[LN 0818] AUGUST 2018 **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: **(3 x 10 = 30)**

1. What are the diagnostic criteria for diagnosing diabetes mellitus? Classify diabetes mellitus. Describe the main classes.
2. What is the normal calcium level in serum? How is this regulated?
3. Describe the urea cycle with a neat diagram.

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

1. Steps of beta oxidation in mitochondria.
2. Name the hormones formed from Tyrosine. How they are formed?
3. Which parameters are measured to assess the status of iron metabolism in our body and what are their implications?
4. List the sex hormones and their actions.
5. Draw the electrophoresis pattern of normal serum. List the protein found in each band.
6. How to find the type of jaundice with Total, direct, indirect bilirubin results?
7. ACTH stimulation test.
8. Name the hormones produced by pancreas and mention their functions.

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

1. Name the enzyme digesting proteins in gasterointestinal tract.
2. What is Thalassemia?
3. Name the lipid digesting enzymes secreted by pancreas.
4. Name the monosaccharides found in human.
5. Draw the diagram of discoid micelle formed during the digestion and absorption of lipids.
6. What is M band in serum protein electrophoresis?
7. Name one substance each used for producing Ion Selective electrode for Na+, K+ and pH.
8. What is hemochromatosis?
9. What are negative acute phase reactants?
10. Why flame photometer is suitable for Na+ and K+ estimation?

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