BIOLOGY

BOOKS - MODERN PUBLISHERS

BIOLOGY (HINGLISH)

BIOMOLECULES

Practice Problems

1. Define cellular pool.

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2. List the protoplasmic elements .

Watch Video Solution

3. Name two fractions obtained during chemical analysis of living tissue.

Watch Video Solution

4. What are building blocks of proteins ?

Watch Video Solution

5. Name two basic amino acids .

Watch Video Solution

6. What do you mean by Zwitter ion ?

Watch Video Solution

7. List one difference between essential and non-essential amino acids.

Watch Video Solution

8. Give the general formula of monosugars .

Watch Video Solution

9. Give one difference between furanose and pyranose ring .

Watch Video Solution

10. What are building blocks of nucleic acids ?

Watch Video Solution

11. List three components of a nucleotide .

Watch Video Solution

12. Name four types of nucleotides of RNA.

Watch Video Solution

13. List a difference between nucleoside and nucleotide.

Watch Video Solution

14. What are triglycerides .

Watch Video Solution

15. Give one difference between primary and secondary metabolites.

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Practice Problems Biomacromolecules

1. Name the macrobiomolecules found in acid - insoluble fraction of cell.

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2. Which type of bonds are found in the proteins and polysaccharides .

Watch Video Solution

3. What does tertiary structure of a protein indicate ?

Watch Video Solution

4. Name two transport proteins .

Watch Video Solution

5. List one difference between homopolysaccharide or heteropolysaccharide.

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6. Why cellulose , starch and glycogen are commonly called glucans ?

Watch Video Solution

7. Why is chitin also called fungal cellulose?

Watch Video Solution

8. Give the function of heparin .

Watch Video Solution

9. Which types of bonds are found in nucleic acids?

Watch Video Solution

10. What do you mean by antiparallel nature of two DNA chains ?

Watch Video Solution

11. Give one difference between B-DNA and Z-DNA .

Watch Video Solution

12. What do you mean by amphipathic nature of phospholipids ?

Watch Video Solution

13. Name two derived lipids.

Watch Video Solution

Practice Problems Enzymes

1. Name two non-proteinaceous enzymes .

Watch Video Solution

2. Define turn over number .

Watch Video Solution

3. Who proposed lock and key hypothesis of enzyme activity ?

Watch Video Solution

4. What do you mean by Km-value ?

 Watch Video Solution

5. Define denaturation of enzymes .

 Watch Video Solution

6. Give one example of competitive inhibition .

 Watch Video Solution

7. List one difference between prosthetic group and coenzyme.

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Ncert File Ncert Exercise Questions

1. What are macromolecules ? Give examples .

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2. Illustrate a glycosidic, peptide and a phosphodiester bond.

Watch Video Solution

3. What is meant by tertiary structure of proteins ?

Watch Video Solution

4. Find and write down structures of 10 interesting small molecular weight biomolecules. Find if there is any industry which manufactures the compounds by isolation. Find out who are the buyers.

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5. Proteins have primary structure. If you are given a method to know which amino acid is at either of the two termini (ends) of a protein,

can you connect this information to purity or homogeneity of a protein?

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6. Find out and make a list of proteins used as therapeutic agents. Find other applications of proteins (e.g., cosmetics, etc.)

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7. Explain the composition of triglyceride.

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8. Can you describe what happens when milk is converted into curd or yoghurt from your understanding of proteins?

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9. Can you attempt building models of biomolecules using commercially available atomic models (Ball and Stick models).

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10. Attempt titrating an amino acid against a weak base and discover the number of dissociating (ionizable) functional groups in the amino acid.

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11. Draw the structure of the amino acid alanine .

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12. What are gums made of ? Is fevicol different ?

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13. Find out a qualitative test for proteins, fats and oils, amino acids and test any fruit juice, saliva, sweat and urine for them.

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Ncert File Ncert Exemplar Problems Multiple Choice Questions

1. 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 organisms have more carbon, oxygen and hydrogen per unit mass than inanimate objects.

D. Living organisms have more calcium in them inanimate

Answer: C

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2. 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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3. 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: A

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4. 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 charged form

B. Negatively charged form

C. Neutral form

D. Zwitterionic form

Answer: D

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5. Sugars are technically called carbohydrates, referring to the fact that their formulae are only multiple of $C(H_2O)$. Hexoses therefore have six carbons, twelve hydrogens and six oxygen atoms. Glucose is a hexose. Choose from among the following another hexose.

A. Fructose

B. Erythrose

C. Ribulose

D. Ribose

Answer: A

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

A. Cytoplasm

B. Cell membrane

C. Nucleus

D. Mitochondria

Answer: A

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8. The most abundant chemical in living organisms could be

A. Protein

B. Water

C. Sugar

D. Nucleic acid

Answer: B

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9. 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 made of amino acids. While a nucleic acid like DNA or RNA is made of only 4 types of nucleotide monomers, proteins are 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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10. Proteins perform many physiological functions. For example, some function as enzymes. One of the following represents an additional function that some proteins discharge

A. Antibiotics

B. Pigments conferring colour to skin

C. Pigments making colours of flowers

D. Hormones

Answer: D

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11. Glycogen is a homopolymer made of:

A. Glucose units

B. Galactose units

C. Ribose units

D. Aminoacids

Answer: A

 Watch Video Solution

12. 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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13. A pure protein should normally have

A. Two ends

B. One end

C. Three ends

D. No ends

Answer: A

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14. Enzymes are biocatalysts. They catalyse biochemical reaction. In general they reduce activation energy of reactions. Many physio-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. Untwining the two strands of DNA

C. Hydrolysis of sucrose

D. Formation of peptide bond

Answer: D

Watch Video Solution

Ncert File Ncert Exemplar Problems Very Short Answer Type Questions

1. Medicines are either man made (i.e., synthetic) or obtained from living organisms like plants, bacteria, animals, etc., and hence, the latter are called natural products. Sometimes, natural products are chemically altered by man to reduce toxicity or side effects. Write against each of the following whether they were initially obtained as a natural product or as a synthetic chemical.

