I,(C)-ii,(D)-iii

B. (A)-iv,(B)-iii,(C)-ii,(D)-i

C. (A)-iii,(B)-I,(C)-ii,(D)-iv

D. (A)-iv,(B)-ii,(C)-I,(D)-ii

Answer: A



View Text Solution

15. The monomers used for the synthesis of nylon-2-nylon-6 are :

A. Caprolactum

B. Alanine and amino caproic acid

C. Glycine and amino caproic acid

D. Hexamethylenediamine and adipic acid

Answer: C



Watch Video Solution

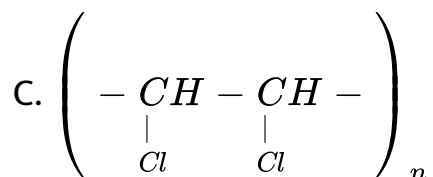
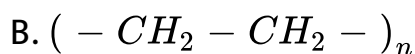
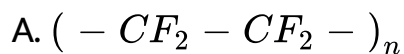
16. The polymerization process in which two or more chemically different monomers take part to form a polymer is called

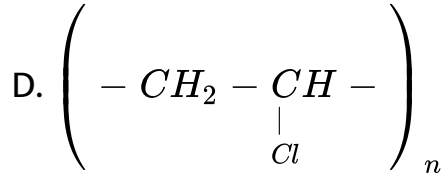
- A. Addition polymerisation
- B. Copolymerisation
- C. Chain polymerisation
- D. Homopolymerisation

Answer: B

 [Watch Video Solution](#)

17. Which one of the following polymers will NOT catch fire ?





Answer: A

 [Watch Video Solution](#)

18. The starting materials for the preparation of styrene is

A. Ehtane

B. Ethene

C. Ethyne

D. Vinyl chloride

Answer: B

 [Watch Video Solution](#)

19. Rayon yarns are obtained from

- A. Polymethylene
- B. Polyesters
- C. Cellulose
- D. Styrene

Answer: C



Watch Video Solution

20. A raw material used in making nylon is

- A. Adipic acid

B. Butadiene

C. ethylene

D. Methyl methacrylate

Answer: A



Watch Video Solution

21. Natural rubber is

A. A polymer of 1,3-butadiene

B. A polymer of ethylene

C. A polymer of 2-methyl-1,3-butadiene

D. A polymer of styrene

Answer: C



Watch Video Solution

22. In the preparation of Nylon -6 from chyclohexanone oxime use is made of a rearrangment reaction. This rearrangment reaction is called

- A. Wolf rearrangement
- B. Amadorirearrangment
- C. Curtuis rearrangement
- D. Beckmann rearragement

Answer: D



Watch Video Solution

23. Which polymer manufactured by condensation polymerization is

- A. Polyester
- B. polystyrene
- C. polyethylene propylene
- D. Polyvinyl chloride

Answer: A



Watch Video Solution

24. Example of condensation polymer is

A. Formaldehyde → -meta-formaldehyde

B. Acetaldehyde → para-aldehyde

C. Aceton → mesityl oxide

D. Ethene → polyethene

Answer: C



Watch Video Solution

25. Polymer formation from monomers starts by:

A. Condensation reaction between monomers

B. Coordinate reaction between monomers

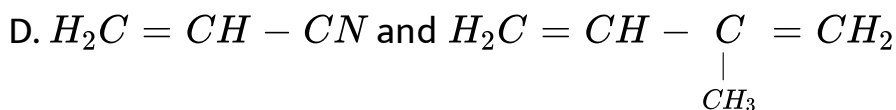
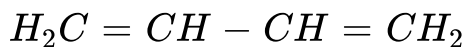
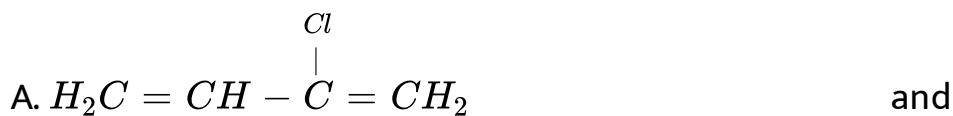
C. Conversion reaction between monomers

D. Conversion of monomers to monomer ions by protons

Answer: A

 Watch Video Solution

26. Buna-N synthetic rubber is a copolymer of:



Answer: C

 Watch Video Solution

27. The species which can best serve as an initiator for the cationic polymerization is:



Answer: C



[Watch Video Solution](#)

28. Acetate rayon is prepared from



B. Glycerol

C. Starch

D. Cellulose

Answer: D



Watch Video Solution

29. When condensation product of hexamethylenediamine and adipic acid is heated to $553K(80^{\circ}C)$ in an atmosphere of nitrogen for about 4 – 5 hours, the product obtained is

A. Solid polymer of nylon 66

B. Liquid polymer of nylon 66

C. Gaseous polymer of nylon 66

D. Liquid polymer of nylon 6

Answer: B



Watch Video Solution

30. The s-block element used as a catalyst in the manufacture of buna-S rubber is

A. Mg

B. Ca

C. Ba

D. Na

Answer: D



Watch Video Solution

31. Which of the following pair of monomers are used in preparation of PHBV?

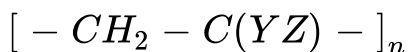
- A. β -hydroxy butyric acid, β -hydroxy valeric acid
- B. β -hydroxy valeric acid, amino caproic acid
- C. β -hydroxy butyric acid, adipic acid
- D. lactic acid, adipic acid

Answer: A



Watch Video Solution

32. Which of the following is a syndiotactic polymer in



- A. All Y groups lie on one side of the chain and all Z groups on the other side
- B. The Y and Z group lie alternately on each side of the chain
- C. The Y and Z group are arranged in a random fashion
- D. Y and Z group are same

Answer: B



Watch Video Solution

33. Polymers of the type Z-Mn-Y , i.e those which contain a foreign molecule in addition to the recurring unit are known as

- A. Semisynthetic polymers
- B. Atactic polymers
- C. Telomers
- D. Pasticiser

Answer: C



Watch Video Solution

34. In the natural rubber 'Caoutchouc'. The isoprene units are joined by

A. Head-to-head

B. Tail-to-tail

C. Head-to-tail

D. All of these

Answer: C



Watch Video Solution

35. The degree of crystallinity of which of the following is highest

A. Atactic polyvinylchloride

B. Isotactic polyvinylchloride

C. Syndiotactic polyvinylchloride

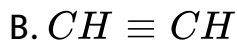
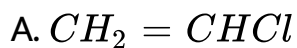
D. All of these

