

# BIOCHEMISTRY

**MUTIPLE CHOICE QUESTIONS FOR BCH 101**

**COMPILED BY RSM**

1. \_\_\_\_\_ yields polyhydroxyl aldehyde and ketones during hydrolysis.  
A. Protein B. Carbohydrate C. Lipids D. Nucleic acid
2. Glucose provides immediate energy for the \_\_\_\_\_  
A. Brain B. Kidney C. Liver D. Muscles
3. Which of the following is not a disaccharide  
A. Maltose B. Sucrose C. Galactose D. Lactose
4. Monosaccharides are also known as  
A. Complex Sugar B. Derived Sugar C. Simple Sugar D. Single Sugar
5. Which of the following is not a function of carbohydrates  
A. Source of energy B. Cell-cell recognition C. Synthesis of DNA D. Structural tissues in plant and micro-organism
6. Which of the following is not monosaccharide  
A. Glucose B. Fructose C. Maltose D. Galactose
7. Which of the following sugar is more sweet  
A. Fructose B. Sucrose C. Glucose D. Maltose
8. \_\_\_\_\_ are stereoisomers formed when ring is formed  
A. Epimers B. Anomers C. Enantiomers D. Isomers
9. \_\_\_\_\_ are stereoisomers that differs in configuration about one chiral carbon.  
A. Epimers B. Anomers C. Enantiomers D. Isomers
10. Most naturally occurring sugars are  
A. Isomers B. Disomers C. Trisomers D. None of the above
11. Starches are stored in  
A. Liver B. Plant cell C. Animal cell D. Muscles
12. Which of the following is a non-reducing sugar  
A. Maltose B. Lactose C. Glucose D. Trehalose
13. Glycogen is present in the cells as  
A. Starch B. Glucose C. Granules D. Energy
14. When lactose is being hydrolyzed we have  
A. Glucose + Glucose B. Glucose + Galactose C. Fructose + Glucose D. Glycogen + Galactose
15. The basic composition of hydrogen is  
A. CH<sub>4</sub> B. C<sub>2</sub>HO C. CH<sub>2</sub>O D. CHO<sub>2</sub>
16. The possible isomer of a given compound is determined by  
A. Hooke's law B. Charles law C. Vant Hoff's rule D. Boyle's law
17. Ketone reacts with alcohol to form  
A. Hemiketal B. Hemiacetal C. Hemiketo D. Hemialdo
18. Aldehyde reacts with alcohol to form  
A. Hemiketal B. Hemialdo C. Hemiketo D. Hemiacetal

19. Cellulose yields \_\_\_\_ in complete hydrolysis  
A. Glycogen B. Glucose C. Starch D. Cellubriose
20. \_\_\_\_ gives no color with iodine  
A. Starch B. Cellulose C. Glucose D. Maltose
21. What type of amino acid can be consumed in diet  
A. Essential B. Non-essential C. Fibrous D. Globous
22. Which of the following is not an Essential amino acid  
A. Phenylaline B. Isoleucine C. Proline D. Histidine
23. \_\_\_\_ is the sequence of amino acids in the peptide chain and the location of the disulfide bridges.  
A. Secondary structure B. Primary structure C. Quartenary structure D. Tertiary structure
24. Which of the following is not an example of fibrous protein  
A. Keratins B. Globulins C. Collagen D. Elastins
25. Which functional group do amino acid contains  
A. Amino group only B. Carboxylic group only C. Hydroxyl group only D. None of the above
26. What is the primary structure of proteins  
A. Sequence of amino acids B. Location of disulfide bridges C. Description of backbone D. None of the above
27. What is isoelectric ph  
A. Ph at which amino acid lose H to N B. Ph at which amino acids are protonated C. Ph at which amino acids have no net charge D. All of the above
28. Which time of structure involves beta sheet and alpha helix  
A. Primary structure B. Secondary structure C. Quartenary structure D. Tertiary structure
29. Protein that protect the body from foreign substance are  
A. Collagen B. Globulins C. Immunoglobulin D. Immunocollagen
30. Primary structure of proteins is stabilize by  
A. Glycolic bond B. Peptide bond C. Dipetide bond C. Keratin bond
31. Which amino acid is considered essential only for infants  
A. Phenylaline B. Isoleucine C. Proline D. Arginine
32. What is the function of myoglobin  
A. Carries O<sub>2</sub> in the blood B. Act as an enzyme C. Synthesises protein D. Stores O<sub>2</sub> in muscles
33. How many polypeptide does haemoglobin possess  
A. 1 B. 2 C. 3 D. 4
34. \_\_\_\_ is any physical or chemical process that changes the structure of protein  
A. Malnutrition B. Denaturation C. Polarization D. Structurization
35. What is the function of enzymes  
A. Act as biological catalyst B. Store energy C. Store O<sub>2</sub> in muscles D. None of the above
36. How many different tripeptide are possible if each amino acids must be present  
A. 27 B. 9 C. 6 D. 3

