QP Code : 102383 **Reg . No……**

First Year M.Sc. MLT Degree Supplementary Examinations – June 2014 (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. Name any five plasma enzymes of diagnostic importance and mention its clinical significance
2. Define gluconeogenesis. Outline the pathway of gluconeogenesis from alanine. Name the key enzymes.
3. Mention the desirable serum levels of total cholesterol, HDL cholesterol and LDL cholesterol. List the causes and consequences of hypercholesterolemia.
4. Describe the sources of carbon and nitrogen atoms of purine ring with the help of a diagram. Mention the purine salvage pathway and mention its importance
5. Why is citric acid cycle called “amphibolic pathway” . Explain with examples
6. Outline the pathways of ketogenesis and ketolysis. What is ketosis and mention the causes of ketosis.
7. Describe the normal chemical composition of cerebrospinal fluid (CSF). Explain the clinical significance of CSF protein estimation.
8. Explain the fate of bilirubin in liver. Add a note on congenital hyperbilirubinemia.
9. What are the abnormal constituents of urine . Mention the principles of the tests to detect them.
10. Explain the importance of uronci acid pathway in humans and galactosemia

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