BIOLOGY

BOOKS - UNIVERSAL BOOK DEPOT 1960 BIOLOGY (HINGLISH)

BIOMOLECULES

Biomolecules

1. Starch and cellulose are the compounds made up of many units of

A. Simple suger

B. Fatty acid

C. Glycerol

D. Amino acid

Answer: A

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2. Which one of the following is the sweetest sugar or laevorotatory suger

Or

Inulin is a polymer of

A. Fructose

B. Glucose

C. Galactose

D. Sucrose

Answer: A

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3. Which of the following is the characteristic of plants

A. Glucose and cellulose

B. Pyruvic acid and glucose

C. Cellulose and starch

D. Starch and pyruvic acid

Answer: C

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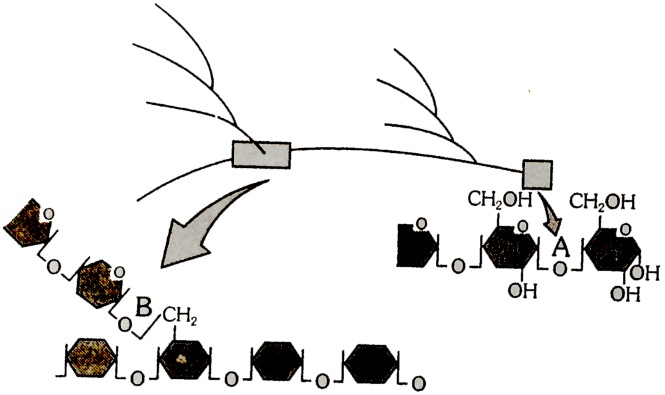
4. Observe the following figure and identify A and B bonds in the diagrammatic representaion of a portion of glycogen



A. $A = 1 - 4\alpha$-glycosidic bonds, B =1-4 α- glycosidic bonds

B. A = 1-1 α-glycosidic bonds, B = 1-1 α- glycosidic bonds

C. A = 1-6 α- glycosidic bonds, B = 1-4 α- glycosidic bonds

D. A = 1-4 α- glycosidic bonds, B = 1-6 α- glycosidic bonds

Answer: D

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5. Inulin found in plant cell is a

A. Liqid

B. Protein

C. Polysaccharide

D. Vitamin

Answer: C

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6. Pentoses and hexoses are the most common

Or

The simple polyhydroxy ketone molecule containing 3-7 carbons is a

A. Disaccharides

B. Monosaccharides

C. Oligosaccharides

D. Polysaccharides

Answer: B

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7. Corn is immersed in the boiling water. It is then cooled, the solution becomes sweet. It is due to

A. Enzymes are inactivated in boiling water

B. Disaccharides are converted to monosaccharides

C. Monosaccharides are converted to disaccharides

D. None of these

Answer: B

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8. Cholesterol belongs to which of the following groups

A. Steroids

B. Neutral fats

C. Waxes

D. Phospholipids

Answer: A

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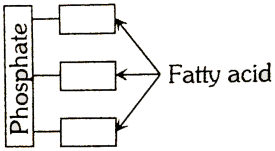
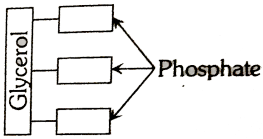
9. Which one of the following diagrams shows a molecule of simple liqid

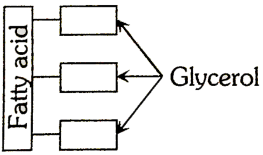
A.



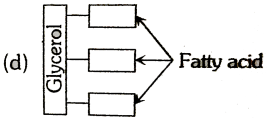
B.



C.



D.



Answer: D

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10. The alpha helices and beta sheets are the example of which level of protein organization

A. Primary structure

B. Secondary structure

C. Tertiary structure

D. Quaternary structure

Answer: B

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11. Sucrose, a common table sugar, is composed of

A. Glucose + fructose

B. Glucose + galactose

C. Fructose + galactose

D. None of these

Answer: A

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12. Which is non-reducing sugar

A. Glucose

B. Galactose

C. Mannose

D. Sucrose

Answer: D

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13. Sugar and amino acids are

A. Primary metabolites

B. Secondary metabolites

C. Feed stock

D. Inoculum

Answer: A

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14. A complex polysaccharide produced from sucrose by the bacterium Leuconostoc mesenteroides is

A. Chitin

B. Starch

C. Cellulose

D. Dextran

Answer: D

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15. The chemical formula of starch is

A. $(C_6H_{10}O_5)_n$

B. $(C_6H_{12}O_6)_n$

C. $C_{12}H_{22}O_{11}$

D. CH_3COOH

Answer: A

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16. Oval shaped and eccentric starch particles are found in

A. Wheat

B. Maize

C. Potato

D. Rice

Answer: C

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17. Which one of the following is conjugate protein

A. Globulin

B. Albumin

C. Histone

D. Flavoprotein

Answer: D

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18. Glycoproteins contain

A. Protein and fat

B. Protein and salt

C. Protein and vitamin

D. Protein and carbohydrates

Answer: D

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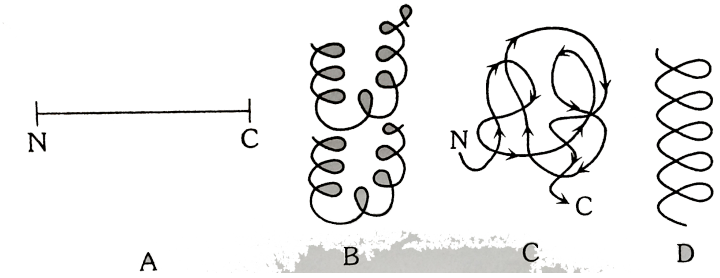
19. See the following figure and identify the structure of proteins in the figure



A. A = 4° structure, B = 3° structure, C = 2° structure, D = 1° structure

B. A = 1° structure, B = 4° structure, C = 3° structure, D = 2° structure

C. A = 4° structure, B = 2° structure, C = 3° structure, D = 1° structure

D. A = 1° structure, B = 2° structure, C = 3° structure, D = 4° structure

Answer: B

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20. Which one of the following is a basic amino acid

A. $NH_2 - \underset{\underset{CH(CH_3)_2}{|}}{\overset{\overset{COOH}{|}}{C}} - H$

B. $NH_2 - \underset{\underset{(CH_2)_4NH_2}{|}}{\overset{\overset{COOH}{|}}{C}} - H$

C. $NH_2 - \underset{\underset{CH_2OH}{|}}{\overset{\overset{COOH}{|}}{C}} - H$

D. $NH_2 - \underset{\underset{CH_3}{|}}{\overset{\overset{COOH}{|}}{C}} - H$

Answer: B

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21. Largest physical and chemical molecules are

Or

What are the most diversed molecules in the cell

Or

No cell could live without

A. Carbohydrates

B. Lipids

C. Proteins

D. Nucleic acids

Answer: C

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22. Find out the wrongly matched pair

A. Primary metabolites - Ribose

B. Secondary metabolite-Anthocyanins

C. Protein - Insulin

D. Cellulose - Heteropolymer

Answer: D

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23. Lipids are incoluble in water, because lipids molicules are

A. Neutral

B. Zwitter ions

C. Hydrophobic

D. Hydrophilic

Answer: C

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24. Which one of the following statements is wrong

A. Sucrose is a disaccharide

B. Cellulose is a poysaccharide

C. Uracil is a pyrimidine

D. Glycine is a sulphur containing amino acid

Answer: D

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25. Which of the following is conjugated protein

A. Chromoproteins

B. Phosphoprotein

C. Glycoprotein

D. All of the above

Answer: D

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26. α-helical model of protein was discovered by

A. Pauling and Correy

B. Watson

C. Morgan

D. Berzelus

Answer: A

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27. Which one of the following biomolecules is correctly characterrised

A. Lecithin - a phosphorylated glyceride found in cell membrane

B. Palmitic acid - an unsaturated fatty acid with 18 carbon atoms

C. Adenylic acid - adenosine with a glucose phosphate molecule

D. Alanine amino acid - Contains an amino group and an acidic group anywhere in the molecule

Answer: A

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28. High content of lysine is present in

A. Wheat

B. Apple

C. Maize

D. Banana

Answer: A

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29. Example of a typical homopolysaccharide is