37. How many dipetide can be formed mixing alanine and Glycine  
A. 2 B. 4 C. 6 D. 8
38. Which of the following is a Non-essential amino acid  
A. Isoleucine B. Histidine C. Proline D. Phenylaline
39. How many different amino acids are there in naturally occurring proteins  
A. 10 B. 15 C. 20. D. 25
40. Zwitterionic structure contain both  
A. NH-&COO+ B. NH+&COO- C. NH-&COOH+ D. NH+&COOH-
41. Which of the following compartment of the body are lipids primarily found  
A. Plasma B. Adipose tissue C. Biological membrane D. All of the above
42. \_\_\_\_ are hydrophobic in nature  
A. Protein B. Lipids C. Carbohydrates D. Nucleic acid
43. \_\_\_\_ occurs mainly as esters in natural fat and oil  
A. Triacylglycerol B. Waxes C. Fatty acids D. Phospholipids
44. \_\_\_\_ are formed mainly during the hydrogenation of liquid vegetable oil  
A. Fatty acid B. Trans fatty acids C. Palmitic acid D. Stearic acid
45. Cis double bond are \_\_\_\_ in room temperature  
A. Solid B. Semi-solid C. Liquid D. Gas
46. Monoenoic contains how many double bond  
A. 1 B. 2 C. 3 D. 4
47. Which of the following is not an example of Eicosanoids  
A. Prostaglandin B. Lipoxins C. Thromboxanes D. Triacylglycerol
48. Which of the following is not a property of Eicosanoids  
A. They have 20 carbon atoms B. They are hormone C. They are synthesised from poly unsaturated fatty acid D. They are gaseous at room temperature
49. The full meaning of PUFA is  
A. Pre-universal fatty acid B. Poly unsaturated fatty acid C. Poly universal fatty acids  
D. Pre unsaturated fatty acids
50. Lipoxins are secreted from?  
A. Prostaglandin wall B. Arterial wall C. Lipase wall D. Platelet
51. Prostaglandin were first discovered in the secretion of?  
A. Arterial wall B. Prostatic gland C. Prostatic wall D. Platelets
52. \_\_\_\_ & \_\_\_\_ are important members of Prostaglandin in human tissues  
A. PGD&PGE B. PGE&PGF C. PGD%PGF D. PGF&PGG
53. Leukotrienes are secreted from the following except  
A. Mast cell B. Platelets C. Arterial wall D. Leukocyte
54. Lack of essential fatty acids causes the following except  
A. Rickets B. Dermatitis in infant C. Fatty liver D. Growth retardation
55. Esters of fatty acids with alcohol are called?  
A. Simple lipids B. Complex lipids C. Derived lipids D. Single lipids
56. Esters of fatty acid with alcohol and other groups are called?  
A. Simple lipids B. Compound lipids C. Derived lipids D. Single lipids
57. \_\_\_\_ is the development of bad odour and taste of fats and oil  
A. Lipoxins B. Liposuction C. Rancidity D. Fattening

