

**FIRST B.N.Y.S. DEGREE EXAMINATION****PAPER I – BIOCHEMISTRY***Q.P. Code : 821501***Time: Three hours****Maximum : 100 Marks****Answer All questions****I. Essay Questions: (2 X 15 = 30)**

1. What are vitamins? Describe in detail about the sources, daily requirements, synthesis, functions and deficiency manifestations of Vitamin A.
2. Explain about the chemistry of proteins with examples?

**II. Short Notes: (10 X 5 = 50)**

1. Explain about cell membrane and mitochondria.
2. Explain monomeric units of Nucleic acids.
3. Write about Lipoproteins.
4. Explain digestion and absorption of carbohydrates.
5. Write a note on Glycogen storage diseases.
6. Explain Myoglobin in detail.
7. Explain the DNA structure.
8. Biochemistry of starvation.
9. Calcium absorption, transport and storage.
10. Explain about denaturation of proteins.

**III. Short Answers: (10 X 2 = 20)**

1. Define Carbohydrates.
2. What is protein?
3. What is meant by lipids?
4. Define pH.
5. Types of Amino acids.
6. What is isoenzyme?
7. What is sickle cell anemia?
8. What are ketone bodies?
9. What is translation?
10. Define acids and bases.

\*\*\*\*\*