Answer: C



Watch Video Solution

36. Which is used in the manufacture of plastic



Answer: A



Watch Video Solution

37. Polymerization of glycol with dicarboxylic acids is _____

- A. Addition polymerisation
- B. Condensation polymerisation
- C. Telomerisation
- D. Any of these

Answer: B



Watch Video Solution

38. The 'mercerised cellulose' is chemically prepared by

- A. Acetylation
- B. Mercuration

C. Halogenation

D. Hydrolysis

Answer: D



Watch Video Solution

39. What should be added to the plastics , to change from hard to soft and readily workable into new object .

A. Catalyst

B. Telomers

C. Pasticisers

D. Vulcaniser

Answer: C



Watch Video Solution

40. Celluloid is

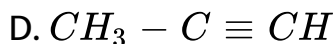
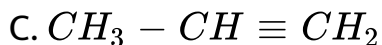
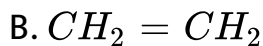
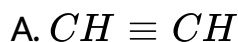
- A. A thermoplastic material obtained from caprolactam and urea
- B. A thermoplastic material obtained from cellulose nitrate and camphor
- C. A thermosetting material obtained from urea and formaldehyde
- D. A thermosetting material obtained from glycerol and phthalic anhydride

Answer: B



Watch Video Solution

41. Polypropylene can be obtained by polymerization of _____.



Answer: C



Watch Video Solution

42. When heated with zinc chloride, lactides forms a linear polymer which may be

- A. Polystyrene
- B. polyamide
- C. Polyester
- D. Polythene

Answer: A



Watch Video Solution

43. Which of the following has been used in the manufacture of non-inflammable photographic films?

- A. Cellulose nitrate
- B. Cellulose acetate
- C. Cellulose xanthate
- D. Cellulose perchlorate

Answer: B



Watch Video Solution

44. Assertion : 1, 3 – Butadiene is the monomer for natural rubber.

Reason : Natural rubber is formed through anionic addition polymerization.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false
- D. If the assertion and reason both are false

Answer: D

 [Watch Video Solution](#)

Ordinary Thinking Composition Properties And Uses Of Polymers

1. Heating rubber with sulphur is known as

- A. Galvanisation
- B. Vulcanisation
- C. Bessemerisation
- D. Sulphonation

Answer: B



Watch Video Solution

2. Neoprene (synthetic rubber) is a polymer of

- A. Propene
- B. Vinyl chloride
- C. Chloroprene
- D. Butadiene

Answer: C



Watch Video Solution

3. Natural rubber is basically of or the monomer of natural polymer rubber is

- A. Neoprene
- B. Isoprene
- C. Chloroprene
- D. Butadiene

Answer: B



Watch Video Solution

4. Which of the following is used to make nonstick cookware?

A. PVC

B. polystyrene

C. Polyethylene terephthalate

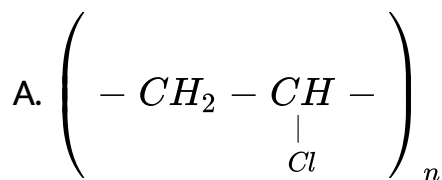
D. Polytetrafluoroethylene

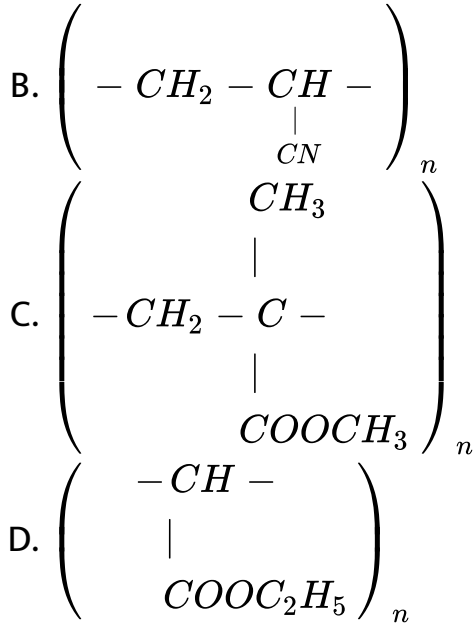
Answer: D



[Watch Video Solution](#)

5. Acrilan is a hard, horny and a high melting material. Which of the following represent its structure?





Answer: B



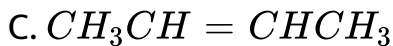
Watch Video Solution

6. The monomer of the polymer



A. 

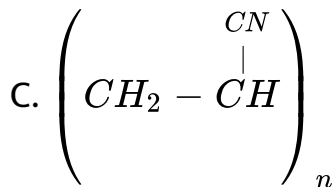
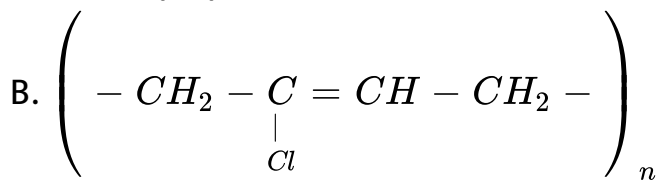
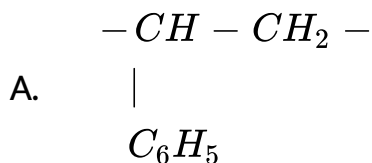
B. $(CH_3)_2C = C(CH_3)_2$

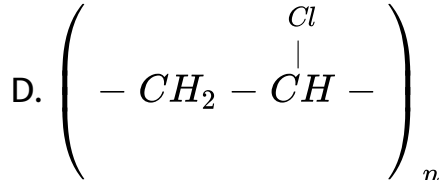


Answer: A

 [View Text Solution](#)

7. Which of the following structures represents neoprene polymer?





Answer: B



Watch Video Solution

8. Terylene is a

A. Polyamide

B. Polyester

C. Polyethylene

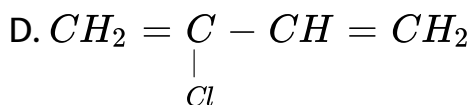
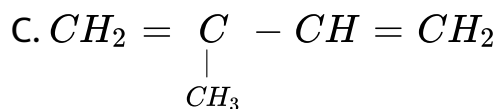
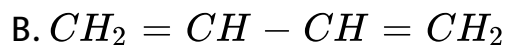
D. Polypropylene

Answer: B



Watch Video Solution

9. Which is the monomer of neoprene in the following?



Answer: D



Watch Video Solution

10. In elastomer, intermolecular forces are

A. Nil

B. Weak

C. Strong

D. Very strong

Answer: B



Watch Video Solution

11. Orlon is a polymer of

A. Styrene

B. Tetrafluoro ethylene

C. Vinyl chloride

D. Acrylonitrile

Answer: D



Watch Video Solution

12. Which of the following is currently used as a tyre cord?

A. Terylene

B. Polyethylene

C. Polypropylene

D. Nylon - 6

Answer: D



Watch Video Solution

13. In a polymer sample, 30 % of molecules have a molecular mass of 20,000, 40 % have 30,000 and the rest 60,000. What is the weight average molecular mass of the polymer?

