

QP Code: 104383

Reg. No.....

**First Year M.Sc. MLT Degree Regular/Supplementary Examinations
August 2024
(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. Discuss in detail the different pathways of blood coagulation.
2. Outline the different steps in the metabolism of xenobiotics.
3. Compare the salient features of Marasmus and Kwashiorkor.
4. Explain the free radical scavenger systems in our body. Add a note on Anti oxidants. (5+5)
5. Write the biochemical functions of calcium. Explain the regulation of blood calcium levels. (5+5)
6. Write the sources, requirement, functions and disease states associated with selenium. (1+1+5+3)
7. Name the different muscle proteins and outline their actions during muscle contraction. (1+9)
8. Define Basal Metabolic Rate. Write the normal values and discuss the factors affecting it. (1+2+7)
9. Name the different glucose transporters- Write their site, characteristics, mechanism of action and significance. (1+1+3+3+2)
10. Describe the transport of carbon dioxide in blood. Add a note on the effect of pCO₂ on the Oxygen dissociation curve.