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2. Select an appropriate chemical bond among ester bond, glycosidic bond, peptide bond and hydrogen bond and write against each of the following :

(a) Polysaccharide . . . . . .

(b) Protin . . . . . .

(c) Fat . . . .

(d) Water . . . . . .

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3. Write the name of any one amino acid, sugar, nucleotide and fatty acid.

View Text Solution

4. Reaction given below is catalysed by oxidorecductase between two substrates A and A' complete the reaction.

A reduced + A' oxidised $\rightarrow$

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5. How are prosthetic groups different from co-factors?

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6. Glycine and alanine are different with respect to one substituent on the α-carbon. What are the other common substituent groups ?

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7. Starch, Cellulose, Glycogen, Chitin are polysaccharides found among the following, Choose the one appropriate and write against each:

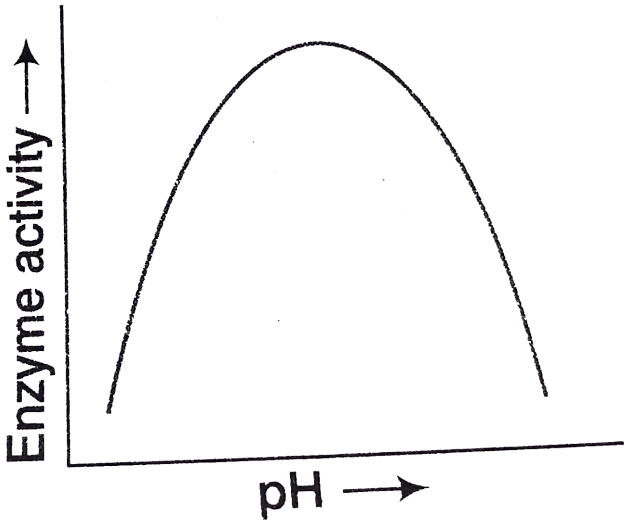
View Text Solution

Ncert File Ncert Exemplar Problems Short Answer Type Questions

1. Enzymes are proteins, Proteins are long chains of amino acids linked to each other by peptide bonds. Amino acids have many functional groups in their structure.

These functional groups are many of them at least, ionisable. As they are weak acids and bases in chemical nature, this ionisatio is infuluenced by pH of the solution. For many enzymes, activity is influenced by surrounding pH. This is depicted in the curve below, explain

briefly.



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2. Is rubber a primary metabolite or a secondary metabolite? Write four sentences about rubber.

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3. Schematically represent primary, secondary and tertiary structures of a hypothetical polymer say for example a protein.

Watch Video Solution

4. Nucleic acids exhibit secondary structure, justify with example.

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5. Comment on the statement 'living state is a non-equilibrium steady state to be able to perform work :

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Ncert File Ncert Exemplar Problems Long Answer Type Questions

1. Formation of Enzyme substrate complex (ES) is the first step in the caalysed reactions.

Describe the other steps till the formation of product.

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2. What are different classes of enzymes? Explain any two with the type of reactions they catalyse.

Watch Video Solution

3. Nucleic acid exhibit secondary structure. Describe through Watson-Crick model.

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4. What is the difference between a nucleotide and nucleoside ? Give two examples of each with their structure.

Watch Video Solution

5. Describe various forms of lipid with a few examples.

Watch Video Solution

Hots Very Short Answer Questions

1. What is the composition of triglyceride?

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2. Name the chemical used for grinding the animal tissue for chemical analysis of organic compounds.

Watch Video Solution

3. Name the (a) Fruit sugar (b) Blood sugar (c) Milk Sugar (d) Cane sugar

Watch Video Solution

4. Name the amino acids involved in urea cycle.

Watch Video Solution

5. What are prostaglandins ?

Watch Video Solution

6. Sucrose is a non-reducing sugar. Maltose and lactose are reducing sugars. Why ?

Watch Video Solution

7. Write two uses of cellulose.

Watch Video Solution

8. Which homopolysaccharide is called animal starch?

Watch Video Solution

9. Name the polymer of fructose.

Watch Video Solution

10. Name one heteropolysaccharide.

Watch Video Solution

11. Who proposed the lock and key hypothesis ?

Watch Video Solution

12. What is the chemical nature of enzymes ?

Watch Video Solution

Hots Short Answer Questions

1. What would happen if salivary amylase which acts specifically on starch enters the stomach and mixes with gastric juice ?

Watch Video Solution

2. Write the formula representation of rate of chemical reaction. Define.

Watch Video Solution

3. Why starch and glycogen are more suitable as storage product than glucose ?

Watch Video Solution

4. How do proteins act as carrier proteins?

Watch Video Solution

5. What is cholesterol ? Name the two forms of cholesterol.

Watch Video Solution

6. What are pyrimidines ?

Watch Video Solution

7. What is peptide bond ?

Watch Video Solution

8. Name the essential fatty acids.

Watch Video Solution

9. What are polyunsaturates ?

Watch Video Solution

10. What are globular proteins?

Watch Video Solution

Hots Short Answer Type Questions

1. How does temperature and pH affect activity of enzyme ?

Watch Video Solution

2. Differentiate between prosthetic group and co-enzyme.

 Watch Video Solution

3. What are the factors which affect the action of enzyme ?

 Watch Video Solution

4. Differentiate between α-helix and β pleated structure of proteins.

Watch Video Solution

5. Describe the composition of triglycerides.

Watch Video Solution

6. Differentiate between primary metabolites and secondary metabolites.

Watch Video Solution

7. What are gums made of ? Is fevicol different ?

Watch Video Solution

Hots Long Answer Type Question

1. What is the concept of metabolism ? Discuss the metabolic basis of life.

Watch Video Solution

2. Discuss the functions of polysaccharides.

Watch Video Solution

3. DNA व RNA में अन्तर लिखिए।

Watch Video Solution

4. What are different classes of enzyme ? Explain any two with the type reaction they catalyse.

Watch Video Solution

5. Discuss the tertiary structure of proteins.

Watch Video Solution

Quick Memory Test Say True Or False

1. Proteins are one of the most diverse molecules of cell.

Watch Video Solution

2. Oval and eccentric starch grains are found in maize,

Watch Video Solution

3. FMN is related with vitamin B_2 .

 Watch Video Solution

4. Adenylic acid is an acidic amino acid.

 Watch Video Solution

5. Tryptophan takes part in the formation of vitamin nicotinamide.

 Watch Video Solution

6. Cephalin is found in liver.

Watch Video Solution

7. In a nucleotide, purine or pyrimidine nitrogenous base is joined by deoxyribose sugar which is further linked to phosphate.