A. 40300

B. 30600

C. 43333

D. 50400

Answer: C

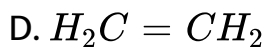
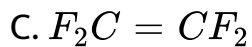


Watch Video Solution

14. The monomer of Nylon-6 is/are

A. 

B. 



Answer: B



[View Text Solution](#)

15. Which polymer is used for making magnetic recording tapes?

A. Dacron

B. Acrlan

C. Glyptal

D. Bakelite

Answer: A



Watch Video Solution

16. Given the polymers (i) Nylon 66, (ii) Buna-S , (iii) Polythene , arrange these in increasing of their inter-molecular forces (lower to high)

A. $(i) > (ii) > (iii)$

B. $(ii) > (iii) > (i)$

C. $(ii) < (iii) < (i)$

D. $(iii) < (i) < (ii)$

Answer: A



[Watch Video Solution](#)

17. The polymer used for optical lenses is

- A. Teflon
- B. Terylene
- C. Polystyrene
- D. Polymethyl Methacrylate

Answer: D



[Watch Video Solution](#)

18. Which of the following fibres contain amide linkage ?

A. Nylon -66

B. Terylene

C. Teflon

D. Bakelite

Answer: A



Watch Video Solution

19. Isoprene is a valuable

A. Propene

B. Liquid fuel

C. Synthetic rubber

D. Petrol

Answer: C



Watch Video Solution

20. Which of the following polymer turns yellowish on exposure to sunlight

- A. Polystyrene
- B. Nylon
- C. Polyethylene
- D. Styrene butadiene resin

Answer: D



Watch Video Solution

21. Characteristic property of teflon is

- A. 2000 poise viscosity
- B. High surface tension
- C. Non-inflammable and resistant to heat
- D. Highly reactive

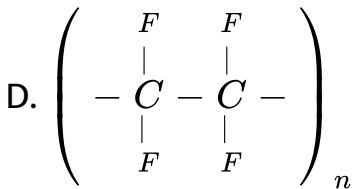
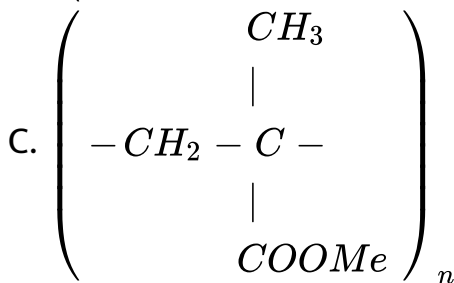
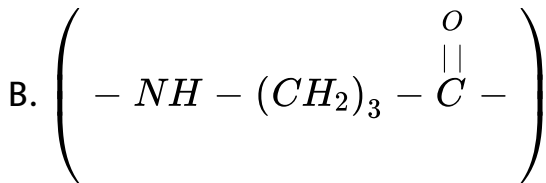
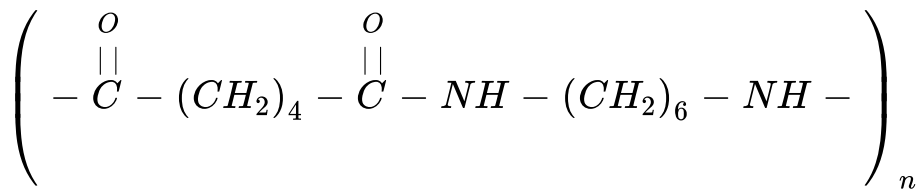
Answer: C



Watch Video Solution

22. Nylon -66 is

A.

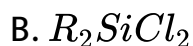


Answer: A



Watch Video Solution

23. Among the following substituted silanes, the one which will give rise to cross linked silicon polymer on hydrolysis is



Answer: A



Watch Video Solution

24. Buna-S rubber is which of the following of 1-3-butadiene and styrene

A. Polymers

B. Copolymer

C. Addition

D. Condensation polymer

Answer: B



Watch Video Solution

25. Which of the following is used in vulcanization of rubber ?

A. SF_6

B. CF_4

C. Cl_2F_2

D. C_2F_2

Answer: A



Watch Video Solution

26. Synthetic polymer which resembles natural rubber is:

A. Neoprene

B. Chloroprene

C. Glyptal

D. Nylon

Answer: A



Watch Video Solution

27. The plastic household crockery is prepared by using

- A. Melamine and tetrafluoroethane
- B. Malonic acid and hexamethylenamine
- C. Melamine and vinyl acetate
- D. Melamine and formaldehyde

Answer: D



Watch Video Solution

28. Three dimensional molecules with cross-links are formed
in case of

- A. Thermoplastic

B. Thermosetting plastic

C. Both

D. None

Answer: B



Watch Video Solution

29. PVC is used for the _____.

A. Manufactured of cosmetics

B. Manufacture of tyres

C. Manufactures of nonstick pans

D. Manufacture of plastics pipes

Answer: D



Watch Video Solution

30. Which of the following has ester linkage ?

A. Nylon -66

B. PVC

C. Terylene

D. SBR

Answer: C



Watch Video Solution

31. The mass average molecular mass & number average molecular mass of a polymer are 40,000 and 30,000 respectively. The polydispersity index of polymer will be

- A. < 1
- B. > 1
- C. 1
- D. 0

Answer: B

 [Watch Video Solution](#)

