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: $(3 \times 10 = 30)$

- 1. What is the normal plasma glucose level? What are the criteria for diagnosing diabetes mellitus? Describe how blood glucose level is regulated?
- 2. Describe the digestion and absorption of lipids.
- 3. How is iron absorbed, transported and stored in our body? Describe the condition in which there is iron deficiency and iron excess.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Describe transamination reaction with 2 examples. Name the coenzyme involved.
- 2. How is Carbondioxide transported in blood?
- 3. Write the steps of glycolysis.
- 4. Name the thyroid hormones. How is the level of thyroid hormone regulated?
- 5. Write the steps of uric acid formation.
- 6. Write the steps of cholesterol synthesis up to its rate limiting step.
- 7. Draw a diagram illustrating carnitine transport.
- 8. Biological function of female sex hormones.

III. Short answers on: $(10 \times 3 = 30)$

- 1. Name three acute phase reactants.
- 2. Draw the oxygen dissociation curve.
- 3. Name the compounds formed from heme.
- 4. Name the disaccharide breaking enzymes present in intestine.
- 5. Name the non protein nitrogenous substances.
- 6. List the hormones produced by adrenal glands.
- 7. Name any three porphyrias.
- 8. Name three types of jaundice.
- 9. How is cerebrospinal fluid formed?
- 10. What deprivation test is done for the diagnosis of which disease? What was measured in this test?