

Type: MCQ

Q1. Carbohydrates can be classified into ____ type. (1)

1. One
2. Two
3. **Three
4. Four

Q2. The α and β forms of D-Glucose are known as ____ . (1)

1. **Anomer
2. Epimer
3. Racemic mixture
4. Enediol

Q3. Disaccharide consists of two monosaccharide units held together by a ____ bond. (1)

1. Hydrogen
2. **Glycosidic
3. Phosphodiester
4. Ionic

Q4. Lipids are soluble in ____ . (1)

1. Water
2. **Organic solvents
3. Inorganic solvents
4. Polar solvents

Q5. The lipids which are uncharged are referred to as ____ lipids. (1)

1. Positive
2. Negative
3. **Neutral
4. Earthing

Q6. ____ are molecular complexes of lipids with proteins. (1)

1. **Lipoprotein
2. Glycolipids
3. Phospholipid
4. Steroids

Q7. ____ is the most abundant animal sterol. (1)

1. Ergosterol
2. **Cholesterol
3. β sitosterol
4. Stigmasterol

Q8. Which of the following is not a part of nucleotides? (1)

1. Nitrogenous base
2. Penrose sugar

3. Phosphate group
4. **Hexose sugar

Q9. ___ deals with the study of energy changes in biochemical reactions. (2)

1. Genetics
2. Biotechnology
3. **Biochemical thermodynamics
4. Biochemistry

Q10. The energy actually available to do work is known as _____. (2)

1. ** free energy
2. Enthalpy
3. Entropy
4. Biological oxidation

Q11. ___ is defined as the loss of electrons. (2)

1. Reduction
2. ** oxidation
3. Electrolysis
4. Electrophoresis

Q12. The process of synthesizing ATP from ADP and pi coupled with the electron transport chain is known as _____. (2)

1. Catabolism
2. Reductive phosphorylation
3. Anabolism
4. ** oxidative phosphorylation

Q13. High energy compound ATP stands for _____. (2)

1. ** Adenosine triphosphate
2. Adenosine monophosphate
3. Adenosine tetraphosphate
4. Adenosine diphosphate

Q14. What is the final product of electron transport chain? (2)

1. AMP
2. H₂O
3. **ATP
4. ADP

Q15. All the enzymes involved in biological oxidation belong to class ____? (2)

1. Transferases
2. Ligases
3. Isomerase
4. **Oxidoreductase

Q16. The degradative processes are concerned with the breakdown of complex molecules to simple one are called as _____. (3)

1. **Catabolism
2. Anabolism
3. Amphibolism
4. Metabolism

Q17. The biosynthetic reactions involving the formation of complex molecules from simple processes are known as _____. (3)

1. Metabolism
2. Amphibolism
3. **Anabolism
4. Catabolism

Q18. Glycolysis is also known as _____. (3)

1. Citric acid cycle
2. Tricarboxylic acid cycle
3. Krebs cycle
4. **Embden-Meyerhof pathway

Q19. Formation of glycogen from glucose is known as _____. (3)

1. Glycolysis
2. Gluconeogenesis
3. **Glycogenesis
4. Glycogenolysis

Q20. The process of breakdown of glycogen to glucose is known as _____. (3)

1. Krebs cycle
2. **Glycogenolysis
3. Genetics
4. Glycolysis

Q21. Hake Jose monophosphate pathway is also called as _____. (3)

1. Monophosphate pathway
2. **Pentosephosphate pathway
3. Hexosephosphate pathway
4. Ribophosphate pathway

Q22. Citric acid cycle essentially involves the oxidation of acetyl CoA to CO₂ and _____. (3)

1. **H₂O
2. O₂
3. H₂O₂
4. S₂

Q23. Citric acid cycle is also called as _____. (3)

1. Glycolysis
2. **Krebs cycle
3. Glycogenesis
4. Glycogenolysis

Q24. The operon is the coordinated unit of genetic expression in _____. (4)

1. Fungi
2. **Bacteria
3. Plants
4. Animals

Q25. The repressor molecule acts as a _____ regulator of gene expression. (4)

1. Positive
2. Binary
3. Neutral
4. **Negative

Q26. The structural Z gene of lactose operon is responsible for the synthesis of the enzymes. (4)

1. ** β Galactosidase
2. Permease
3. Acetylase
4. Amylase

Q27. The zinc fingers bind to the _____ of DNA and lie on the face of the DNA. (4)

1. Minor groove
2. **Major groove
3. Single Groove
4. Double Groove

Q28. Two amphipathic Alpha helix segments of protein can form _____ motif and bind to DNA. (4)

1. Helix-turn-helix
2. Leucine zipper
3. **Helix loop-helix
4. Zinc finger

Q29. The overall influence of glucocorticoid on carbohydrate metabolism is to _____ blood glucose concentration. (4)

1. **Increase
2. Decrease
3. Maintain
4. Balance

Q30. Epinephrine and nor-epinephrine increase the degradation of _____. (4)

1. Glucose
2. **Glycogen

3. Proteins
4. Amino acid