A. Lignin

B. Suberin

C. Inulin

D. Starch

Answer: D

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30. Arachidonic acid is

A. Non-essential fatty acid

B. Essential fatty acid

C. Polyunsaturated fatty acid

D. Both (b) and (c)

Answer: B

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31. The two polypeptides of human insulin are linked together by

A. Hydrogen bonds

B. Phosphodiester bond

C. Covanlent bond

D. Disulphide bridges

Answer: D

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32. Which of the following carbon is anomeric in glucose

A. C_1

B. C_2

C. C_4

D. None of these

Answer: A

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33. During strenous exercise glucose is converted into

A. Glycogen

B. Pyruvic acid

C. Starch

D. Lactic acid

Answer: D

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34. In which form does the food transported in plants

A. Sucrose

B. Fructose

C. Glucose

D. Lactose

Answer: A

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35. Which of the following fatty acids is liquid at room temperature

A. Palmitic acid

B. Stearic acid

C. Oleic acid

D. Linoleic acid

Answer: C::D

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36. Match the following and choose the correct combination from the option given

Columa I (Organic Compound)	Column II (Example)
A. Fatty acid	1. Glutamic acid
B. Phospholipid	2. Tryptophan
C. Aromatic amino acid	3. Lecithin
D. Acidic amino	4. Palmitic acid

A. A-1, B-2, C-3, D-4

B. A-4, B-3, C-2, D-1

C. A-2, B-3, C-4, D-1

D. A-3, B-4, C-1,D-2

Answer: B

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37. Which of the following amino acids is not optically active

A. Glycine

B. Valine

C. Leucine

D. Isoleucine

Answer: A

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38. Paraffin wax is

A. Ester

B. Acid

C. Monohydric alcohol

D. Cholesterol

Answer: A

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39. Match the items in column I with those in column II and choose the correct answer

Column I (Biomolecules)	Column II (Examples)
A. Carbohydrates	1. Trypsin
B. Cholesterol	2. Insulin
C. Nucleic acid	3. Insulin
D. Lipid	4. Adenylic acid

A. A-4, B-3, C-1, D-2

B. A-2, B-3, C-4, D-1

C. A-3, B-4, C-1, D-2

D. A-4, B-1, C-2, D-3

Answer: A

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40. Match the items in column I with items in column II and choose the correct anwer

Coluna I	Column II
A. Triglyceride	1. Animal hormones
B. Membrane lipid	2. Feathers and leaves
C. Steroid	3. Phospolipids
D. Wax	4. Fat stored in form of droplets

A. A-4, B-3, C-1, D-2

B. A-2, B-3, C-4, D-1

C. A-3, B-4, C-1, D-2

D. A-4, B-1, C-2, D-3

Answer: A

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41. Given below is the chemical formula of

$$CH_3(CH_2)_{14} - \overset{O}{\overset{||}{C}} - OH$$

A. Palmitic acid

B. Stearic acid

C. Glycerol

D. Galactose

Answer: A

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42. Find out the mis-matched pair

A. Agar - Polymer of glucose and sulphur containing carbohydrates

B. Chitin - Polymer of glucosamine

C. Peptidoglycan - Polysaccharide linked to peptides

D. Lipopolysaccharides - A complex of liqid and polysaccharide

Answer: A

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43. Select the wrong statement

A. The building blocks of lipids are amino acids

B. Majority of enzymes contain a non-protein part called the prosthetic group

C. The thylakoids are arranged one above the other like a stack of coins forming a granum

D. Crossing-over occurs at pachytene stage of meiosis I

Answer: A

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44. Match the following with correct combination

Column - I	Column - II
A. Triglycerides	1. Galactose
B. Lactose	2. Glycerol
C. RNA	3. Palmitic acid
D. βpleats	4. Uracil
E. Beewax	5. secondary structure

A. A - 4, B - 1, C - 5, D - 2, E - 3

B. A - 5, B - 1, C - 4, D - 2, E - 3

C. A - 3, B - 1, C - 4, D - 5, E - 2

D. A - 2, B - 1, C - 4, D - 5, E - 3

Answer: D

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45. Which of the following is not a disaccharide

A. Maltose

B. Starch

C. Sucrose

D. Lactose

Answer: B

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46. What does the following equation denote? Amino acid + ATP $\rightarrow$ Aminoacyl AMP + PP

A. Elongation of chain

B. Chain termination

C. Activation of amino acid

D. None of these

Answer: C

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47. Which of the following is not conjugated protein

A. Peptone

B. Phosphoprotein

C. Lipoprotein

D. Chromoprotein

Answer: A

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48. Which of the following fats is least harmful for heart

A. Saturated fat

B. Cholesterol

C. Polyunsaturated fat

D. Oils

Answer: C

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49. Protein denaturation takes place by the activity of

Or

Enzymes are sensitive to

A. Water

B. Heat

C. Enzyme

D. Pressure

Answer: B

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50. In a polysadccharide, the individual monosaccharides are linked by a

A. Glycosidic bond

B. Peptide bond

C. Ester bond

D. Phosphodiester bond

Answer: A

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51. Select the incorrect statement

A. Amino acids are substituent methanes

B. Glycerol is a trihydroxy propane

C. Lysine is a neutral amino acid

D. Lecithin is a phospholipid

Answer: C

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52. Carbohydrates are commonly found as starch in plant storage organs. Which of the following five properties of starch (A-E) make it useful as a storage material

(A) Easily translocated

(B) Chemically non-reactive

(C) Easily digested by animals

(D) Osmotically inactive

(E) Synthesized during photosynthesis

The useful proeprties ar :

A. (A), (C) and (E)

B. (A) and (E)

C. (B) and (C)

D. (B) and (D)

Answer: D

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53. Which of the following promotes softening of fruits

A. Polygalacturonase

B. Colchicine

C. Polyethylene glycol

D. Cellulase

Answer: A

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54. Which of the following statements is/are not true

(A) Glycerol is a 3 carbon alcohol with 3 OH groups that

(B) Waxes are esters formed between a long chain alcohol and saturated fatty acids

(C) The term protein was coined by Gerardus Johannes Mulder

(D) Agar is an indispensable polysaccharide and it is a complex polymer of glucose and sulphur-containing carbohydrates

A. (A) and (C) only

B. (A) and (D) only

C. (A), (B), and (D) only

D. (D) only

Answer: D

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55. Which is an organic compound found in most cells

Or

Most common monomer of carbohydrate is

Or

The "repeating unit" of glycogen is

A. Glucose

B. Water

C. Sodium chloride

D. Oxygen

Answer: A

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56. Quarternary structure of protein

A. Consists of four subunits

B. May be either α or β

C. Is unrelated to two function of the protein

D. Is dictated by the primary structures of the individual subunits

Answer: D

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57. Which of the following carbohydrates is not a disaccharide

A. Maltose

B. Lactose

C. Sucrose

D. Galactose

Answer: D

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58. Chitin is a

A. Polysaccharide

B. Nitrogenous polysaccharide

C. Lipoprotein

D. Protein

Answer: B

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59. Which of the following is the least likely to be involved in stabilizing the three-dimensional folding of most proteins

A. Ester bonds

B. Hydrogen bonds

C. Electrostatic interaction

D. Hydrophobic interaction

Answer: A

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60. Which of the followings can bring about the denaturation of proteins

A. Reaction to salts of heavy metals

B. Reaction to acid and bases

C. Reaction to inorganic neutral salts

D. Preservation at a temperature below-$5^{\circ} C$

Answer: A::B::C

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61. The two functional groups characteristic of sugars are

A. Hydroxyl and methyl

B. Carbonyl and methyl

C. Carbonyl and phosphate

D. Carbonyl and hydroxyl

Answer: D

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62. A ribose (but not deoxyribose) nucleotide is

A. Cytosine - pentose sugar - phosphate

B. Guanine - pentose sugar - phosphate

C. Thymine - pentose sugar - phosphate

D. Uracil - pentose sugar - phosphate

Answer: D

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63. DNA is present in

Or

Which one of the following has its own DNA

A. Nucleus only

B. Mitochondrion only

C. Chloroplast only

D. All the above

Answer: D

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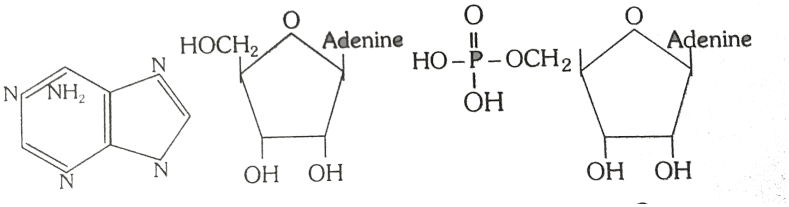
64. See the following figure and identify the correct combination