32. Which percentage of sulphur is used in the vulcanization of rubber?

A. 5

B. 0.03

C. 0.3

D. 0.55

Answer: A



Watch Video Solution

33. Discovery of '*nylon*' is associated with

A. Newyork and london

B. Newyork and longuet

C. Nyholm and london

D. None of these

Answer: A



Watch Video Solution

34. Which of the following is resistant to boiling aqua-regia

A. Polythene

B. Perspex

C. Teflon

D. Bakelite

Answer: C



Watch Video Solution

35. Nylon polymers are_____.

- A. Acidic
- B. Basic
- C. Amphoteric
- D. Neutral

Answer: C



Watch Video Solution

36. In the process of forming 'mercerised cellulose' the swelling of cellulose is caused by

- A. Water soluble

B. Na_2CO_3

C. Aq. NaOH

D. Aq.HCl

Answer: C



Watch Video Solution

37. 'Rayon' is

A. Natural silk

B. Artificial silk

C. Natural plastic or rubber

D. Synthetic plastic

Answer: B



Watch Video Solution

38. As the molecular weight increases the tensile strength of polymers

- A. Increases
- B. Decreases
- C. Remains unchanged
- D. Uncertain

Answer: A



Watch Video Solution

39. Glyptals are chiefly employed in

- A. Toy making
- B. Surface coating
- C. Photofilm making
- D. Electric insulators

Answer: B



Watch Video Solution

40. The sterile gauze (or cotton) used in medicine is obtained by oxidising cellulose with

- A. Nitrogen

B. $KMnO_4$

C. Nitrogen dioxide

D. potassium chlorate

Answer: C



Watch Video Solution

41. Ethylene-propylene rubber (EPR) is

A. Unsaturated, stereoregular

B. Saturated, stereoregular

C. Atactic, unsaturated

D. Syndiotactic, unsaturated

Answer: B



Watch Video Solution

42. Acrylic resins are

- A. Colourless and transparent
- B. Dark brown and thermosetting
- C. Dark brown and thermoplastic
- D. White like milk

Answer: A



Watch Video Solution

43. Which of the following has cross -links

- A. Vulcanised rubber
- B. Nylon
- C. Phenol-formaldehyde resins
- D. Both (a) and (c) are correct

Answer: D

 [Watch Video Solution](#)

44. Which of the following polymers are hard?

- A. Linear polymer
- B. Cross-linked

C. Branched chain

D. Thermoplastic

Answer: B



Watch Video Solution

45. In the trinitrocellulose, each glucose unit contains how many-OH groups

A. 2

B. 3

C. 4

D. 5

Answer: B



Watch Video Solution

46. Assertion: The time of vulcanisation and temperature is increased by adding accelerators.

Reason: By vulcanising, a material of high tensile strength can be obtained

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. if assertion is true but reason is false
- D. if the assertion and reason both are false

Answer: D



Watch Video Solution

47. Assertion: In vulcanisation of rubber , sulphur cross links are introduced.

Reason: Vulcanisation is a free radical initiated chain reaction.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. if assertion is true but reason is false
- D. if the assertion and reason both are false

Answer: B



Watch Video Solution

48. (A) Teflon has high thermal stability and chemical inertness.

(R) Teflon is a thermoplastic.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false
- D. If the assertion and reason both are false

Answer: B



Watch Video Solution

Critical Thinking Objective Question

1. The number of *ATP* molecules produced in the lipid metabolism of a molecules of palmitic acid is

- A. 130
- B. 36
- C. 56
- D. 86

Answer: A

 [Watch Video Solution](#)

2. Ebonite is:

- A. Polropene
- B. Natural rubber
- C. Synthetic rubber
- D. Highly vulcanized rubber

Answer: D

 [Watch Video Solution](#)

3. Which of the following is not polyamide ?

A. Nylon-66

B. Protein

C. Glyptal

D. Nylon-6

Answer: C



Watch Video Solution

4. Vitamin B_{12} contains

A. Ca(II)

B. Zn(II)

C. Fe(II)

D. Co(III)

Answer: D



Watch Video Solution

5. Chargaff's rule states that in an organism:

A. Amounts of all bases are equal

B. Amount of adenine (A) is equal to that of thymine (T)
and the amount of guanine (G) is equal to that of
cytosine (C)

C. Amount of adenine (A) is equal to that of guanine (G)
and the amount of thymine (T) is equal to that of
cytosine (C)

D. Amount of adenine (A) is equal to that of cytosine (C)
and the amount of thymine (T) is equal to guanine (G)

Answer: B

 [Watch Video Solution](#)

6. Which of the following is a chain growth polymer?

A. Polystyrene

B. Protein

C. Starch

D. Nucleic acid

Answer: A





[Watch Video Solution](#)

7. A sequence of how many nucleotides in messenger RNA makes a condon for an amino acid

- A. One
- B. Two
- C. Three
- D. Four

Answer: C



[Watch Video Solution](#)

8. The enzyme which hydrolyses triglycerides to fatty acid and glycerol is called:

A. Zymase

B. Pepsin

C. Maltase

D. Lipase

Answer: D



Watch Video Solution

9. Total number of chiral carbons in $\beta - D(+)$ glucose is

A. Three

B. Four

C. Five

D. Six

Answer: B



Watch Video Solution

10. Cell membranes are mainly composed of :

A. Carbohydrates

B. proteins

C. phospholipids

D. fats

Answer: B



Watch Video Solution

11. The cell membranes are following statements is not true

- A. Buna-S is a copolymer of butadiene and styrene
- B. Natural rubber is a 1,4-polymer of isoprene
- C. In vulcanization, the formation of sulphur bridges between different chains make rubber harder and stronger
- D. Natural rubber has the trans configuration at every double bond

Answer: D



Watch Video Solution

12. Which of the statements about "Denaturation" given below are correct ?

(1) Denaturation of proteins causes loss of secondary and tertiary structures of the protein.

(2) Denaturation leads to the conversion of double strand of DNA into single strand.

(3) Denaturation affects primary structure which gets distorted.

