

**First Year B.Sc MLT Degree Supplementary Examinations
November 2021**

Biochemistry

(2016 Scheme)

Time: 3 Hours

Total Marks: 100

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers* • *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essay

(2x10=20)

1. Discuss how a standard clinical laboratory is set up in a P.H.C. Add a note on the laboratory safety measures. (5+5)
2. Enumerate the eukaryotic cell organelles. Discuss the structure and functions of each organelle with a note on their fractionation and Comparison of cell organelles with plant and animal cell (3+4+3)

Short notes

(10x5=50)

3. Nephelometry
4. Heteropolysaccharides
5. Reflectance photometry.
6. Functions of phospholipids.
7. Function and classification of proteins
8. Laboratory first aid measures.
9. Donnan membrane equilibrium.
10. Colour reactions of amino acids.
11. Calibration of automatic pipette.
12. Preparation of 500ml. of 1N potassium permanganate.

Answer briefly

(10x3=30)

13. S.I units
14. Nucleosomes.
15. Benedict's test.
16. Primary standards.
17. Double distilled water
18. Saponification number.
19. Isoelectric precipitation.
20. Cleaning of glass wares.
21. Water as universal solvent.
22. Define molarity. Mention the procedure for preparation of 500 ml of 1M sodium carbonate.