

B.Sc. MEDICAL LABORATORY TECHNOLOGY**FIRST YEAR****PAPER II – BASIC CHEMISTRY***Q.P. Code: 725002***Time: Three Hours****Maximum: 100 Marks****Answer all questions****I. Elaborate on:****(3 x 10 = 30)**

1. Classification of carbohydrates and write on glucose metabolism.
2. Define Vitamins. Give an account on source, physiological role and deficiency of water soluble vitamins.
3. Explain the theory of calorimetry.

II. Write notes on:**(8 x 5 = 40)**

1. Classification of carbohydrates.
2. Biological importance of phospholipids.
3. Write about nucleosides and nucleotides.
4. Explain induced fit and lock and key model of enzymes.
5. Write about the properties of amino acids.
6. Titration using indicators.
7. Calorific value of food stuff.
8. Albumin by BCG method.

III. Short answers on:**(10 x 3 = 30)**

1. Stereo isomerism.
2. Buffer solution.
3. Functional proteins.
4. Electrophoresis.
5. Poly unsaturated fatty acids (PUFA).
6. Define specific dynamic action.
7. Coenzymes.
8. Essential amino acids.
9. Explain about invert sugar.
10. Explain nitrogen balance.
