

**BACHELOR OF MEDICAL LABORATORY
TECHNOLOGY
SECOND SEMESTER
BIOCHEMISTRY II
BMLT – 203**

**SET
A**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

[Objective]

Marks: 20

Choose the correct answer from the following:

$1 \times 20 = 20$

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