Watch Video Solution

8. Bees wax consists of palmitic acid and myricyl alcohol.

Watch Video Solution

9. Gliadin protein found in wheat has the structure $C_{685}H_{1068}N_{195}O_{211}S_5$.

Watch Video Solution

10. Glucose, fructose and lactose are isomers having a formula $C_6H_{12}O_6$

Watch Video Solution

11. Amino acids can be acidic, basic or neutral.

Watch Video Solution

12. Oil dissolves in water.

Watch Video Solution

13. Thyroxine is derived from tyrosine.

Watch Video Solution

14. Removal of amino group from amino acids in animals is carried out by transamination only .

Watch Video Solution

Quick Memory Test Complete The Missing Links

1. Fats are made of ..... and .....

Watch Video Solution

2. ..... and ..... are purine nitrogenous bases.

View Text Solution

3. ..... is cofactor in enzyme cytochrome oxidase,

Watch Video Solution

4. A true fat with three molecules of fatty acids is called ....

Watch Video Solution

5. Three pyrimidines are thymine, cytosine and .....

Watch Video Solution

6. DNA has ..... instead of wracil.

Watch Video Solution

7. rRNA is associated with ...

View Text Solution

8. Keratin is a .... protein

 Watch Video Solution

9. The carbohydrate molecule cellulose is a .....

 Watch Video Solution

10. The double helix model of DNA was proposed by ..... and .....

View Text Solution

11. .....and ..... are storage polysaccharides.

Watch Video Solution

12. When amino acid chain is arranged like a coil it is called is α _____.

Watch Video Solution

13. Chitin is a polysaccharide found in the ..... of crabs and prawn etc.

Watch Video Solution

14. The kind of protein which can enhance the efficiency of a biochemical reaction is called an

Watch Video Solution

15. The substances which stop or slow down the reaction are called .

Watch Video Solution

16. A protein molecule has at least 200 to 300 ..... linkages

Watch Video Solution

17. The enzymes which break down proteins into amino acid molecules are called as ....

Watch Video Solution

18. When the enzymes with slightly different molecular structure can also perform the identical activities , they are called as .....

Watch Video Solution

19. When the production of the cell is inhibited by its own metabolites, this control is termed as _____.

Watch Video Solution

20. Biochemical reactions are regulated by catalysts called .....

21. A vitamin is often associated as a .... with an enzyme

22. The molecules on which enzymes act are known as .....

Watch Video Solution

23. Enzymes which breakdown compounds without the involvement of water are called .....

Watch Video Solution

24. A compound with almost similar structure to the substrate can act as a .....

Watch Video Solution

25. The functions of enzymes is to lower the ..... of biochemical reactions.

Watch Video Solution

26. The enzymatic activity stops due to ..... of enzymes at very high temperature

Watch Video Solution

27. The enzyme ..... catalyses the formation of glucose-6-phosphate from glucose and ATP.

Watch Video Solution

28. ..... catalyse covalent bonding between two molecules to form a large molecule.

