### [LC 0212]

# FEBRUARY 2013 Sub. Code: 5017

# B.Sc. MEDICAL LABORATORY TECHNOLOGY SECOND YEAR

### PAPER II – BIOCHEMISTRY-I

Q.P. Code: 725017

Time: Three hours Maximum: 100 marks

**Answer ALL questions.** 

## I. Elaborate on: (3X10=30)

- 1. Explain in detail the different steps in the anaerobic degradation of glucose. Add a note on its energetics.
- 2. How is cholesterol synthesized in the body? What are the functions of cholesterol?
- 3. Write the dietary sources, daily requirement, functions and deficiency features of calcium.

#### II. Write Notes on::

(8X5=40)

- 1. Functions of glutathione
- 2. Complications of Diabetes mellitus
- 3. Purine salvage pathway
- 4. Hypothyroidism
- 5. Acute intermittent porphyria
- 6. Transamination reactions
- 7. Fatty acid synthase complex
- 8. Synthesis of prostaglandins

#### **III.** Short Answers on:

(10X3=30)

- 1. Mention any three glycogen storage disorders
- 2. Name three aminoacids involved in creatinine synthesis
- 3. What are the derivatives of tryptophan
- 4. Mention the functions oxytocin
- 5. Orotic aciduria
- 6. Mention any three applications of electrophoresis
- 7. What are the hormones of adrenal cortex
- 8. Role of bile salts in digestion of lipids
- 9. Importance of 2,3 bisphosphoglycerate
- 10. Rate limiting step of heme synthesis

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