

QP Code: 104383

Reg. No.....

**First Year M.Sc. MLT Degree Regular/Supplementary Examinations
July 2025**

(Biochemistry)

Paper IV - General Physiology, Nutrition & Mineral Metabolism

Time: 3 hrs.

Max. 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*

Essays:

(10x10=100)

1. Write in detail about the muscle proteins. Add a note on Muscle energy metabolism. (4+6)
2. Describe oxygen toxicity and explain the processes of removal of free radicals from the body. (3+7)
3. Describe the digestion and absorption of carbohydrates. (3+7)
4. Describe the chemistry of blood coagulation. Write the coagulation disorders. (4+6)
5. What is the normal serum level of sodium. Write in detail about hyponatremia and hypernatremia. (5+5)
6. Describe the oxygen dissociation curve and explain delivery of oxygen to tissues. (4+6)
7. Describe the biochemical functions of copper. Add a note on its deficiency manifestations. (5+5)
8. What is respiratory quotient. Add a note on the role of carbohydrates, lipids and proteins in diet. (3+7)
9. Explain the mechanisms of detoxification by reduction with examples, and add a note on the detoxification of drugs. (5+5)
10. Describe the glycemic index. Write in detail about diet in pregnancy. (3+7)