 Watch Video Solution

Quick Memory Test Choose The Correct Alternative

1. Lyases/Ligases perform breakdown reacting

 Watch Video Solution

2. Apoenzyme/coenzyme is the non-protein part of conjugate enzyme.

Watch Video Solution

3. Nucleoside is basic/acidic in reaction.

Watch Video Solution

4. Proenzymes are active/inactive enzyme precursors.

 Watch Video Solution

5. Glutelins/Prolamins are soluble in dilute alkali or acid.

 Watch Video Solution

6. Active site in induced fit theory is static/dynamic.

 Watch Video Solution

7. Source of lactose is milk/germinating seeds.

Watch Video Solution

Revision Exercises Very Short Answer Questions

1. Which mineral deficiency auses goitre in man?

Watch Video Solution

2. Name two steroid hormones.

 Watch Video Solution

3. What are steroids?

 Watch Video Solution

4. Which type of bonds are present between the nucleotides in DNA?

 Watch Video Solution

5. Name three essential amino acids,

View Text Solution

6. Which proteins help in night vision and colour vision?

Watch Video Solution

7. What is the basic structural unit of chitin?

Watch Video Solution

8. Where we can find chitin?

Watch Video Solution

9. Namne two S-containing amino acids.

Watch Video Solution

10. Which mineral helps the enzyme nitrogenase in nitrogen fixation?

Watch Video Solution

11. Give two example of tranferases

Watch Video Solution

12. Why does water behave as a dipolar ion?

Watch Video Solution

13. Why does water have high boiling point?

Watch Video Solution

14. Define Michaelis constant (km) of an enzyme.

Watch Video Solution

15. An example of non-competitive inhibition is

Watch Video Solution

16. Which enzyme converts glucose into ethyl alcohol?

Watch Video Solution

17. Give the term for the energy required to initiate a biochemical reaction.

Watch Video Solution

18. What are peptide bonds?

Watch Video Solution

19. Write two functions of waxes.

Watch Video Solution

20. Give technical words for acid-soluble and acid-insoluble fractions.

Watch Video Solution

21. Name two acidic amino acids.

Watch Video Solution

22. Give three examples of homo polysaccharides.

Watch Video Solution

23. Which organic compound is commonly called animal starch?

Watch Video Solution

24. Name the sugar present in RNA.

Watch Video Solution

25. Name the nitrogen bases of DNA.

Watch Video Solution

26. What do you mean by antiparallel nature of two chains of DNA.

 Watch Video Solution

27. Distinguish between prosthetic group and coenzyme.

 Watch Video Solution

28. Name the inactive form of pepsin.

Watch Video Solution

29. Give one example of non-competitive inhibition.

Watch Video Solution

30. Who coined the term enzyme for the first time?

Watch Video Solution

31. Name the components of nucleotide

Watch Video Solution

32. What do you mean by Zwitter ionic nature of amino acids?

Watch Video Solution

33. In which ratio, C, H and O are found in the carbohydrates?

View Text Solution

34. Name three components of a nucleotide.

View Text Solution

35. Give examples of proteins which help in blood clotting at injury

Watch Video Solution

36. Select the wrongly matched pair from the following:

View Text Solution

Revision Exercises Short Answer Questions

1. List the functions of protiens and name one protien that performs each function.

Watch Video Solution

2. Proteins have been called 'biological polymers'. Explain.

Watch Video Solution

3. What are monosaccharides?Give one example

Watch Video Solution

4. Differentiate acidic and basic proteins

Watch Video Solution

5. What is inulin?

Watch Video Solution

6. What is lignification?

Watch Video Solution

7. What are ligases?Give example

Watch Video Solution

8. Explain the terms holozyme and isozyme.

Watch Video Solution

9. Distinguish between apoenzyme and coenzyme.

Watch Video Solution

10. What is coenzyme?

Watch Video Solution

11. Name any three groups of digestive enzymes, their substrates and products.

Watch Video Solution

12. Expand IUB and write about its most significant contribution.

Watch Video Solution

13. How ferment and enzymes differ?

Watch Video Solution

14. What are semiessential amino acids?

Watch Video Solution

15. Can a chemical reaction take place without enzyme ? Comment .

Watch Video Solution

16. What is a nucleotide ?

Watch Video Solution

17. Differentiate between a nucleoside and a nucleotide.

Watch Video Solution

18. Which type of bords stabilize the tertiary structure of a protein ?

Watch Video Solution

19. Define Michaelis constant (km) of an enzyme.

Watch Video Solution

20. Although all protiens are made of the same amino acids, explain how your proteins are different from those of a dog.

Watch Video Solution

21. Distinguish between homopolysaccharides and heteropolysaccharides.

Watch Video Solution

22. What are oxidoreductases?

Watch Video Solution

23. What do you mean by holoenzymes?

Watch Video Solution

24. Define turn over number. Give one example,

Watch Video Solution

25. Differentiate between anabolism and catabolism.

Watch Video Solution

26. Differentiate between primary and secondary structures of proteins.

Watch Video Solution

27. Differentiate essential and non-essential amino acids.

Watch Video Solution

28. What are derived fats? Give two examples.

Watch Video Solution

29. Differentiate between primary and secondary metabolites

Watch Video Solution

30. Identify the given biomolecules

View Text Solution

31. Differentiate between B-DNA and Z-DNA.

Watch Video Solution

32. What are the functions of amino acids ?

Watch Video Solution

33. What are co factors?

Watch Video Solution

34. What are Prosthetic Group?

Watch Video Solution

35. Define metabolism.

Watch Video Solution

36. What are isomerases?

Watch Video Solution

37. What are the components of a nucleotide ?

Watch Video Solution

38. What is peptide bond?

Watch Video Solution

39. What are prostaglandins ?

Watch Video Solution

40. What are Lyases?

Watch Video Solution

41. Write notes on : (a) Steroids (b) Wax

Watch Video Solution

42. Give the biological importance of polysaccharides.

Watch Video Solution

43. Explain the composition of glycogen.

Watch Video Solution

44. How do the substrate concentrations affect the enzyme activity?

Watch Video Solution

45. How does pH affects the rate of enzyme activity?

Watch Video Solution

Revision Exercises Long Answer Questions

1. What is Collagen?

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2. Mention two functions of protein in living system

Watch Video Solution

3. What are the purine and pyrimidine bases present in RNA?

Watch Video Solution

4. Define inhibition.

 Watch Video Solution

5. Define metabolism. Describe two types of metabolism.

 Watch Video Solution

6. What are saturated and unsaturated fatty acids?

 Watch Video Solution

7. What are oligosaccharides?

Watch Video Solution

8. Enlist two biological importance of amino acids.

Watch Video Solution

9. List two functions of lipids in a biological system.

Watch Video Solution

10. What are essential and non essential amino acids?

Watch Video Solution

11. Describe the components of a nucleotide.

Watch Video Solution

12. What are Homopolysaccharides?

Watch Video Solution

Competition File Objective Type Questions Multiple Choice Questions Mcqs

1. 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

 Watch Video Solution

2. Pentoses and hexoses are the most common

Or

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

A. Disaccharide

B. Monosaccharide

C. Polysaccharide

D. Dipeptide

Answer: B

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3. In the double helix model of DNA , how far is each base pair from the next base pair

A. 3.4 nm

B. 0.34 nm

C. 2.0 nm

D. 34 nm

Answer: B

Watch Video Solution

4. Cellulose, the most important constituent of plant cell wall is made up of

A. Branched chain of glucose molecules linked by a, 1,6, glycosidic bond at the site of branching

B. Unbranched chain of glucose molecules linked by α, 1, 4, glycosidic bond

C. Branched chain of glucose molecules linked by β, 1,4 glycosidic bond in straight chain and α, 1,6 glycosidic bond at the site of branching

D. Unbranched chain of glucose molecules linked by $\beta, 1, 4$ glycosidic bord

Answer: D

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5. Feedback inhibition of an enzymatic reaction is caused by

