(LG 4254) **FEBRUARY 2015** **Sub Code: 4254**

B.PHARM. EXAMINATION
FIRST YEAR
PAPER IV – BIOCHEMISTRY

Q.P. Code : 564254

Time : Three hours **Maximum : 100 marks**

I. Essays: **(2 x 20 = 40)**

1. a) Define an equation to show that the velocity of enzyme catalyzed reaction is dependent on the substrate concentration.
   b) Explain enzyme inhibition with examples.
2. What are proteins? Classify them with examples and describe the biosynthesis of proteins.

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

1. β oxidation of fatty acids.
2. Biochemical role of calcium and iron.
3. Mention the biological significance of polyunsaturated fatty acids.
4. t-RNA.
5. Write on account of digestion and absorption of carbohydrates in the body.
6. Write the physical, chemical properties, structure of hemoglobin.
7. Insulin.
8. Explain glycogenolysis.

III. Short answers: **(10 x 2 = 20)**

1. Write the structure and functions of cholesterol
2. Functions of nucleic acids
3. Substrate specificity
4. Biochemical functions of vit E
5. Hemolytic jaundice
6. Fatty liver
7. Define transamination
8. Identification tests for proteins
9. Saponification number
10. Other names of glycolysis

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