

QP Code : 104383

Reg . No.....

**First Year M.Sc. MLT Degree Examinations – November 2015
(Biochemistry)**

PAPER – IV GENERAL PHYSIOLOGY, NUTRITION & MINERAL METABOLISM

Time : 3 hrs.

Max. marks : 100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays:

(10x10 = 100)

1. What is meant by xenobiotics . Mention the three phases of detoxification with examples. Add a note on detoxification of aspirin (2+6+2)
2. Explain the following and add a note on its clinical importance: • Effect of pH and haem-haem interaction on transport of oxygen • Chloride shift (5+5)
3. Explain the role of proximate principles, calorie requirement and general composition of food in the preparation of a balanced diet. (3+3+4)
4. Explain biochemical functions of iodine & its deficiency and biochemical functions of zinc & its deficiency (5+5)
5. Explain the sources, regulation and deficiency of calcium. (2+6+2)
6. Discuss the digestion and absorption of proteins.
7. Define and classify anemia. Add a note on the lab work up for iron deficiency anemia. (2+4+4)
8. Explain Blood coagulation process and myosin (5+5)
9. Explain Biochemical role of sodium, hyponatremia and marasmus (5+5)
10. What is a free radical. Name any four reactive oxygen species. Discuss the role of superoxide dismutase , and glutathione reductase as free radical scavenger systems. Add a note on commercial anti-oxidants (2+2+5+1)