A. Substrate

B. Enzyme

C. End product

D. Rise in temperature

Answer: C

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6. Coenzymes :

(1) Act as a donor of groups of atoms added to the substrate

(2) Act as acceptor of groups of atom removed from substrate

(3) Cannot be easily separated from apoenzyme

(4) Do not act as prosthetic groups Codes:

A. 1 , 2 and 3 correct

B. 1 and 2 correct

C. 2 and 4 are correct

D. 1 and 3 are correct

Answer: B

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7. A substance unrelated to substrate reversibly changes the activity of an enzyme. It is

A. Competitive inhibitor

B. Non-competitive inhibitor

C. Catalytic inhibitor

D. Allosteric modulator/inhibitor

Answer: D

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8. 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. Co-enzyme

B. Holoenzyme

C. Apoenzyme

D. Prosthetic group

Answer: C

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

A. Chitin

B. Starch

C. Cellulose

D. Dextran

Answer: D

Watch Video Solution

10. Which of the following enzyme is used in making detergent?

A. Amylase

B. Cellulase

C. Protease

D. Peptidase

Answer: C

View Text Solution

11. Enzyme found functional in lysosome is :

A. Acid phosphatase

B. Basic phosphatase

C. Oxidoreductase

D. Lyases

Answer: D

 Watch Video Solution

12. Enzymes, vitamins and hormones can be classified into a single category of biological chemicals, because all of these

A. Enhance oxidative metabolism

B. Are conjugated proteins

C. Are exclusively synthesized in the body of a living organism at present

D. Help in regulating metabolism

Answer: D

 Watch Video Solution

13. Crabohydrates, the most abundant biomlecles on earth, are produced by

A. All bacteria, fungi and algae

B. Fungi, algae and green plant cells

C. Some bacteria, algae and green plant cells

D. Viruses, fungi and bacteria

Answer: C

Watch Video Solution

14. A competitive inhibitor of succinic dehydrogenase is

A. α- ketoglutarate

B. Malate

C. Malonate

D. Oxaloacetate

Answer: A

Watch Video Solution

15. Which one of the following pairs of nitrogenous bases of nucleic acids, is wrongly matched with the category mentioned against it

A. Guanine, Adenine - Purines

B. Adenine, Thymine - Purines

C. Thymine, Uracil - Pyrimidines

D. Uracil, Cytosine - Pyrimidines

Answer: A

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16. In the DNA molecule

A. The proportion of Adenine in relation to Thymine varies with the organism

B. There are two strands which run antiparallel - one in $5' \rightarrow 3'$ direction and other is $3' \rightarrow 5'$

C. Total amount of purine nucleotides and pyrimidine nucleotides is not always

equal

D. There are two strands which run parallel in the $5' \rightarrow 3'$ direction

Answer: A

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17. 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. 1 , 3 and 5

B. 1 and 5

C. 2 and 3

D. 2 and 4

Answer: D

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18. Which of the following is not caused by deficiency of mineral ?

A. Chlorosis

B. Etiolation

C. Shortening of internodes

D. Necrosis

Answer: D

Watch Video Solution

19. Select the correct answer from the following statements :

1. Cutin is fatty acid polymer

2. Starch is glucose polymer

3. Sucrose is monosaccharide

4. maltose is polymer of fructose.

A. 1 , 2 , 3 are correct

B. 1 , 2 are correct

C. 2 and 4 are correct

D. 1 and 3 are correct

Answer: C

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20. Select the correct answer from the following, DNA can be

1. A-DNA 2. B-DNA

3. Z-DNA 4. Y-DNA.

A. 1 , 2 , 3 are correct

B. 1 and 2 correct

C. 2 and 4 are correct

D. 1 and 3 are correct

Answer: D

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21. 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. A , C and D only

Answer: D

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22. An example of feedback inhibition is

A. Cyanide action on cytochromes

B. Sulpha drug on folic acid synthesizing bacteria

C. Allosteric inhibition of hexokinase by Glucose-6-P

D. Reaction between succinate and succinic dehydrogenase

Answer: B

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23. The haploid content of human DNA is

A. 3.3×10^9 bp

B. 3.3×10^9 kbp

C. 4.6×10^6 bp

D. 48502 bp

Answer: D

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24. 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. Fructose

C. Sucrose

D. Maltose

Answer: B

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25. Which one of the following is ss RNA ?

A. TMV

B. T_2- bacteriophage

C. Pox virus

D. $\phi \times 174$

Answer: C

Watch Video Solution

26. Uracil is present in RNA at the place of :

A. Adenine

B. Guanine

C. Cytosine

D. Thymine

Answer: A

Watch Video Solution

27. The enzyme that cuts DNA is :

A. DNA -polymerase

B. DNA-lyase

C. DNA- ligase

D. Restriction endonuclease

Answer: A

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28. Which of the following be named for DNA produced from RNA ?

A. A - DNA

B. B-DNA

C. C-DNA

D. Z - DNA

Answer: D

Watch Video Solution

29. Quarternary structure of protein

A. Consists of four subunits

B. May be either α or β-helix

C. Is untrelated to the function of protein

D. Is dictated by the primary structure of the subunits

Answer: C

Watch Video Solution

30. Identify the sulphur-containing amino acid?

A. Proline

B. Methionine

C. Aspartic acid

D. Tryptophan

Answer: B

Watch Video Solution

31. Which of the following carbohydrates is not a disaccharide

A. Maltose

B. Lactose

C. Sucrose

D. Galactose

Answer: D

Watch Video Solution

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

A. May be destroyed or resynthesised 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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34. The effectiveness of an enzyme is affected least by

A. Temperature

B. Concentration of substrate

C. Original activation energy of the system

D. Concentration of the enzyme

Answer: D

Watch Video Solution

35. Starch is a polymer of

A. Glucose

B. Fructose

C. Sucrose

D. Maltose

Answer: A

 Watch Video Solution

36. Table sugar is

A. Sucrose

B. Glucose

C. Fructose

D. Lactose

Answer: A

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37. Human proteins can be produced in the milk or semen of farm animals. True of false?