A. A and b

B. A ,B and C

C. B and C

D. A and C

Answer: A



Watch Video Solution

13. Which of the following statement is false

- A. Artificial silk is derived from cellulose
- B. Nylon-66 is an example of elastomer
- C. The repeat unit in natural rubber is isoprene
- D. Both starch and cellulose are polymers of glucose

Answer: B



Watch Video Solution

14. Which of the following statement is correct regarding the drawbacks of raw rubber ?

- A. It is plastic in nature
- B. It has little durability
- C. It has large water-absorption capacity
- D. All of these

Answer: D

 [Watch Video Solution](#)

15. The nucleic acid base having two possible binding sites is:

- A. Thymine

B. Cytosine

C. Guanine

D. Adenine

Answer: C



Watch Video Solution

16. Subunits present in haemoglobin are:

A. 2

B. 3

C. 4

D. 5

Answer: C

 [Watch Video Solution](#)

17. The statement which is not correct , is

- A. Chlorophyll is responsible for the synthesis of carbohydrate in plants
- B. The compound formed by the addition of oxygen to haemoglobin is called oxyhaemoglobin
- C. Acetyl salicyclic acid is known as aspirin
- D. The metal ion present in vitamin B_{12} is Mg^{2+}

Answer: D

 [Watch Video Solution](#)

18. Perlon is

- A. Rubber
- B. Nylon-6
- C. Terylene
- D. Orlon

Answer: B



Watch Video Solution

19. Starting with three different amino acid molecules, how many different tripeptide molecules are formed

A. 12

B. 9

C. 8

D. 6

Answer: D



Watch Video Solution

20. *DNA* multiplication is called:

A. Translation

B. Transduction

C. Transcription

D. Replication

Answer: D



Watch Video Solution

21. Alkyl benzene sulphonates can be used as detergents in hard water, unlike soaps, as

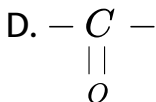
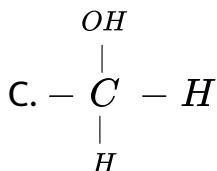
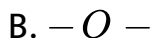
- A. They are highly soluble in water
- B. Their Ca^{++} / Mg^{++} salts are water soluble
- C. They are non-ionic
- D. Their Ca^{++} / Mg^{++} salts are insoluble in water

Answer: B



Watch Video Solution

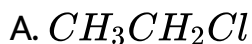
22. In bakelite, the rings, are joined to each other through:

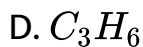
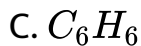
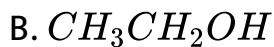


Answer: A

 [Watch Video Solution](#)

23. Which one of the following can be used as monomer in a polymerisation reaction ?





Answer: D



Watch Video Solution

24. Silicones are a group of organosilicon polymers containing_____linkages.

A. Si-O-Si

B. O-Si-O linkage

C. Si-C-Si linkage

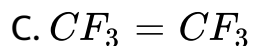
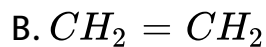
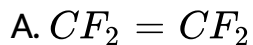
D. Si-Si -O linkage

Answer: A



Watch Video Solution

25. The repeating units of PCTEF is



Answer: D



Watch Video Solution

26. Polymer used in bullet proof glass is:

- A. Lexan
- B. PMMA
- C. Nomex
- D. Kevlar

Answer: A

 [Watch Video Solution](#)

27. Pick out the unsaturated fatty acid from the following

- A. Tearic acid
- B. Lauric acid

C. Oleic acid

D. Keratin

Answer: C



Watch Video Solution

28. Proteins fulfil several functions in living system . An example of a protein which acts as a hormone is

A. Casein

B. Oxytocin

C. Trypsin

D. Keratin

Answer: B



Watch Video Solution

29. A compound of mol. Wt 180 is acetylated to give a compound of mol. Wt 390. the number of amino groups in the initial compound is

A. 2

B. 4

C. 5

D. 6

Answer: C



Watch Video Solution

30. Sucrose is made up of

- A. A gluco pyranose and a fructo pyranose
- B. A glucose a fructose
- C. A gluco furanose and a fructo pyranose
- D. A gluco furnose and a fructo furanose

Answer: B



[Watch Video Solution](#)

31. The source of energy in a cellular reaction is

- A. Chemical energy

B. light energy

C. Heat energy

D. Solar radiation

Answer: A



Watch Video Solution

32. Which one of the following metal ions is essential inside the cell for the metabolism of *glucose/synthesis* of proteins:

A. Ca^{2+}

B. Mg^{2+}

C. Na^{+}

D. K^+

Answer: B



Watch Video Solution

33. Which of the following statement is not correct

- A. Caprolactam is the monomer of nylon-6
- B. Terylene is the monomer of nylon-6
- C. Phenol formaldehyde resin is known as bakelite
- D. The monomer of natural rubber is butadiene

Answer: D



Watch Video Solution

34. Protein can be most easily removed from

- A. Alkanes
- B. Alkenes
- C. Alkynes
- D. Benzene

Answer: D

 [Watch Video Solution](#)

35. Which one of the following is a polysaccharide

- A. Nylon
- B. Amylose

C. Ribose

D. Polyethylene

Answer: B



Watch Video Solution

36. Trans -form of polyisoprene is

A. Guttapercha

B. Hydrochloride rubber

C. Buna -N

D. Synthetic rubber

Answer: A





[Watch Video Solution](#)

37. Wash and wear clothes are manufactured using_____.

- A. Nylon fibres
- B. Cotton mixed with nylon
- C. Terylene fibres
- D. Wool fibres

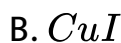
Answer: C



[Watch Video Solution](#)

Jee Section Only One Choice Correct Answer

1. Schweitzer's reagent used for dissolving cellulose in the manufacture of artificial silk is



Answer: C

 [Watch Video Solution](#)

2. Which of the following pairs give positive Tollen's test ?



B. Glucose, fructose

C. Hexanal, acetophenone

D. Fructose, sucrose

Answer: B



Watch Video Solution

3. The two forms of α -D-glucopyranose obtained from solution of D-glucose are known as:

A. Isomer

B. Anomer

C. Epimer

D. Enantiomer

Answer: B

 [Watch Video Solution](#)

4. 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](#)

5. Among cellulose, poly (vinyl chloride), nylon and natural rubber, the polymer in which the intermolecular force of attraction is weakest is

- A. Nylon
- B. Polyvinyl chloride
- C. Cellulose
- D. Natural rubber

Answer: D



Watch Video Solution

6. The correct statement about the following disaccharide is



- A. Ring (a) is pyranose with α -glycosidic link
- B. Ring (a) is furanose with α -glycosidic link
- C. Ring (b) is furanose with α -glycosidic link
- D. Ring (b) is pyranose with β -glycosidic link

Answer: A



View Text Solution

7. The following carbohydrates is



- A. A ketohexose
- B. An aldohexose
- C. An α -furanose
- D. An α -pyranose

Answer: B



View Text Solution

8. Synthesis of each molecule of glucose in photosynthesis involves :

- A. 18 molecules of ATP
- B. 10 molecules of ATP
- C. 8 molecules of ATP

D. 6 molecules of ATP

Answer: A



Watch Video Solution

9. Which one is classified as a condensation polymer ?

A. Dacron

B. Neoprene

C. Teflon

D. Acrylonitrile

Answer: A



Watch Video Solution

10. Which of the following base is not present in DNA ?

A. Quinoline

B. Adenine and thymine, guanine and cytosine

C. Cytosine

D. Thymine

Answer: A



Watch Video Solution

11. The structure of D-(+)-glucose is



The structure of L-(-)-glucose is

A. 