58. \_\_\_\_ are formed of ceramide and a carbohydrates radical  
A. Phospholipids B. Glycolipids C. Sphingomyelin D. Lipositol
59. Which of the following us not a derived lipids?  
A. Steriod B. Waxes C. Carotenoid D. Fatty acids
60. Which of the following vitamin is not a Fat soluble vitamin  
A. Vitamin A B. Vitamin K. C. Vitamin C D. Vitamin D
61. Which of the following is not a classification of steroids  
A. Sterol B. Bile Acid C. Liposuction D. Steroid Hormones
62. \_\_\_\_are produced by either hydrolysis of simple lipids or Conjugated lipids  
A. Derived lipids B. Complex lipids C. Single lipids D. None of the above
63. The process where by liquid oil is converted into solid fat is called  
A. Hydrolysis B. Hardening C. Reducing D. Freezing
64. The full meaning of UFA is?  
A. Universal fatty acids B. Unsaturated fatty acid C. Unique fatty acids C. Unlimited fatty acids
65. The following are examples of Waxes except  
A. Retinol esters B. False waxes C. Calciferol esters D. Cholestryl esters
66. The term biochemistry was coined in the year  
A. 1860 B. 1870 C. 1880 D. 1890
67. Who disapproved vitalism  
A. Eduard Bucher B. Friedrich Wohler C. Antione Lavosier D. James Summer
68. Who showed that enzymes are proteins  
A. Eduard Bucher B. Friedrich Wohler C. Antione Lavosier D. James Summer
69. What year did Eduard Bucher win the Nobel prize in chemistry  
A. 1905 B. 1906 C. 1907. D. 1908
70. What year was it proposed that bubbles in the sea were the key to helping create complex matter that eventually became life.  
A. 1990 B. 1991 C. 1992 D. 1980
71. The term “Only cell produce cell” is known as  
A. Cell reproduction B. Cell theory C. Cell growth D. Cell Division
72. Which of the following element is more abundant in living organisms  
A. Sulphur B. Oxygen C. Carbon D. Hydrogen
73. The term “Compounds found in living organisms can only be produced by living organisms ” is known as  
A. Fermentation B. Pasteurisation C. Vitalism D. Vitamin
74. What year was vitalism disapproved?  
A. 1823 B. 1838 C. 1828 D. 1835
75. Who proposed that the combustion of a candle is similar to the respiration of animals  
A. Eduard Bucher B. Friedrich Wohler C. Antione Lavosier D. James Summer
76. What year was genetic code discovered  
A. 1960s B. 1970s C. 1980s D. 1990s
77. What year was the manipulation of DNA discovered  
A. 1960s B. 1970s C. 1980s D. 1990s
78. What year was the causes of cancer discovered

- A. 1960s B. 1970s C. 1980s D. 1990s
- 79. Which of the following element is not common in the earth crust
  - A. Aluminium B. Magnesium C. Silicon D. Iron
- 80. The structure of DNA as a double helix structure was discovered in what year?
  - A. 1955 B. 1954 C. 1953 D. 1952
- 81. Nucleic acid are polymers of?
  - A. Nucleotides B. Nucleoside C. Nucleobase D. Nucleic polymers
- 82. The monomeric unit of nucleic acid are
  - A. Nucleotides B. Nucleoside C. Nucleobase D. Nucleic polymers
- 83. Replication occurs in
  - A. Meiosis B. Mitosis C. A&B D. None of the above
- 84. The process whereby genetic messages are decoded to make protein is.
  - A. Transcription B. Translation C. Replication D. Tradition
- 85. The process where by identical copies of DNA are made is called
  - A. Transcription B. Translation C. Replication D. Tradition
- 86. Protein synthesis occurs in the?
  - A. Cytoplasm B. Nucleus C. Ribosome D. Brain
- 87. Nucleotides are made up of the following except
  - A. Pentose Sugar B. Nitrogenous bases C. Phosphate group D. Nucleoside
- 88. The process whereby genetic messages are read and carried out of the cell nucleus to the ribosome is called
  - A. Transcription B. Translation C. Replication D. Tradition
- 89. The following are types of nitrogenous bases
  - A. Purines B. Pyrimidines C. A&B D. None of the above
- 90. The following are types of pyrimidines except?
  - A. Adenine B. Uracil C. Cysteine D. Thymine
- 91. A nucleotide without a phosphate group is called?
  - A. Nucleus B. Nucleoside C. Nucleobase D. Nucleic
- 92. A nucleoside without a Pentose Sugar is called?
  - A. Nucleus B. Nucleotide C. Nucleobase D. Nucleic
- 93. The RNA responsible for the transfer of genetic information is
  - A. mRNA B. tRNA C. rRNA D. miRNA
- 94. The DNA is located in the?
  - A. Cytoplasm B. Nucleus C. Ribosome D. Brain
- 95. Translation takes place in the?
  - A. Cytoplasm B. Nucleus C. Ribosome D. Brain
- 96. Transcription takes place in the?
  - A. Cytoplasm B. Nucleus C. Ribosome D. Brain
- 97. The tertiary structure of tRNA is?
  - A. D-shaped B. L-shaped C. S-shaped D. Y-shaped
- 98. Genes in the DNA of eukaryotes that code for protein are called?
  - A. Exons B. Introns C. A&B D. None of the above
- 99. Initiation of protein synthesis occurs when?

- A. tRNA attaches to a cytoplasm B. mRNA attaches to a ribosome C. rRNA attaches to a ribosome D. None of the above
100. What year did John Watson and Francis Crick receive noble prize for their work?  
A. 1961 B. 1962 C. 1863 D. 1964

N:B All these question were derived from the lecturer's slide or what the lecturer said in class when explaining the topic

***GOOD LUCK WITH YOUR EXAMS***

FOR ANSWERS TO THESE QUESTION: SEND "BCH ANSWERS" TO  948123174904

**GOD BLESS YOU.**