A. True

B. False , proteins cannot be produced in milk

C. False , proteins cannot be produced in semen

D. False, animals are not used for protein production

Answer: A

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38. ..... Is a globular protein of ~ 6 kDa consisting of 51 amino acids, arranged in 2 polypeptide chains held together by disulphide bridge

A. Insulin

B. Keratin

C. Glucagon

D. Fibrinogen

Answer: A

Watch Video Solution

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

A. A non-competitive inhibitor binds 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 sucdnic dehydrogenase by malonate

Answer: D

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40. Which one of the following statements is not correct?

A. Retinal is a derivative of vitamin C

B. Rhodopsin is a purplish red protein present in rods only

C. Retinal is the light absorbing protein of visual photopigment

D. In retina, the rods have the photopigment rhodopsin, while cones have three different photopigments

Answer: A

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41. Which one of the following is a non-reducing carbohydrate?

A. Lactose

B. Ribose-5-phosphate

C. Maltose

D. Sucrose

Answer: D

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

A. Molecular size of the enzymes

B. pH optimum values

C. K_m values

D. Formation of the product

Answer: C

Watch Video Solution

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

A. Adenine and thymine

B. Adenine and guanine

C. Thymnine and cytosine

D. Guanine and cytosine

Answer: C

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44. This is wax

A. Palmitic acid

B. Ethyl Palmitata

C. Hexacosyl palmitate

D. Sodium stearate

Answer: C

Watch Video Solution

45. A tripeptide contains

A. 3 amino acids

B. 4 amino acids

C. 6 amino acids

D. 2 amino acids

Answer: A

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46. How many phosphodiester bonds are there in ATP

A. 3

B. 2

C. 1

D. 0

Answer: D

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47. Which of the following biomolecules does have a phosphodiester bond?

A. Amino acids in a polypeptide

B. Nucleic acids in a nucleotides

C. Fatty acids in a diglyceride

D. Monosaccharides in a polysaccharides

Answer: B

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48. Which of the following biomolecules is common to respiration-mediated breakdown of fats, carbohydrates and proteins

A. Pyruvic acid

B. Acetyl CoA

C. Glucose-6-6 phosphates

D. Fructose 1, 6-bisphosphate

Answer: B

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49. A typical fat molecule is made up of

A. Three glycerol molecules and one fatty acid molecule

B. One glycerol and three fatty acid molecules

C. One glycerol and one fatty acid molecule

D. Three glycerol and three fatty acid molecules

Answer: B

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50. The two functional groups characteristic of sugars are

A. Carbonyl and methyl

B. Carbonyl and phosphate

C. Hydroxyl and methyl

D. Carbonyl and hydroxyl

Answer: B

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Competition File Objective Type Questions Cbse Pmt Main Examination Questions

1. (i) Name three unusual bases present in tRNA and name the bases from which these are developed.

(ii) Name 3 nucleotides which are not constituent of DNA/RNA but take part in metabolic activities. Also name their bases.

(iii) Name the achiral amino acid, symmetric with no side chain.

(iv) Name five amino acid with non-polar side chains.

View Text Solution

2. Refer the graph of two enzymatic reactions and answer the following questions :

(a) What is denoted by plot A?

(b) What is denoted by plot B?

(c) What is C? What is the difference between C of A & B.

(d) What is allosteric modulation?

View Text Solution

3. Fill in the blanks :

(i) Biomembrane consists of phospholipids which has one unit of ..... and two units of .....and phosphate group

(ii) Enzymes are globular ..... and has clefts on their surface called .....

(iii) Most food stored in the higher plants is in

the form of ..... but cell wall is made up of .....

Watch Video Solution

4. What is ribozyme? Who discovered it and in which organism?

View Text Solution

5. Fill in the blanks :

The activity of enzyme inhibited when

modulators bind to it is known as ..... inhibition.

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Competition File Objective Type Questions Assertion Type Questions

1. Assertion : Glycerides are neutral or true fats.

Reason: These are esters of fatty acids with glycerol,

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: A

View Text Solution

2. Assertion : Proteins are linear polymers of long chains made up of amino acids.

Reason: Amino acids are called building blocks of proteins.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: A

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3. Assertion : Cephalins are amino acids and on hydrolysis give ammonia and water.

Reason: Cephalins are hydrolysed with H_2SO_4 and HNO_3.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: D

View Text Solution

4. Assertion: All enzymes are amino acids.

Reason: Proteins are formed of carboxylic acids.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: D

View Text Solution

5. Assertion : LDH has five isoenzymes while α-amylase has sixteen isoenzymes.

Reason: Isoenzymes perform same function but occur in more than one form.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: A

View Text Solution

6. Assertion : Enzymes are organic catalysts.

Reason : They catalyze the chemical reactions .

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: C

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7. Assertion : Oxidoreductases catalyze redox reactions .

Reason : Isomerases catalyze the isomeric changes.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: B

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8. Assertion : Intake of excess of saturated fats should be avoided.

Reason : Saturated fats change into cholesterol which causes arteriosclerosis.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: A

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9. Assertion : Oils have lower melting point .

Reason : Oils mostly contain saturated fatty acids.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: C

View Text Solution

10. Assertion : Chitin is a heteropolysaccharide .

Reason : Chitin is a polymer of N-acetyl Glucosamine .

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: A

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11. Assertion : Very low temperature causes permanent denaturation of enzymes.

Reason : Very low temperature breaks the disulphide bonds of enzymes.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: D

View Text Solution

12. Assertion : Phospholipids are called amphipathic compounds .

Reason : Each phospholipids is doubly charged compound .