B. 

C. 

D. 

Answer: A



[View Text Solution](#)

12. 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

13. Which of the following compounds will behave as a reducing sugar in an aqueous KOH solution ?

A. 

B. 

C. 

D. 

Answer: D



Watch Video Solution

14. Glucose on prolonged heating with HI gives

- A. 1-Hexene
- B. Hexanoic acid
- C. 6-iodohexane
- D. n-Hexane

Answer: D



Watch Video Solution

15. Which of the following is monosaccharide

- A. Galactose
- B. Sucrose

C. Glycogen

D. Cellulose

Answer: A



Watch Video Solution

16. Glucose on reduction with $NaBH_4$ gives

A. sorbitol

B. Fructose

C. Glycerol

D. None of these

Answer: A





[Watch Video Solution](#)

17. Amino acid are

- A. Acidic
- B. Basic
- C. Amphoteric
- D. All of these

Answer: D



[Watch Video Solution](#)

18. Which of the following is a natural polymer?

- A. Nylon

B. Teflon

C. PVC

D. Cellulose

Answer: D



Watch Video Solution

19. Which of the following is not a polyamide?

A. Nylon -66

B. Nylon-6

C. Silk

D. gyptal

Answer: D



Watch Video Solution

20. The products expected from the reaction

CHO

|

CH_2

|

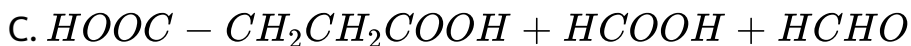
$CHOH \xrightarrow[\text{excess}]{HIO_4}$

|

$CHOH$

|

CH_2OH





Answer: A



Watch Video Solution

21. Milk sugar, once digested furnishes

A. D-glucose

B. L-glucose

C. Fructose

D. Lactose

Answer: A



Watch Video Solution

22. Which of the following coenzymes assist enzymatic reduction

A. NADH

B. NADPH

C. $FADH_2$

D. All of these

Answer: D



Watch Video Solution

23. The activity of the enzymes pepsin is maximum at the pH value of

A. 1.5

B. 6.5

C. 8.5

D. 10.5

Answer: A



Watch Video Solution

24. Gallstone contains mainly

A. Calcium oxalate

B. Cholesterol

C. Citric acid

D. Uric acid

Answer: B



Watch Video Solution

25. Thymine is

- A. 5-methyl uracil
- B. 4-methyl uracil
- C. 3-methyl uracil
- D. 1-methyl uracil

Answer: A



Watch Video Solution

26. Lysine is least soluble in water in the pH range.

A. 3 to 4

B. 5 to 6

C. 6 to 7

D. 8 to 9

Answer: d



[Watch Video Solution](#)

Jee Section More Than One Choice Correct Answer

1. The correct statement (s) about the following sugars X and Y is (are)



- A. X is a reducing sugar and Y is a non-reducing sugar
- B. X is a non-reducing sugar and Y is reducing sugar
- C. The glucosidic linkage in X and Y are α and β respectively
- D. The glucosidic linkage in the X and Y are β and α respectively

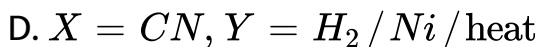
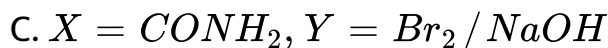
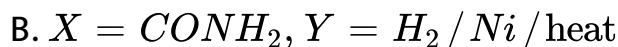
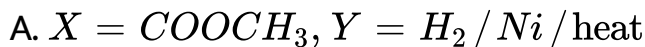
Answer: B::C

 [View Text Solution](#)

2. The correct functional group X and the reagent/reaction condition Y in the following scheme are



Condensation polymer



Answer: A::B::C::D



View Text Solution

3. For 'invert sugar', the correct statement(s) is (are)

(Given : specific rotations of (+) - sucrose, (+) - maltose, +

66° , $+140^\circ$, -52° and 92° respectively)

- A. Invert sugar' is prepared by acid catalyzed hydrolysed of maltose
- B. Invert sugar' is an equimolar mixture of D-(+)-glucose and D-(-)-fructose
- C. Specific rotation of 'invert sugar' is -20°
- D. On reaction with Br_2 water, 'invert sugar' forms saccharic acid as one of the products

Answer: B::C



Watch Video Solution

4. Which of the following are natural polymers

- A. Proteins to amino acids

B. Cellulose

C. Teflon

D. Natural rubber

Answer: A::B::D



Watch Video Solution

5. Which of the following are step growth as well as condensation polymer

A. Nylon-66

B. Bakelite

C. Nylon-66

D. Buna-S

Answer: A::B::C::D



Watch Video Solution

6. Teflon, polystyrene and neoprene are all:

- A. Addition polymers
- B. Chain growth polymer
- C. Condensation polymer
- D. step growth polymer

Answer: A::B



Watch Video Solution

7. Which of the following react with phenyl hydrazine to give same osazone

A. Glucose

B. Fructose

C. Mannose

D. Galactose

Answer: A::B



Watch Video Solution

8. Which of the following show glucose has aldehyde group

A. It gives Tollen's reagent test

B. It gives Fehling's solution test

C. It gives Schiff's reagent test

D. It gives reaction with $NaHSO_3$ and NH_3

Answer: A::B



Watch Video Solution

9. Which of the following do not undergo hydrolysis?

A. Glucose

B. Fructose

C. Cane sugar

D. Maltose

Answer: A::B



Watch Video Solution

10. Which of the following are soluble in water

A. α -Keratin

B. Albumin

C. Haemoglobin

D. Casein

Answer: B::C::D



Watch Video Solution

11. Which of the following statements are correct with reference to isoelectric point?

- A. The isoelectric point is the pH at which the amino acid bears no net charge
- B. It corresponds to pH at which the concentration of the zwitter ion is at a maximum
- C. It is not the average of pK_{a1} and pK_{a2} values
- D. All of these

