



Reg. No: .....

**First Year B.Sc Nursing Degree Supplementary Examinations April 2019****Nutrition and Biochemistry****(2016 Scheme)****Time: 3 Hours****Max Marks: 75**

- Answer all questions
- Write section A (32 Pages) and section B (32 Pages) in separate answer books. Do not mix up questions from section A and section B.

**Q P Code: 114010****Section A – Nutrition****Marks: 50****Short Essay****(2x7= 14)**

1. Discuss about protein energy malnutrition in detail.
2. Explain about water soluble vitamins in detail.

**Short Notes****(5x4=20)**

3. Nutritional programme in India
4. Canning
5. Sources of calcium
6. Goiter
7. Role of fiber

**Answer Briefly****(4x4=16)**

8. Factors affecting food and nutritional intake
9. Functions of carbohydrates
10. Menu plan for a diabetic adult man doing sedentary work
11. ICDS

**Q P Code: 115010****Section B – Biochemistry****Marks: 25****Short Essays****(2x5=10)**

1. Digestion and absorption of carbohydrates.
2. Dietary sources, biochemical functions and deficiency manifestations of vitamin A

**Short notes****(2x3=6)**

3. What are isoenzymes. Give examples of isoenzymes with their clinical importance.
4. Plasma buffers

**Differentiate Between****(3x3=9)**

5. Immunoglobulin (G) and immunoglobulin (M)
6. Essential amino acids and non-essential amino acids
7. Starch and glycogen

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