	A	B	C
(a)	Uracil	Adenosine(Nucleoside)	Adenylic acid(
(b)	Adenosine(Nucleoside)	Adenylic acid(Nucleotide)	Adenine (N -ba
(c)	Adenine(N - base)	Adenosine(Nucleoside)	Adenylic acid(
(d)	Adenin(N - base)	Adenosine(Nucleotide)	Adenylic acid(

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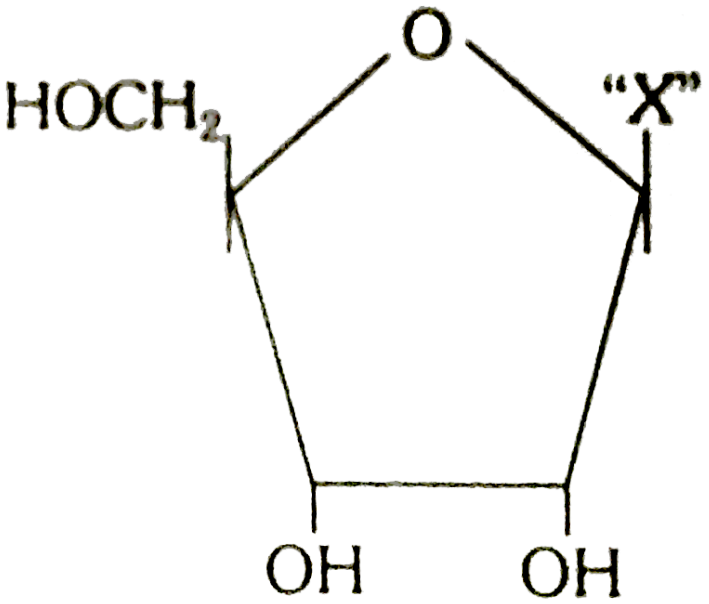
65. Given below is the diagrammatic representation of one of the categories of small molecular weight organic compounds in th living tissues. Identify the category shown and the one blank component "X"in it



	Category	Component
(a)	cholesterol	Guanin
(b)	Amino acid	NH_2
(c)	Nucleotide	Adenine
(d)	Nucleoside	Uracil

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66. DNA is a polymer of

Or

Which is the ultimate unit of DNA molecule

A. Nucleotide

B. Nucleoside

C. Amino acids

D. All of the above

Answer: A

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67. How many nucleotides are present in one turn of DNA helix

A. 4 pairs

B. 8 pairs

C. 10 pairs

D. 9 pairs

Answer: C

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68. ATP is

A. Adenosine D-ribose three phosphate

B. Adenosine L-ribose three phosphate

C. Adenine D-ribose three phosphate

D. Adenine L-ribose three phosphate

Answer: C

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69. Which of the following is correct pair of pyrimidine bases

A. Adenine and Thymine

B. Adenine and Guanine

C. Thymine and Cytosine

D. Guanine and Cytosine

Answer: C

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70. The length of DNA having 23 hase pairs is

A. 70 Å

B. 78.4Å

C. 78.2Å

D. 74.8Å

Answer: D

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71. Name the elements which occur in nucleic acid macromolecule

A. C, H, O, N, S

B. C, O, N, S

C. C, O, P, S

D. C, H, O, N, P

Answer: D

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72. Nucleoside is made up of

A. Sugar only

B. Phosphate only

C. Sugar and phosphate

D. Sugar and base

Answer: D

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73. Strands of DNA are bonded by

A. Hydrogen

B. Carbon

C. Oxygen

D. Nitrogen

Answer: A

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74. RNA and ATP contains

A. Hexose sugar

B. Deoxyribose sugar

C. Dextrose sugar

D. Ribose sugar

Answer: D

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75. Nucleic acid occurs in

A. Golgi body

B. Lysosomes

C. Cytoplasm

D. Mitochondria and chloroplast

Answer: D

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76. Which of the following is not a pyrimidine

A. Thymine

B. Uracil

C. Guanine

D. Cytosine

Answer: C

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77. DNA is not present in one of the following

A. Mitochondria

B. Chloroplast

C. Bacteriophage

D. Tobacco mosaic virus

Answer: D

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78. DNA strands are antiparallel because of the presence of

A. H-bonds

B. Peptide bond

C. Disulphide bonds

D. Phosphate-diester bonds

Answer: A

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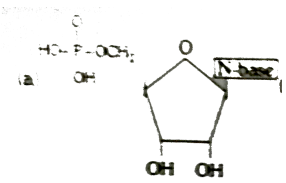
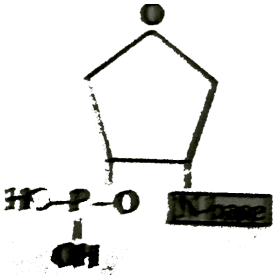
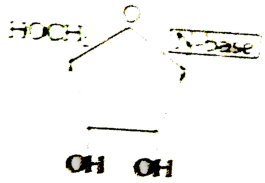
79. Examine the following figures and select the right answer in which diagrammatic representation of a nucleotide is correctly shown

A. 

B. 

C. 

D. 

Answer: A

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80. Which of the following bases is prisent in RNA in place of thymine

A. Uracil

B. Adenine

C. Guanine

D. Water

Answer: A

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81. Nucleic acids were discovered by

Or ltBrgt DNA was first discovered by

A. Watson and Crick

B. Khorana

C. Wilkins

D. Miescher

Answer: D

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82. In DNA molecule, which of the following base pair is present

A. Cytosine and adenine

B. Adenine and thymine

C. Adenine and guanine

D. Cytosine and thymine

Answer: B

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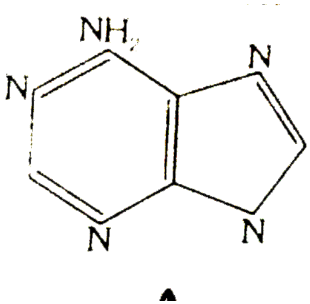
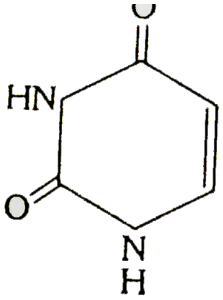
83. The given diagram shows the nitrogenous bases. Identify the correct combination





A. A = Guanine, B = Uracil

B. A = Adenine, B = Uracil

C. A = Guanine, B = Thymine

D. A = Adenine, B = Thymine

Answer: B

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84. The transformation experiments on Pneumococcus showed that

A. DNA can duplicate itself

B. RNA is the genetic material

C. DNA is the genetic material

D. None of these

Answer: C

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85. The base pairs of DNA are correctly shown as

A. $A \equiv T$ and $C = G$

B. A = T and C = G

C. $A = T$ and $C \equiv G$

D. $A \equiv T$ and $C \equiv G$

Answer: C

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86. Which one of the following is widely distributed in a cell

A. DNA

B. RNA

C. Chloroplast

D. Chromoplast

Answer: B

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87. Which of the cell organelles are devoid of deoxy ribonucleic acid

A. Mitochondria and nucleus

B. Chloroplast and mitochondria

C. Nucleus and chloroplast

D. Lysosome and dictyosome

Answer: D

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88. The similarity between DNA and RNA is that both are

