

First Year B.Sc MLT Degree Regular/Supplementary Examinations
November 2024
Biochemistry - I
(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. What are different types of laboratory hazards. What are the safety measures. Add a note on universal safety precautions. (4+3+3)
2. How lipids are digested and absorbed in our body. (4+6)

Short notes**(10x5=50)**

3. Composition and characteristics of different types of glasses.
4. Calibration of pipettes.
5. Different types of buffer systems.
6. Principle and parts of spectrophotometer.
7. Urine preservatives.
8. Properties of colloids.
9. Types, composition and characteristics of Mucopolysaccharides.
10. Secondary structure of proteins.
11. How will you prepare 0.85% NaCl.
12. Write a note on different types of indicators used in laboratory.

Answer briefly**(10x3=30)**

13. Preparation of Chromic Acid Solution.
14. Mitochondria.
15. Electronic weighing balance.
16. Principle, use and maintenance of Desiccator.
17. What are secondary chemical standards. Give examples.
18. Emulsions.
19. Define saponification number. What is its use.
20. What is the dilution factor needed to make a 100mEq/L solution from 3000 mEq/L solution.
21. Preparation of distilled water.
22. Structural proteins.