Answer: A::B



Watch Video Solution

12. Which of the following are biodegradable polymers?

A. PHBV

B. polyglycollic acid

C. Polylactic acid

D. Nylon-66

Answer: A



Watch Video Solution

13. Crystalline polymers are

A. Harder

B. Denser

C. Heavier

D. None of these

Answer: A::B

 [Watch Video Solution](#)

14. Chain growth polymerization may proceed by the following mechanism

A. Condensation polymerization

B. Cationic polymerization

C. Anionic polymerization

D. Free radical polymerization

Answer: B::C::D



Watch Video Solution

15. Which of the following is/are not associated with rubber

- A. Conducting nature
- B. Oriented nature
- C. Elastic nature
- D. Commercially available strong fibre

Answer: A::B::D



Watch Video Solution

16. Indicate the correct statement for chain growth polymers

- A. These polymers are made by the addition of monomers
- B. The end of a chain is reactive because it is a free radical cation or anion
- C. Polystyrene is the example of this class
- D. It takes place step by step

Answer: A::B::C



Watch Video Solution

17. Disaccharides are of four types, namely 1,4'-glycosides, 1-6'-glycosides, 1,1'-glycosides are 1,5'-glycosides. Which of these will be reducing

A. 1,4'

B. 1,6'

C. 1,1'

D. 1,5'

Answer: A::B::D



Watch Video Solution

18. Which of the following monosaccharides yields an optically active alditol on $NaBH_4$ reduction

A. 

B. 

C. 

D. 

Answer: A::B::D



View Text Solution

19. Which of the following are addition copolymers

A. Saran

B. vinyon

C. SBR

D. PVC

Answer: A::B::C



Watch Video Solution

20. which of the following are highly crossed linked polymers

A. Alkyd resin

B. Melamac

C. LDPE

D. PAN

Answer: A::B



Watch Video Solution

21. Which of the following polymers can be made by free radical addition polymersation mechanism?

A. PE

B. HDPE

C. LDPE

D. Teflon

Answer: A::B::C

 [Watch Video Solution](#)

Jee Section Reasoning Type Question

1. Statement I : Glucose gives a reddish-brown precipitate with Fehling's solution

Statement II : Reaction of glucose with Fehling's solution gives CuO and gluconic acid

- A. Statement 1 is true, statement-2 is true , statmenent -2
is a correct explanation for statement -1
- B. Statement 1 is true, statement 2 is true, statement 2 is
not a correct explanation for statement 1
- C. Statement 1 is true, statement 2 is false
- D. Statement 1 is false, statement 2 is true

Answer: C

 [Watch Video Solution](#)

2. Statement I : Glucose gives a reddish-brown precipitate
with Fehling's solution

Statement II : Reaction of glucose with Fehling's solution
gives CuO and gluconic acid

- A. Statement 1 is true, statement-2 is true , statmenent -2
is a correct explanation for statement -1
- B. Statement 1 is true, statement 2 is true, statement 2 is
not a correct explanation for statement 1
- C. Statement 1 is true, statement 2 is false
- D. Statement 1 is false, statement 2 is true

Answer: C

 [Watch Video Solution](#)

3. Statement -1: Vinylidene chloride forms isotactic.

Statement -2: Vinylidene chloride contains chiral carbon
atoms

- A. Statement 1 is true, statement-2 is true , statmenent -2
is a correct explanation for statement -1
- B. Statement 1 is true, statement 2 is true, statement 2 is
not a correct explanation for statement 1
- C. Statement 1 is true, statement 2 is false
- D. Statement 1 is false, statement 2 is true

Answer: D



[View Text Solution](#)

4. A: PMMA is used for making lenser and light cover.

R:It has excellent light transmission properties.

- A. Statement 1 is true, statement-2 is true , statmenent -2
is a correct explanation for statement -1
- B. Statement 1 is true, statement 2 is true, statement 2 is
not a correct explanation for statement 1
- C. Statement 1 is true, statement 2 is false
- D. Statement 1 is false, statement 2 is true

Answer: A

 [Watch Video Solution](#)

5. Statement 1:Nylon fibres are stronger than terylene fibres.

Statement 2:Intermolecular forces of attraction in terylene
are *H*-bonding.

- A. Statement 1 is true, statement-2 is true , statmenent -2
is a correct explanation for statement -1
- B. Statement 1 is true, statement 2 is true, statement 2 is
not a correct explanation for statement 1
- C. Statement 1 is true, statement 2 is false
- D. Statement 1 is false, statement 2 is true

Answer: C



Watch Video Solution

6. Statement I: Carboxypeptidase is an exopeptidase

Statement II: It cleaves *N*-terminal bond.

- A. Statement 1 is true, statement-2 is true , statmenent -2
is a correct explanation for statement -1
- B. Statement 1 is true, statement 2 is true, statement 2 is
not a correct explanation for statement 1
- C. Statement 1 is true, statement 2 is false
- D. Statement 1 is false, statement 2 is true

Answer: C

 [Watch Video Solution](#)

7. Statement I: Glycosides mutarotate.

Statement II: The anomeric OH is etherified and the equilibrium with the free carbonyl form is destroyed.

- A. Statement 1 is true, statement-2 is true , statmenent -2 is a correct explanation for statement -1
- B. Statement 1 is true, statement 2 is true, statement 2 is not a correct explanation for statement 1
- C. Statement 1 is true, statement 2 is false
- D. Statement 1 is false, statement 2 is true

Answer: D

 [Watch Video Solution](#)

8. Statement -1: α -Keratin is a structural protein

Statement -2: It is globular protein.

- A. Statement 1 is true, statement-2 is true , statmenent -2
is a correct explanation for statement -1
- B. Statement 1 is true, statement 2 is true, statement 2 is
not a correct explanation for statement 1
- C. Statement 1 is true, statement 2 is false
- D. Statement 1 is false, statement 2 is true

Answer: C



Watch Video Solution

Jee Setction Comprehension Type

1. Treatment of compound O with $KMnO_4/H^+$ gave P, which on heating with ammonia gave Q. The compound Q on treatment with $Br_2/NaOH$ produced R. On strong heating, Q, gave S, which on further treatment with ethyl 2-bromopropanoate in the presence of KOH followed by acidification, gave a compound T.