A. Double stranded

B. Having similar sugars

C. Polymers of nucleotides

D. Having similar pyrimidines

Answer: C

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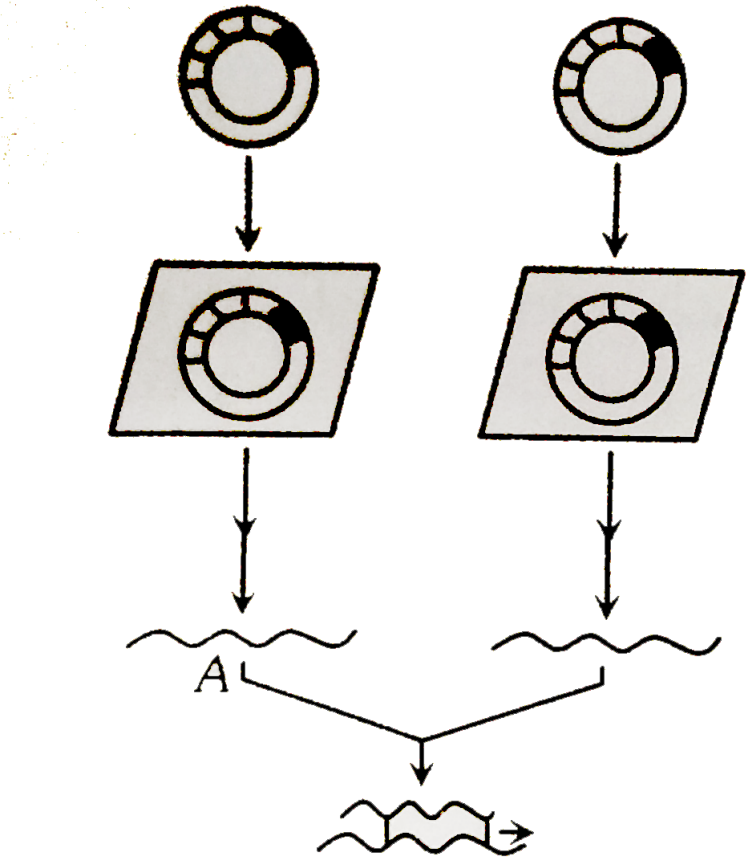
89. What indicated "A" in give figure



A. Peptide bond

B. Glycosidic bond

C. Disulfide bond

D. Hydrophobic bond

Answer: A

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90. Which of the following biomolecules does have phosphodiester bond

A. Monosaccharides in a polysaccharide

B. Amino acids in a polypeptide

C. Nucleic acids in a nucleotide

D. Fatty acids in a diglyceride

Answer: C

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91. Ultraviolet light absorbed by nucleic acid is

A. 26 nm

B. 75 nm

C. 260 nm

D. 1500 nm

Answer: C

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92. Who first used the term "enzyme"

A. J.B. Sumner

B. Kuhne

C. Thompson

D. Garnier

Answer: B

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93. Who coined the term zymase for enzymes in yeast

A. Kuhne

B. Sumner

C. Louis pasteur

D. Edward Buchner

Answer: D

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94. Enzymes are basically or All enzymes contain

A. Sugars

B. Proteins

C. Fats

D. Vitamins

Answer: B

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95. 'Enzymes are proteins", it was suggested by

A. Miller

B. Sumner

C. Pasteur

D. Leeuwenhock

Answer: B

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96. Who got the Nobel prize working on enzymes in the year 1978

A. W. Arber and D. Nathans

B. Nass and Nass

C. R. Misra

D. H.G. Khorana

Answer: A

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97. To explain the mechanism of enzymatic action, who proposed "Lock and key hypothesis"

A. Fischer

B. Jacob

C. Koshland

D. Sumner

Answer: A

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98. Many of the hydrolytic reaction are

A. Reversible

B. Irreversible

C. Endothermic

D. Exothermic

Answer: A

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99. The "lock and key" model of enzyme action illustrates that a particular enzyme molecule

A. May be destroyed and resynthesized several times

B. Interacts with a specific type of substrate molecule

C. Reacts at identical rates under all conditions

D. Forms a permanent enzyme-substrate complex

Answer: B

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100. Enzymes were discovered for the first time in

A. Yeast

B. Maize

C. Bacteria

D. Algae

Answer: A

Watch Video Solution

101. Who discovered 'co-enzymes'

A. James Sumner

B. Fritz Lipmann

C. Mayerhoff

D. Edward Buchner

Answer: B

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102. A competitive inhibitor of succinic dehydrogenase is

A. α-ketoglutarate

B. Malate

C. Malonate

D. Oxaloacetate

Answer: C

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103. An example of feedback inhibition is

A. Cyanide action on cytochrome

B. Sulpha drug on folic acid synthesizer bacteria

C. Allosteric inhibition of hexokinase by glucose 6-phosphate

D. The inhibition of succinic dehydrogenase by malonate

Answer: C

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104. Who proposed the principal of " Induced fit"

A. Jacob

B. Fischer

C. Koshland

D. Laderberg

Answer: C

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105. The molecules that are well recognized as biocatalysts in addition to enzymes are

A. Polysaccharide

B. Fatty acids

C. RNAs

D. None of these

Answer: C

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106. Enzymes are the polymers of

Or

Which of the following is polymerized to form proteins

Or

An enzyme can be synthesised by chemically bonding together molecules of

A. Hexose carbon

B. Fatty acids

C. Amino acids

D. Inorganic phosphate

Answer: C

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107. Telomerase is an enzyme which is a

A. Simple protein

B. RNA

C. Ribonucleoprotein

D. Repetitive DNA

Answer: C

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108. Which one of the following statements is incorrect

A. In competitive inhibition, the inhibitor molecule is not chemically changed by the enzyme

B. The competitive inhibitor does not affect the rate of breakdown of the enzyme-substrate complex

C. The presence of the competitive inhibitor decreases the Km of the enzme for the substrate

D. A competitive inhibitor reacts reversibly with the enzyme to form an enzyme-inhibitor complex

Answer: C

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109. An example of non-competitive inhibition is

A. The inhibition of succinic dehydrogenae by malonate

B. Cyanide action of cytochrome oxidase

C. Sulpha durg on folic acid synthesizing bacteria

D. Reaction of succinic dehydrogenase

Answer: B

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110. Enzymes are absent in

A. Algae

B. Fungi

C. Bacteria

D. Virus

Answer: D

Watch Video Solution

111. Feedback inhibition of enzymes is affected by which of the following

Or

Jacob and Monad named those enzymes allosteric whose activity is regulated by

A. Enzyme

B. Substrate

C. End products

D. Intermediate end products

Answer: C

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112. Non-proteinaceous enzyme that acts as a catalyst for the formation of peptide bond is

Or

"All enzymes are proteins." This statement is now modified because an apparent exception to this biological truth is

A. Spliceosome

B. Ribozyme

C. RNA poly I

D. RNA poly III

Answer: B

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113. Which one of the following statements regarding enzyme inhibition is correct

A. Competitive inhibition is seen when a substrate competes with an enzyme for binding to an inhibitor protein

B. Competitive inhibition is seen when the substrate and the inhibitor compete for the active site on the enzyme

C. Non-competitive inhibition of an enzyme can be overcome by adding large amount of substrate

D. Non-competitive inhibitors often bind to the enzyme irreversibly

Answer: B

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114. In which one of the following enzymes, is copper necessarily associated as an activator

A. Lactic dehydrogenase

B. Tyrosinase

C. Carbonic anhydrase

D. Tryptophanase

Answer: B

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115. Km is related to

A. Morphology

B. ABO blood group

C. ES complex

D. Chromatography

Answer: C

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116. Arrange the steps of catalytic action of an enzyme in order an choose the right option

(A) The enzyme releases the products of the reaction and the enzyme is free to bind to another substrate

(B) The active site of enzyme is in close proximity of the substrate and breaks the chemical bonds of the substrate

(C) The binding of substrate induces the enzyme to alter its shape fitting more tightly around the substrate

(D) The substrate binds to the active site of the enzyme fitting into the active site

A. (D), (C), (B), (A)

B. (C), (B), (A), (D)

C. (D), (B), (A), (C)

D. (B), (A), (D), (C)

Answer: A

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117. Select the option which is not correct with respect to enzyme action

A. A non-competitive inhibitor binds the enzyme at a site distinct from that which binds the substrate

B. Malonate is a competitive inhibitor of succinic dehydrogenase

C. Substrate binds with enzyme at its active site

D. Addition of lot of succinate does not reverse the inhibition of succinic dehydrogenase by malonate

Answer: D

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118. Inhbition of acetylcholine by DEP (Diisorprophl-fluorophosphate) is an example of

A. Competitive inhibition

B. Non-competitive inhibition

C. Non-competitive iirreversible inhibition

D. Allosteric inhibition

Answer: C

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119. The catalytic efficiency of two different enzymes can be compared by the

