

QP Code : 102383

Reg . No.....

**First Year M.Sc. MLT Degree Examinations – September 2016
(Biochemistry)**

PAPER – II ENZYMOLOGY, METABOLISM AND INBORN ERRORS OF METABOLISM

Time : 3 hrs.

Max. marks : 100

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

Essays:

(10x10 = 100)

1. Explain competitive inhibition of enzymes . Site any three examples for clinical application of competitive inhibition (4+6)
2. What are isoenzymes and explain its basis . List two examples for diagnostic application of plasma enzymes and its isoenzymes (1+3+3+3)
3. Mention the functions of cholesterol .Outline the formation of biologically important compounds from cholesterol (2+8)
4. Classify the lipoproteins and mention its functions. What is the role of lecithin cholesterol acyl transferase and lipoprotein lipase (3+3+2+2)
5. Explain the mechanism of oxidative phosphorylation. Add a note on uncouplers (7+3)
6. Outline the formation of biologically important compounds from tyrosine
7. Explain the formation and fate of bilirubin. Add a note on congenital hyperbilirubinemia (3+3+4)
8. Explain the molecular basis of inborn metabolic disorders, enumerate the lab tests used in screening for metabolic disorders. (5+5)
9. Outline the purine catabolism. Explain the biochemical basis of gout. (5+5)
10. Name the ketone bodies and explain how they are formed. Illustrate how starvation causes ketosis (1+4+5)