The compound R is

A. 

B. 

C. 

D. 

Answer: A

2. Treatment of compound O with $KMnO_4/H^+$ gave P, which on heating with ammonia gave Q. The compound Q on treatment with $Br_2/NaOH$ produced R. On strong heating, Q, gave S, which on further treatment with ethyl 2-bromopropanoate in the presence of KOH followed by acidification, gave a compound T.



The compound T is

- A. Glycine
- B. Alanine
- C. Valine
- D. Serine

Answer: B



View Text Solution

3. On the basis of intermolecular forces of attraction, polymers, are classified as elastomers, fibres, thermoplastics and thermosetting polymers. Elastomers have the weakest while fibres have the strongest intermolecular forces of attraction. Polymers which can be chemical composition and mechanical strength are called thermoplastics. in contrast, those polymers which can be heated only once when they undergo a permanent change in chemical composition to give a hard, infusible and insoluble mass, are called thermosetting polymers.

Which of the following can be remelted time and again without producing any change

A. PVC

B. Bakelite

C. Melmac

D. Urea-formaldehyde resin

Answer: A

 [View Text Solution](#)

4. On the basis of intermolecular forces of attraction, polymers, are classified as elastomers, fibres, thermoplastics and thermosetting polymers. Elastomers have the weakest while fibres have the strongest intermolecular forces of

attraction. Polymers which can be chemical composition and mechanical strength are called thermoplastics. in contrast, those polymers which can be heated only once when they undergo a permanent change in chemical composition to give a hard, infusible and insoluble mass, are called thermosetting polymers.

Which are true for elastomers

- A. They possess elasticity
- B. These possess weak intermolecular forces of attraction between polymer chains
- C. Vulcanized rubber is an example of elastomer
- D. All are correct

Answer: D



[View Text Solution](#)

5. On the basis of intermolecular forces of attraction, polymers, are classified as elastomers, fibres, thermoplastics and thermosetting polymers. Elastomers have the weakest while fibres have the strongest intermolecular forces of attraction. Polymers which can be chemical composition and mechanical strength are called thermoplastics. in contrast, those polymers which can be heated only once when they undergo a permanent change in chemical composition to give a hard, infusible and insoluble mass, are called thermosetting polymers.

The linear chains in terylene are held together by

A. Covalent bond

B. Hydrogen bonds

C. Dipole-dipole interactions

D. Van der waals forces

Answer: C

 [View Text Solution](#)

6. Polynucleotides are nucleic acid. Every nucleotide is made up of three parts, i.e, a pentose sugar , a heterocyclic nitrogenous base and phosphoric acid. Depending upon the type of sugar whether, ribose or 2-deoxyribose, nucleic acid are called RNA and DNA respectively. overall there are remaining three are pyrimidines . out of these five bases, each type nucleic acid has four of them.

Which of the following sets 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



[View Text Solution](#)

7. Polynucleotides are nucleic acid. Every nucleotide is made up of three parts, i.e, a pentose sugar , a heterocyclic nitrogenous base and phosphoric acid. Depending upon the type of sugar whether, ribose or 2-deoxyribose, nucleic acid are called RNA and DNA respectively. overall there are remaining three are pyrimidines . out of these five bases,

each type nucleic acid has four of them.

Which base is found only in the nucleotides of RNA

A. Adenine

B. Uracil

C. Guanine

D. Cytosine and uracil

Answer: B



[View Text Solution](#)

8. Polynucleotides are nucleic acid. Every nucleotide is made up of three parts, i.e, a pentose sugar , a heterocyclic nitrogenous base and phosphoric acid. Depending upon the type of sugar whether, ribose or 2-deoxyribose, nucleic acid

are called RNA and DNA respectively. overall there are remaining three are pyrimidines . out of these five bases, each type nucleic acid has four of them.

In nucleic acids, the nucleotides are linked to one another through

- A. Hydrogen bond
- B. Peptide bond
- C. Glycosidic linkage
- D. Phosphate groups

Answer: D



[View Text Solution](#)

1. The substituents R_1 and R_2 for nine peptides are listed in the table give below. How many of these peptides are positively charged at pH=7.0



 [View Text Solution](#)

2. A tetrapeptide has $-COOH$ group on alanine. This produces glycine (Gly), valine (Val), phenyl alanine (Phe) and alanine (Ala), on complete hydrolysis. For this tetrapeptide, the number of possible sequences (primary structures) with $-NH_2$ group attached to a chiral centre is :

 [Watch Video Solution](#)

3. The total number of lone-pairs of electrons in melamine is.

 [Watch Video Solution](#)

4. The total number of distinct naturally occurring amino acids obtained by complete acidic hydrolysis of the peptide shown below is



 [View Text Solution](#)

5. The total number of possible aldohexoses belonging to D-series is

 [Watch Video Solution](#)

6. The number of chiral carbons in $\beta - D(+) -$ glucose is:

 [Watch Video Solution](#)

7. The total number of basic group in the following form of lysine is



 [View Text Solution](#)

8. The number of tripeptides formed by three different amino acids is:

 [Watch Video Solution](#)

9. Amongst the following the total number of thermoplastics is: Polythene, PVC, teflon, PAN, PMMA, polyester, bakelite, nylon 6, melamine formaldehyde.

 [Watch Video Solution](#)

10. How many of the following are thermosetting polymers? Bakelite, polyester, polyvinyl acetate, SBR, polypropylene, nylon 6,6, thiokol, urea-formaldehyde resin, melamine formaldehyde resin.

 [Watch Video Solution](#)

11. How many of the following are biodegradable polymers? PVC, PAN, polystyrene, cellulose, dextran, glyptal, PHBV, nylon

6,6, nylon-2-nylon-6.



[Watch Video Solution](#)

Jee Section Matrix Type Questions

1. Match the chemical substance in Column I with type of polymers/type of bond in Column II



[View Text Solution](#)

2. Match the entries listed in Column I with appropriate entries listed in Column II .



 [View Text Solution](#)

3. Match the entries listed in Column I with appropriate entries listed in Column II



 [View Text Solution](#)

4. Match the entries listed in Column I with appropriate entries listed in Column II .



 [View Text Solution](#)

1. The Fischer presentation of D-glucose is given below



The correct structure (s) of β -L-glucopyranose is (are)

A. 

B. 

C. 

D. 

Answer: D



View Text Solution