A. Formation of the product

B. The pH of optimum value

C. The Km value

D. Molecular size of the enzyme

Answer: C

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120. Which one of the following enzyme contains Mn metallic ion as the prosthetic group

Or

Which one of the following enzyme is not used in making detergent

A. Phosphatase

B. Dehydrogenase

C. Peptidase

D. Catalase

Answer: C

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121. Three of the following statements about enzymes are correct and one is wrong. Which one is wrong

A. Enzymes require optimum pH for maximal activity

B. Enzymes are denatured at high temperature but in certain exceptional organisms they are effective even at temperatures $80^\circ - 90^\circ C$

C. Enzymes are highly specific

D. Most enzymes are proteins but some are lipids

Answer: D

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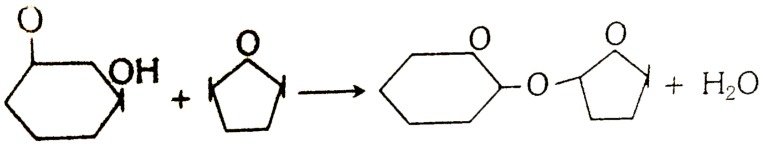
122. Which type of reaction is shown by the following figure



Or

Formation of both peptide and glycosidic bonds involves

A. Hydration

B. Denaturation

C. Dehydration

D. Dydrolysis

Answer: C

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123. Transition state structure of the substrate formed during an enzymatic reaction is

A. Permanent and stable

B. Transient but stable

C. Permanent but unstable

D. Transient but unstable

Answer: D

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124. An organic substance bound to and enzyme and essential for its activity is called

Or

Non-protein part of an enzyme is known as

A. Apoenzyme

B. Isoenzyme

C. Coenzyme

D. Holoenzyme

Answer: C

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125. An enzyme acts by

A. Reducing the energy of activation

B. Increasing the energy of activation

C. Decreasing the pH

D. Increasing the pH

Answer: A

Watch Video Solution

126. The protein part of enzyme is known as

Or

The enzyme which combines with non-protein part to form a functional enzyme known as

A. Holoenzyme

B. Apoenzyme

C. Isoenzyme

D. All of the above

Answer: B

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127. Which enzyme shows greatest substrate specificity

A. Nuclease

B. Trypsin

C. Sucrase

D. Pepsin

Answer: C

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128. Which one of the following statements is correct with reference to enzymes

A. Apoenzyme = Holoenzyme + Coenzyme

B. Holoenzyme = Apoenzyme + Coenzyme

C. Coenzyme = Apoenzyme + Holoenzyme

D. Holoenzyme = Coenzyme + Co-factor

Answer: B

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129. Number of active sites in allosteric enzyme is

A. One

B. Two

C. Three

D. Four

Answer: B

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130. Which one value is required for better enzymatic action

A. High Ki

B. Low Ki

C. Low Km

D. High Km

Answer: B

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131. Cofactor (prosthetic group) is a part of holoenzyme. It is

A. Loosely attached inorganic part

B. Accessory non-protein substance attached firmly

C. Loosely attched organic part

D. None of these

Answer: B

Watch Video Solution

132. The permeases are

A. Structural membrane proteins

B. Enzymatic membrane proteins

C. Carrier membrane proteins

D. None of these

Answer: C

Watch Video Solution

133. Which one of the following is not true for enzymes

A. They act on a specific substrate

B. They are made up of fat and sugar

C. They act at a specific temperature

D. They act at a specific pH

Answer: B

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134. Co-enzyme is

A. Always a protein

B. Often a vitamin

C. Always an inorganic compound

D. Often a metal

Answer: B

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135. Which of the following enzyme can form RNA fron DNA

A. Restriction enzyme

B. DNA polymerase

C. RNA polymerase

D. Reverse transcriptase

Answer: C

Watch Video Solution

136. Inhibitory effect of melonic acid on succinic dehydrogenase enzyme is

A. Competitive inhibition

B. Non-competitive inhibition

C. Feedback inhibition

D. Inhibition hue to end product

Answer: A

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137. Lactose operon is considered to be glucose sensitive due to

A. Catabolite induction

B. Allosteric inhibition

C. Anabolic inhibition

D. None of these

Answer: A

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138. FAD or FMN is a coenzyme. Which vitamin is incorporated into its structure

A. Vitamin C

B. Vitamin B_1

C. Vitamin B_6

D. Vitamin B_2 (Riboflavin)

Answer: D

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139. Which of the following enzyme has/have haem as a prosthetic group

(i) Catalase

(ii) Carboxypeptidase

(iii) Succinic dehydrogenase

(iv) Peroxidase

A. (i) Only

B. (i) and (ii)

C. (ii) and (iii)

D. (i) and (iv)

Answer: D

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140. Which of the following is not co-enzyme

A. NAD

B. NADP

C. FAD

D. ATP

Answer: D

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141. Enzymes capable of changing their form are called

A. Apoenzyme

B. Holoenzyme

C. Isoenzyme

D. Allosteric enzymes

Answer: D

Watch Video Solution

142. Enzymes as they exist inside the cell are

A. In solid form

B. In crystalline form

C. In colloidal form

D. In solution form

Answer: C

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143. Select the type of enzyme involved in the following reaction

$S - G + S' \rightarrow S + S' - G$

A. Dehydrogenase

B. Transferase

C. Hydrolase

D. Lyase

Answer: B

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144. Template theory of enzyme action is supported by

A. Enzymes occur in living beings and speed up certain reaction

B. Enzymes speed up reaction

C. Enzymes determine the direction of reaction

D. Compounds similar to substrate inhibit enzyme activity

Answer: D

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145. Decline in the activity of the enzyme hexokinase by glucose 6 - phosphate is caused by

A. Non-competitive

B. Competitive inhibitions

C. Allosteric modulator

D. Denaturation of enzymes

Answer: C

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146. During glycolysis enzyme hexokinase chages glucose to glucose-6-phosphate. Glucose-6-phosphate is inhibited by

A. Feedback inhibition

B. Positive feedback

C. Competitive inhibition

D. Non-competitive inhibition

Answer: A

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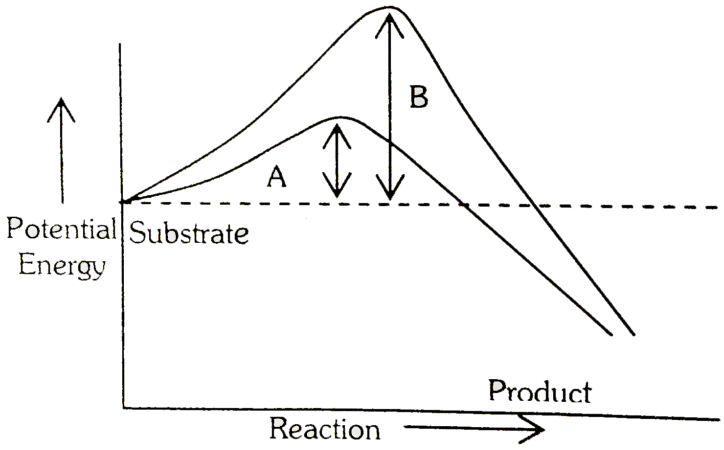
147. Which of the following describes the given grapgh correctly



A. Exothermic reaction with energy A in absence of enzyme and B in presence of enzyme

B. Endothermic reaction with energy A in presence of enzyme and B in absence of enzyme

C. Exothermic reaction with energy A in presence of enzyme and B in absence of enzyme

D. Endothermic reaction with energy A in absence of enzyme and B in presence of enzyme

Answer: C

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148. Enzymes that catalyse inter-conversion of optical, geometrical or positional isomers are

A. Ligases

B. Lyases

C. Hydrolases

D. Isomerases

Answer: D

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149. Systematic approach of naming enzymes has been recommended by the Commission on Enzymes of the

A. International Union of Physiology

B. International Union of Biochemistry

C. International Union of Biotechnology

D. International Union of Genetic Engineering

Answer: B

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150. Basically how many types of enzymes have been recognised by International Union of Biochemistry

A. 4

B. 5

C. 6

D. 8

Answer: C

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151. In the modern system of nomenclature which one of the following enzyme occupies 1st position