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: C

Watch Video Solution

13. 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 Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: A

Watch Video Solution

14. Assertion. Nucleotides are the building blocks of nucleic acid.

Reason. Nucleotides are also components of energy carriers and coenzymes.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: B

Watch Video Solution

15. Assertion. Coenzyme is a nonprotein group without which certain enzymes are inactive or incomplete.

Reason. Coenzymes not only provide a point of attachement to the chemical group being transferred but also influence the properties of the group.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: A

 Watch Video Solution

16. Assertion. Carboxypeptidase is an exopeptidase.

Reason. It cleaves the N-terminal bond.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: C

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17. Assertion. A coenzyme or metal ion that is very tightly bound to enzyme protein called prosthetic group.

Reason. A complete, catalytically active enzyme

together with its bound prosthetic group is called apoenzyme.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: C

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Competition File Objective Type Questions Reasoning Type Questions

1. Nucleotides are acidic in nature.

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2. GC pair of DNA is more stable than AT pair.

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3. At high temperature, the enzymes stop functioning

 Watch Video Solution

4. Cholesterol and its esters are deposited in the arteries.

Watch Video Solution

5. In human beings some essential amino acids are required.

Watch Video Solution

6. The high boiling point of water is advantageous to living organisms.

Watch Video Solution

7. Apoenzyme alone cannot function.

Watch Video Solution

8. Co-enzyme can function in association with an apoenzyme.

Watch Video Solution

9. End products are generally not produced more than their requirements .

Watch Video Solution

10. Enzymes generally have different pH but same temperature optima.

Watch Video Solution

Competition File Objective Type Questions Analogy Type Questions

1. amino acid : protein :: nucleotides : .....

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2. plants : starch :: mammals : .....

Watch Video Solution

3. α-helix : protein :: double helix : .....

Watch Video Solution

4. protein : peptide bonds :: polysaccharide : .....

Watch Video Solution

5. microbiomolecules : filtrate : : macrobiomolecules : .....

Watch Video Solution

6. anabolism : photosynthesis :: catabolism : .....

Watch Video Solution

7. primary metabolite : amino acids : : secondary metabolite : .....

Watch Video Solution

8. hexokinase : transferase : : amylase : .....

Watch Video Solution

9. α-helix : secondary structure : : enzymes : .....

Watch Video Solution

10. purine : guanine : : pyrimidine : .....

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Competition File Objective Type Questions Additional Multiple Choice Questions

1. Which is protein in nature ?

A. Cellulose

B. Terylene

C. Polythene

D. Silk and wool

Answer: D

View Text Solution

2. Which is a reducing sugar ?

A. Cellulose

B. Maltose

C. Sucrose

D. Starch

Answer: B

Watch Video Solution

3. Among following natural materials , largest amount of cellulose is found in :

A. Wood

B. Fruit pulp

C. Wheat straw

D. Cotton fibres

Answer: D

View Text Solution

4. The polysaccharide formed from fructose monomers only is :

A. Insulin

B. Lignin

C. Cellulose

D. Amylose

Answer: A

 Watch Video Solution

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

A. Coenzyme

B. Holoenzyme

C. Apoenzyme

D. Isoenzyme

Answer: A

 Watch Video Solution

6. One turn of the helix in a B-form DNA is approximately-

A. 20 nm

B. 0.34 nm

C. 3.4 nm

D. 2 nm

Answer: C

 Watch Video Solution

7. Antiparallel strands of a DNA molecule means that :

A. One strand turns anti-clockwise

B. One strand turns anti-clockwise

C. Phosphate groups of two DNA strands at their ends , share the same position

D. Phosphate groups at the start of two DNA strands (poles) are in opposite position

Answer: D

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8. In which one of the following sets of three items each belong to the category mentioned against them ?

A. Lysine , glycine , thiamine - amino acids

B. Myosin , oxytocin and gastrin - hormones

C. Rennin , helicase and hyaluronidase- enzymes

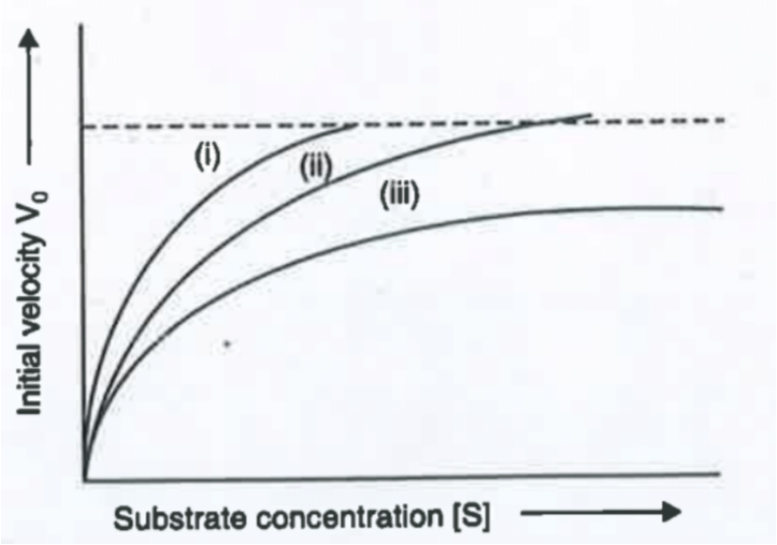
D. Optic , occulomotor , vagus - sensory nerves

Answer: C

Watch Video Solution

9. The figure given below shows three velocity - substrate concentration curves for an enzyme reaction . What do the curves a , b and c depict

respectively .



A. (i) normal enzyme reaction,

(ii) competitive inhibition ,

(iii) non-competitive inhibition

B. (i) enzyme with an allosteric modulator added .

(ii) normal enzymes activity ,

(iii) competitive inhibition

C. (i) enzyme with an allosteric stimulator ,

(ii) competitive inhibitor added,

(iii) normal enzyme reaction

D. (i) normal enzyme reaction ,

(ii) non-competitive inhibitor added ,

(iii) allosteric inhibitor added

Answer: D

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10. Chitinous exoskeleton is found in

A. Periplaneta

B. Ascaris

C. Pheretima

D. Hydra

Answer: A

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11. Which enzyme converts glucose into alcohol ?

