

**BACHELOR OF MEDICAL LABORATORY  
TECHNOLOGY  
SECOND SEMESTER  
BIOCHEMISTRY II  
BMLT – 203 [REPEAT]  
[USE OMR SHEET FOR OBJECTIVE PART]**

Duration: 3 hrs.

Full Marks: 70

[ Objective ]

Time: 30 min.

Marks: 20

*Choose the correct answer from the following:*

**1×20=20**

1. RNA is:
  - a. Ribonucleic acid
  - b. Deoxyribonucleic acid
  - c. Both a and b
  - d. None of the above
2. Water is:
  - a. Neutral and alkali
  - b. Acid
  - c. Base
  - d. Neutral
3. To produce a product, an enzyme act on:
  - a. enzyme
  - b. substrate
  - c. Both of the above
  - d. None of the above
4. In enzymic reaction, substance which speeds reaction is:
  - a. Substrate
  - b. Catalyst
  - c. Both of the above
  - d. None of the above
5. pH of water is:
  - a. 8
  - b. 6
  - c. 10
  - d. None of the above
6. Double helical structure of DNA was shown by:
  - a. Watson
  - b. Crick
  - c. Both of the above
  - d. None of the above
7. Polymers of nucleotide is:
  - a. DNA
  - b. RNA
  - c. Both of the above
  - d. None of the above
8. Sodium hydroxide is:
  - a. Base
  - b. Acid
  - c. Neutral
  - d. None of the above

9. In base pairing of DNA or RNA, guanine to adenine and thiamine to :
  - a. Uracil
  - b. Cytosine
  - c. Both of the above
  - d. None of the above
10. Properties of water deals with:
  - a. Van der waals force
  - b. Hydrogen Bond
  - c. Both of the above
  - d. None of the above
11. A world famous author for Biochemistry book is:
  - a. Chawrasia
  - b. Lembart
  - c. Leninger
  - d. None of the above
12. A cell contain:
  - a. Nucleus
  - b. Mitochondria
  - c. Golgi bodies
  - d. All of the above
13. The name of course code of Biochemistry II in BMLT course is:
  - a. BMLT 202
  - b. BMLT 302
  - c. BMLT 103
  - d. BMLT 203
14. Examples of salt are:
  - a. Sodium bicarbonate
  - b. Calcium carbonate
  - c. Baking Soda
  - d. All of the above
15. TDP and CMP in abbreviation is:
  - a. same
  - b. Different
  - c. Only a
  - d. None of the above
16. When a phosphate group attach to a nucleoside, it is called as:
  - a. Nucleoside
  - b. nucleotide
  - c. Both a and b
  - d. None of the above
17. Ribonucleotides consists of
  - a. Nitrogenous base , Phosphoric acid, ribose sugar
  - b. Pentose sugar
  - c. Only a
  - d. All of the above
18. RNA are three types namely
  - a. mRNA and rRNA
  - b. rRNA and tRNA
  - c. Both a and b
  - d. None of the above
19. Enzyme given by
  - a. German Physiologist
  - b. Kuhne
  - c. Both a and b
  - d. None of the above
20. Instrument used for vit. test is:
  - a. HPLC
  - b. Colorimeter
  - c. Both a and b
  - d. None of the above

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**( Descriptive )**

Time : 2 hrs. 30 min.

Marks : 50

*[ Answer question no.1 & any four (4) from the rest ]*

1. Define Enzyme, Nucleoside and Nucleotide. Write the difference between competitive and non competitive inhibitor. Draw a structure of GMP. 10
2. Define acid, base and salt and give classification with examples. Also define electrolyte with a diagram for preparation in a laboratory. 10
3. Write about colorimeter and its principle. Also define water balance and water output. 10
4. Write about pentose sugar and draw a diagram with examples. Draw the structure of pentose sugar of ribose and deoxyribose . 10
5. Write the difference between DNA and RNA. Draw a structure of double helical structure of DNA. 10
6. What is enzyme and coenzyme. Give the classification of enzyme with examples. 10
7. Write about enzyme substrate complex with a diagram. Give the properties of enzyme. 10
8. Give the properties of water and explain the chemical structure water with a diagram . 10

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