A. Oxidoreductase

B. Transferase

C. Hydrolase

D. Ligase

Answer: A

Watch Video Solution

152. The plant proteinases or endopeptidases enzyme is

A. Urease

B. Papain

C. Pepsin

D. Trypsin

Answer: B

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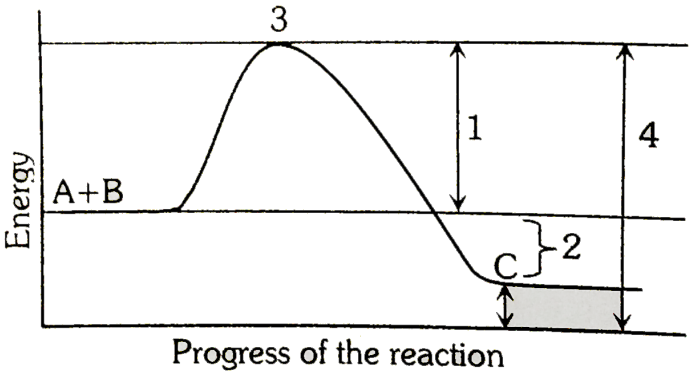
153. See the following figure and identify 1, 2, 3 and 4 from the list I to IV



I. Segment representing the energy of activation

II. Segment representing the amount of free energy released by the reaction

III. Transition state

IV. Segment would be the same regardless of whether the reaction were

uncatalysed or catalysed. Which one correct

	I	II	III	IV
(a)	1	2	4	3
(b)	1	3	2	4
(c)	1	2	3	2
(d)	1	3	2	4

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154. Zymogens are

A. Enzyme acting upon starch

B. Group of zymase enzymes

C. Inactive enzyme precursors

D. None of the above

Answer: C

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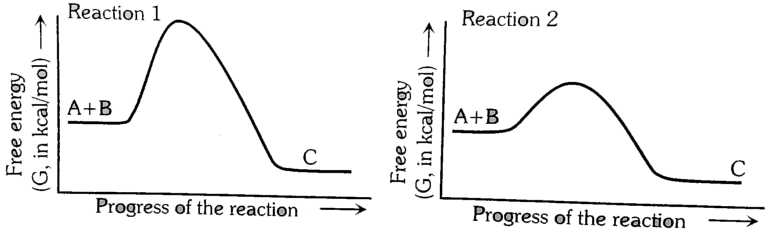
155. The two chemical reactions are showing in the following figure. Which statement is correct for reaction 1



A. Slower and more exergonic than 2

B. Slower and more endergonic than 2

C. Faster and more exergonic than 2

D. Faster and more endergonic than 2

Answer: A

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156. At the time of cotton seeds germination, the stored food is digested by

Or

Which one of the following enzyme is composed of simple proteins

A. Diastase

B. Maltase

C. Lipase

D. Amylase

Answer: D

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157. Fat is hydrolysed by enzyme lipase to yield

A. Fatty acid and amino acids

B. Gycerol and fatty acids

C. Glycerine and water

D. Glycerol and amino acids

Answer: B

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158. Substrate of amylase enzyme is

A. Protein

B. Fat

C. Starch

D. Sucrose

Answer: C

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159. Enzyme which hydrolyses starch to maltose is

A. Lactase

B. Protease

C. Maltase

D. Amylase

Answer: D

Watch Video Solution

160. Which one is not an example for hydrolases

Or

Hydrogen is removed from a substrate with the help of enzyme or

Enzyme concerned with transfer of electrons are

A. Dehydrogenase

B. Protease

C. Amylase

D. Esterase

Answer: A

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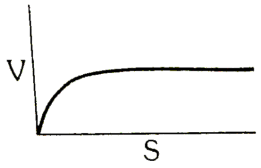
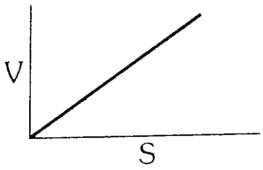
161. Which graph shows the relationship between the rate of an enzymatic activity and substrate conc. (S)

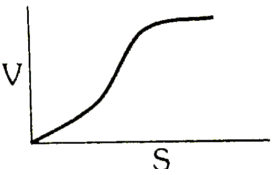
A.



B.



C.



D.

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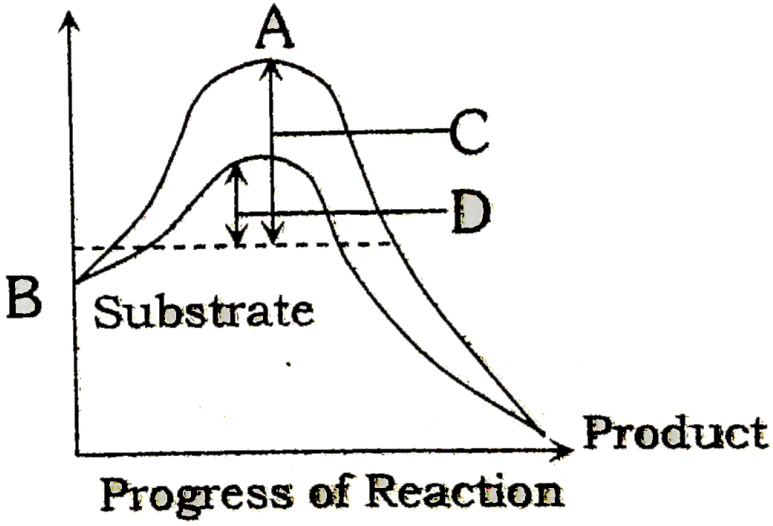
162. The figure given below shows the conversion of a substrate into product by an enzyme. In which one of the four options (a-d) the components of reaction labelled as A, B, C and D are identified correctly



A.

	A	B	C
(a)	Potential energy	Transition state	Activation energy with enzy

B.

	A	B	C
(a)	Transition state	Potential energy	Activation energy without e

C.

	A	B	C
(a)	Potential energy	Transition state	Activation energy with enzy

D.

	A	B	C
(a)	Activation energy with enzyme	Transition state	Activation en

Answer: B

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163. Which enzyme helps in removing oil stains from clothes

Or

Which enzyme digests the stored food material of castor seeds

A. Streptokinase

B. Trypsin

C. Lipase

D. Amylase

Answer: C

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164. Enzyme having different molecular arrangement but similar functions is

Or

Enzymes which are slightly different in molecular structure but can perform identical activity are called

A. Isoenzyme

B. Holoenzyme

C. Apoenzyme

D. Co-enzyme

Answer: A

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165. Allosteric modulation is due to the inhibition action of enzyme by

A. Competitive inhibition

B. Substrate concentration

C. Products of reaction

D. Enzyme conecentration

Answer: C

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166. Which one of the following pairs is wrongly matched

A. Detergents - lipase

B. Alcohol - nitrogenase

C. Fruit juice - pectinase

D. Textile - amylase

Answer: B

Watch Video Solution

167. Modern detergents contain enzyme preparations of

A. Thermoacidophiles

B. Thermophiles

C. Acidophiles

D. Alkaliphiles

Answer: D

Watch Video Solution

168. Signaling between cells usually resulys in the activation of protein

A. Lipases

B. Kinases

C. Proteases

D. Nucleases

Answer: B

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169. With reference to enzymes, turnover number means.....

A. The number of substrate molecules that a molicule of an enzyme converts into products per hour

B. The number of substrate molecules that a molecule of an enzyme converts into products per second

C. The number of substrate molecules that a molecule of an enzyme convert into produsts per minute

D. The number of substrate molicules that a molecule of an enzyme converts into products per day

Answer: C

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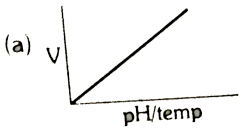
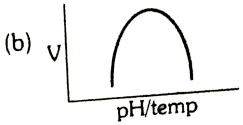
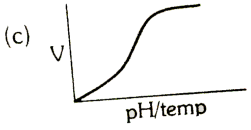
170. Which graph represents the effect of pHk/temp on the velocity of a typical enzymatic reaction (V)

A. 

B. 

C. 

D.