A. Zymase

B. Diastase

C. Invertase

D. Lipase

Answer: A

Watch Video Solution

12. One mole of glucose on metabolism liberate how many kilo calories of energy ?

A. 180

B. 80

C. 160

D. 280

Answer: D

View Text Solution

13. Phosphodiester bond is present in :

A. ATP

B. ADP

C. C-AMP

D. None of these

Answer: D

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14. In which virus, DNA is double stranded

A. Hepatitis- A

B. Hepatitis- B

C. Hepatitis- C

D. Hepatitis- D

Answer: B

Watch Video Solution

15. Which is the most abundant protein on earth ?

A. Lignin

B. Rubisco

C. Cellulose

D. Pectin

Answer: B

Watch Video Solution

16. Essential amino acid which is synthesized by plant is :

A. Phenylalanine

B. Leucine

C. Arginine

D. Serine

Answer: A

View Text Solution

17. Enzyme responsible for conversion of glucose to C_2H_5OH is :

A. Zymase

B. Invertase

C. Sucrase

D. Maltase

Answer: A

 Watch Video Solution

18. How many of the twenty amino acids are essential amino acids for children

A. 6

B. 8

C. 10

D. 7

Answer: C

19. Bacterial cell wall is composed of

A. Cellulose

B. Hemicellulose

C. Both (a) and (c)

D. Peptidoglycan

Answer: D

 Watch Video Solution

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

A. Competitive inhibition

B. Substrate concentration

C. Products of reaction

D. Enzyme concentration

Answer: C

Watch Video Solution

Competition File Objective Type Questions Multiple Choice Questions

1. Consider the following statements:

(A) Coenzyme or metal ion that is tightly bound to enzyme protein is called prosthetic group,

(B) A complete catalytic active cnzyme with its bound prosthetic group is called apoenzyme.

Select the correct option

A. Both (A) and (B) are true

B. (A) is true and (B) is false

C. Both (A) and (B) are false

D. (A) is false and (B) is true

Answer:

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Chapter Practice Test

1. What is the sweetness index of sucrose ?

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2. Give two examples of storage polysaccharides .

Watch Video Solution

3. What is cellulose ?

Watch Video Solution

4. Which are purines ?

Watch Video Solution

5. What is fat ?

 Watch Video Solution

6. What are waxes?

 Watch Video Solution

7. A nitrogenous base is present in RNA but absent in DNA . What is it?

Watch Video Solution

8. Arrange the following carbohydrates in the order of incereasing complexity of chemical structure : fructose, starch, oligosaccharides, maltose, triose.

Watch Video Solution

9. Proteins have been called 'biological polymers'. Explain.

Watch Video Solution

10. How does temperature and pH affect activity of enzyme ?


Watch Video Solution

11. What are proteins ?


Watch Video Solution

12. What is Catabolism?

Watch Video Solution

13. Differentiate between homopolysaccharide and heteropolysaccharide .

Watch Video Solution

14. What are conjugated proteins ? Give any three examples .

Watch Video Solution

15. What is saturated fatty acids ?

Watch Video Solution

16. What are non essential fatty acids?Give example

Watch Video Solution

Chapter Practice Test Section A

1. Most abundant protein on earth is

A. Lignin

B. Rubisco

C. Cellulose

D. Pectin

Answer: B

Watch Video Solution

2. What is Essential amino acid ?

Watch Video Solution

3. Enzyme responsible for conversion of glucose to C_2H_5OH is :

A. Zymase

B. Invertase

C. Sucrase

D. Maltase

Answer: A

 Watch Video Solution

4. How many of the twenty amino acids are essential amino acids for children

A. 6

B. 8

C. 10

D. 7

Answer: C

Watch Video Solution

5. The bacterial cell wall is formed of :

A. Cellulose

B. Hemicellulose

C. Both (a) and (c)

D. Peptidoglycan

Answer: D

Watch Video Solution

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

A. Competitive inhibition

B. Substrate concentration

C. Products of reaction

D. Enzyme concentration

Answer: C

Watch Video Solution

Chapter Practice Test Section B

1. What are non essential amino acids?

Watch Video Solution

2. Who proposed lock and key enzyme hypothesis of enzyme activity ?

Watch Video Solution

3. A nitrogenous base is present in RNA but absent in DNA . Identify it .

Watch Video Solution

4. Arrange the following carbohydrates in the order of incereasing complexity of chemical structure : fructose, starch, oligosaccharides, maltose, triose.

Watch Video Solution

5. Proteins have been called 'biological polymers'. Explain.

Watch Video Solution

Chapter Practice Test Section C

1. How does temperature offers the activity of enzyme ?

Watch Video Solution

2. What are hydrolases?Give two example.

Watch Video Solution

3. What is monellin?

Watch Video Solution

4. Differentiate between anabolism and catabolism.

Watch Video Solution

Chapter Practice Test Section D

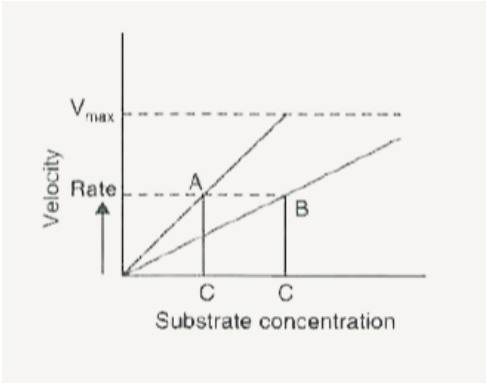
1. Refer the graph of two enzymatic reactions and answer the following questions :

(a) What is denoted by plot A?

(b) What is denoted by plot B?

(c) What is C? What is the difference between C of A & B.

(d) What is allosteric modulation?



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Chapter Practice Test Section E

1. What is Activation energy?

Watch Video Solution

Case Based Short Answer Type Questions

1. What are the base pairs present in RNA?

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