Answer: B

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171. The effectiveness of an enzyme is affected least by

A. Temperature

B. Concentration of the substrate

C. Original activation energy of the system

D. Concentration of the enzyme

Answer: C

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172. The enzyme which converts glucose into ethyl alchohol (C_2H_5OH) is

A. Diastase

B. Maltase

C. Zymase

D. Invertase

Answer: C

Watch Video Solution

173. The enzymes ribulose biphosphate carboxylase-oxygenase and phosphoenol pyruvate carboxylase are activated by

A. Mg

B. Zn

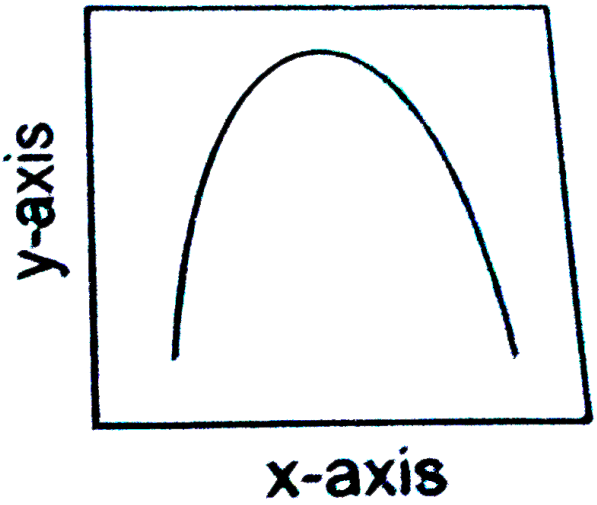
C. Mo

D. Mn

Answer: A

Watch Video Solution

174. the curve given below shows wnzymatic acitvity with relation to three conditions (pH , temperature and substrate concentration).



what do the two axes (x and y) represent ?

A. X-axis Y-axis
(a)Enzymatic activity Temperature

B. X-axis Y-axis
(b)Enzymatic activity pH

C. X-axis Y-axis
(c)Temperature Enzyme Acitivity

D. X-axis Y-axis
(d)Substrate concentration Enzymatic Activity

Answer: C

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175. The nucleic acids are broken into nucleotides by.....

A. Amylases

B. Nucleases

C. Lipases

D. Proteases

Answer: B

Watch Video Solution

176. Which one of the following is wrongly matched

A. Fungi - Chitin

B. Phospholipid - Plasma membrane

C. Enzyme - Lipopolysaccharide

D. ATP - Nucleotide derivative

Answer: C

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177. As temperature changes from $3^{\circ} C$ to $45^{\circ} C$, the rate of enzyme activity will

A. Decrease and then increase

B. Increase and then decrease

C. Increase only

D. Decrease only

Answer: B

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178. It is said that elemental composition of living organisms and that of inanimate objects (like earth's crust) are similar in the sense that all the major elements are present in both. Then what would be the difference between these two groups ?

Choose a correct answer from the following.

A. Living organisms have more gold in them than inanimate objects

B. Living organisms have more water in their body than inanimate objects

C. Living orgnisms have more carbon, oxygen and hydrogen per unit mass than inanimate objects

D. Living organisms have more calcium in them than inanimate objects

Answer: C

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179. Many elements are found in living organisms either free or in the form of compounds. One of the following is not found in living organisms.

A. Silicon

B. Magnesium

C. Iron

D. Sodium

Answer: A

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180. Aminoacids, as the name suggests, have both an amino group and a carboxyl group in their structure. In addition, all naturally occurring aminoacids (those which are found in proteins) are called L-aminoacids. From this, can you guess from which compound can the simplest aminoacid be made

A. Formic acid

B. Methane

C. Phenol

D. Glycine

Answer: B

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181. Many organic substances are negatively charged e.g., acetic acid, while others are positively charged e.g., ammoniumion. An aminoacid under certain conditions would have both positive and negative charges simultaneously in the same molecule. Such a form of aminoacid is called

A. Positively charded form

B. Negatively charged form

C. Neutral form

D. Zwitterionic form

Answer: D

Watch Video Solution

182. Which of the following sugars have the same number of carbon as present in glucose ?

A. Fructose

B. Erythrose

C. Ribulose

D. Ribose

Answer: A

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183. When you take cells or tissue pieces and grind them with an acid in a mortar and pestle, all the small biomolecules dissolve in the acid. Proteins, polysaccharides and nucleic acids are insoluble in mineral acid and get precipitated. The acid soluble compounds include aminoacids, nucleosides, small sugars ets. When one adds a phosphate group to a nucleoside one gets another acid soluble biomolecule calle

A. Nitrogen base

B. Adenine

C. Sugar phosphate

D. Nucleotide

Answer: D

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184. When we homogenise any tissue in an acid the acid soluble pool represents

A. Cytoplasm

B. Cell membrane

C. Nucleus

D. Mitochondria

Answer: A

Watch Video Solution

185. The most abundant chemical in living organisms could be

A. Protein

B. Water

C. Sugar

D. Nucleic acid

Answer: B

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186. A homopolymer has only one type of building block called monomer repeated 'n' number of times. A heteropolymer has more than one type of monomer. Proteins are heteropolymers usually made of

A. 20 types of monomers

B. 40 types of monomers

C. 3 types of monomers

D. Only one type of monomer

Answer: A

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187. Proeins perform many physiological functions. For example, some functions as enzymes. One of the following represents an additional function that some proteins discharge

A. Antibiotics

B. Pigment conferring colour to skin

C. Pigments making colours of flowers

D. Hormones

Answer: D

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188. Glycogen is a homopolymer made up of

A. Glucose units

B. Galactose untis

C. Ribose units

D. Aminoacids

Answer: A

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189. The number of 'ends' in a glycogen molecule would be

A. Equal to the number of branches plus one

B. Equal to the number of branch points

C. One

D. Two, one on the left side and another on the right side

Answer: A

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190. A pure protein should normally have

A. Two ends

B. One end

C. Three ends

D. No ends

Answer: A

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191. Enzymes are biocatalysts. They catalyse biochemical reaction. In general they reduce activation energy of reactions. Many physico-chemical

processes are enzyme mediated. Some examples of enzyme mediated reactions are given below. Tick the wrong entry

A. Dissolving CO_2 in water

B. Unwinding the two strands of DNA

C. Hydrolysis of sucrose

D. Formation of peptide bond

Answer: D

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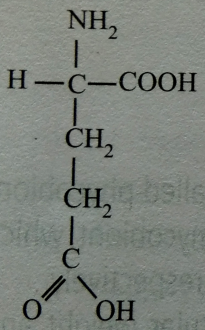
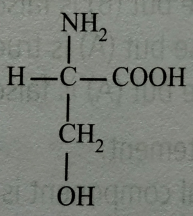
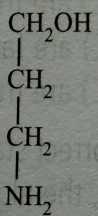
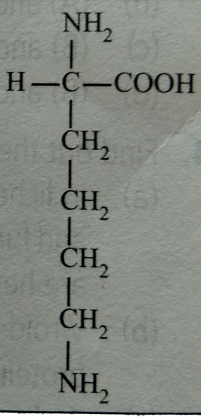
192. Which one out of A-D given below correctly represents the structural formula of a basic amino acid ?

A	B	C	D
			

A. C

B. D

C. A

D. B

Answer: B

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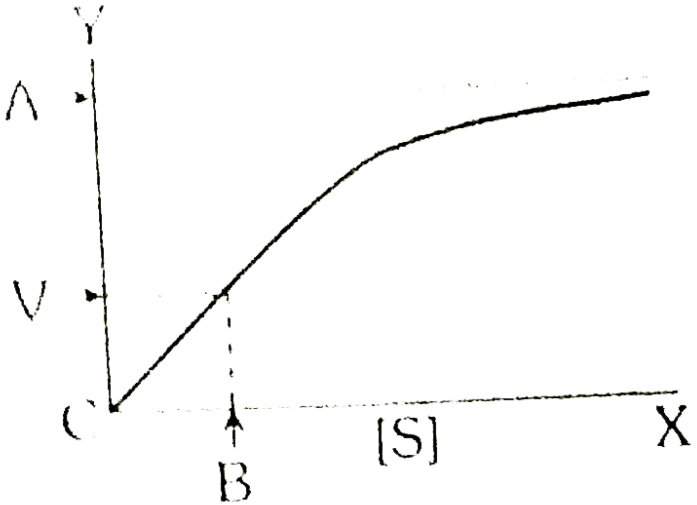
193. The given adjacent graph depicts the change in conc. of substrate on enzyme activity. Identify A, B abd C



A. $\begin{vmatrix} & \text{A} & \text{B} & \text{C} \\ (a) & \text{K}_m & \text{V}_{\max} & \text{V}_{\frac{\max}{2}} \end{vmatrix}$

B. $\begin{vmatrix} & \text{A} & \text{B} & \text{C} \\ (a) & \text{V}_{\max} & \text{K}_m & \text{V}_{\frac{\max}{2}} \end{vmatrix}$

C. $\begin{vmatrix} & \text{A} & \text{B} & \text{C} \\ (a) & \text{V}_{\frac{\max}{2}} & \text{K}_m & \text{Ki} \end{vmatrix}$

D. $\begin{vmatrix} & \text{A} & \text{B} & \text{C} \\ (a) & \text{Ki} & \text{K}_m & \text{V}_{\max} \end{vmatrix}$

Answer: B

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194. Enzymes generally have

A. Same pH and temperature optime

B. Same pH but different temperature optima

C. Different pH but same temperature optima

D. Different pH and different temperature optima

Answer: C

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195. Most of the biochemical reaction differ from those occuring in the non-living world in

A. Requiring energy

B. Releasing energy

C. Being enzymatic

D. Being spontaneous

Answer: C

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196. A phosphoglyceride is always made up of

A. A saturated or unsaturated fatty acid esterified to a phosphate group which is also attached to a glycerol molecule

B. Only a saturated fatty acid esterified to a glycerol molecule to which a phosphate group is also attached

C. Only a unsaturated fatty acid esterified to a glycerol molecule to which a phosphate group is also attached

D. A saturated or unsaturated fatty acid esterified to a glycerol molecule to which a phosphate group is also attached

Answer: D

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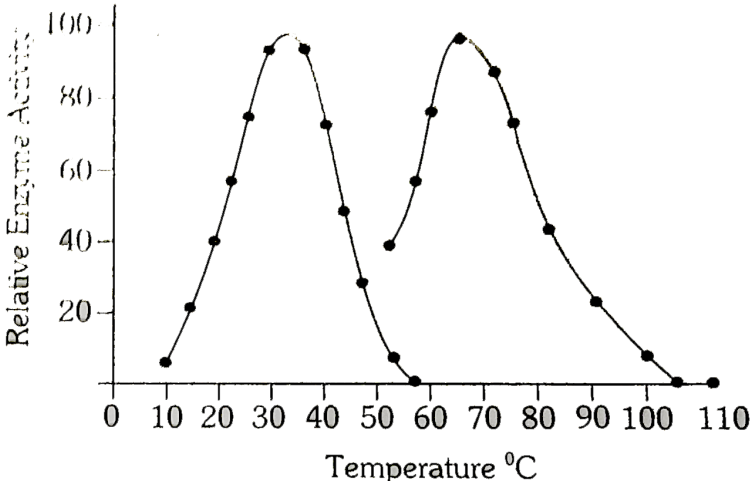
197. The given graph depicts the effect of temperature on the activity of the two enzymes A and B that catalyze the same reaction. Select the correct statement (s) for these results



A. The rate of reaction in each case increases with increase in temperature and declines at higher temperatures due to denaturation of the enzyme

B. Both the enzymes A and B are thermolabile

C. At higher temperature the reactants become highly energized and fail to interact with active site, thus decreasing the rate of reaction

D. The enzyme A is from a mesophilic organism, whereas the enzyme B is from a thermophilic organism

A. A, B, D

B. C and D

C. B and C

D. A and B

Answer: A

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198. In the modern system of nomenclature which one of the following enzyme occupies 6th position

A. Ligase

B. Isomerase

C. Lyase

D. Hydrolase

Answer: A

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199. The most important property of an enzyme is its

A. Composition

B. Thermal denaturation

C. Specificity

D. Solubility

Answer: C

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200. The ratio of the enzyme to substrate molecule can be as high as

A. $1:1000$

B. $1:1,00,000$

C. $1:10,00,000$

D. $1,50,000$

Answer: C

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201. Repressible enzymes are formed

A. In the absence of corepressor

B. In the presence of corepressor

C. In the presence of apressor

D. All of the above

Answer: A

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202. The enzyme nitrogenase is extremely sensitive to

A. Oxygen

B. Nitrogen

C. Hydrogen

D. Helium

Answer: A

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203. Which of the following are not polymeric

A. Nucleic acid

B. Proteins

C. Polysaccharides

D. Lipids

Answer: D

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204. Assertion : DNA is associated with proteins.

Reason : DNA binds around histone proteins that form a pool and the entire structure is called a nucleosome.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: A

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205. Assertion : The bonds attaching second and third phosphated in higher nucleotide are high energy bonds

Reason : The bonds are attached against force of repulsion.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: A

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206. Assertion : Enzymes have active sites and substrates reactive sites, on their surfaces respectively.

Reason : Active and reactive sites push the enzyme and substrate molecules away from each other.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: C

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207. Assertion : Enzyme substrate complex remains throughout the reaction.

Reason : The greater the affinity of the enzyme for a substrate, the higher is the catalytic activity.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: D

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208. Assertion : Desmolysing enzymes are those which catalyse the reactions by hydrolysis.

Reason : Digestive enzymes are hydrolysing in nature.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: D

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209. Assertion : Coenzymes are also called prosthetic groups.

Reason : Coenzymes and prosthetic groups are cofactors.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: D

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210. Assertion : Enzymes are defined as biological lproteins.

Reason : Chemically alll enzymes are globular proteins.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: A

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211. 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 the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If both the assertion and reason are false

Answer: D

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212. Assertion : The higher the turn-over number the more efficient an enzyme is.

Reason : It is not dependent upon the number of active sites present over an enzyme.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: C

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213. Assertion : Allosteric enzymes show feed back inhibition.

Reason : The inhibition is competitive.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: C

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214. Assertion : Enzyme becomes inactive below minimum temperature.

Reason : The inactivity of the enzymes is due to denaturation.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: C

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215. Assertion : Enzymes lower the activation energy.

Reason : A substrate molecule can be acted upon by a particular enzyme.

A. If both the asseration and the reason are true and the reason is a correct explanation of the assertion

B. If both the assertion and rreason are true but the reason not a correct explanation of the assertion

C. If the assertion is true but the reason is false

D. If the assertion is false but reason is true

Answer: B

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216. Raphides are found

A. Dahlia

B. Asparagus

C. Nut

D. Guav

Answer: B

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217. Which level of protein structure is affected by DNA

A. Primary structure

B. Secondary structure

C. Tertiary structure

D. Quaternary structure

Answer: A

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218. Insoluble carbohydrate inulin is commonly found in

A. Root of beet

B. Stem of sugarcane

C. Fruit of grapes

D. Root of Dahlia

Answer: D

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219. Ribose is a

A. Monosaccharide

B. Disaccharide

C. Polysaccharide

D. None

Answer: A

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220. The unit of cellulose is

A. Glucose

B. Fructose

C. Mannose

D. Galactose

Answer: A

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221. Pepsin is inactivated at pH

A. Below 3

B. Below 2

C. Above 5

D. Above 3

Answer: C

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222. Papain produced from

A. Carica papaya

B. Glycine max

C. Citrus sp

D. Ficus carica

Answer: A

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223. What enzymes do for a biochemical reaction

A. Alter its rate

B. Alter its pattern

C. Alter both

D. None of the above

Answer: A

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224. The enzymes required to obtain protoplast from a plant cell are

A. Cellulase and proteinase

B. Cellulase and amylase

C. Cellulase and pectinase

D. Amylase and pectinase

Answer: C

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225. Enzymes have a very narrow optima for

A. Light

B. Temperature

C. pH

D. Humidity

Answer: C

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226. The given graph shows the effect of substrate concentration on the rate of reaction of the enzyme green gram-phosphatase

What dose the graph indicate

A. The rate of enzyme reaction is directly proportional to the substrate concentration

B. Presence of an enzyme inhibitor in the reaction mixture

C. Formation of an enzyme-substrate complex

D. At higher substrate concentration the pH increase

Answer: B

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227. Molecular weight of enzyme is

A. Less than 5000

B. 5000 to 10000

C. 10000 to 20000

D. More than 40000

Answer: D

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228. The term 'feedback' refers to

A. The effect of end product on the rate of enzymatic reaction

B. The effect of substrate on the rate of enzymatic reaction

C. The effect of an external compound on the rate of enzymatic reaction

D. The effect of enzyme concentration on its rate of reaction

Answer: A

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