

**First Basic B.Sc. Nursing Examination, Winter - 2020**  
**NUTRITION AND BIOCHEMISTRY**

Total Duration : Section A+B = 3 Hours

Total Marks : 75

**SECTION - A & SECTION - B**

- Instructions :**
- 1) Use blue/black ball point pen only.
  - 2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
  - 3) All questions are compulsory.
  - 4) The number to the right indicates full marks.
  - 5) Draw diagrams wherever necessary.
  - 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
  - 7) Use a common answerbook for all sections.

**SECTION - A (45 Marks)**

**(Nutrition)**

1. Short answer questions (any five out of six) : [5 × 5 = 25]
- a) Explain the factors affecting food and nutrition.
  - b) Discuss the functions of proteins.
  - c) Iron deficiency anemia.
  - d) Explain role of a nurse in nutritional programme.
  - e) Discuss factors affecting iron absorption.
  - f) Classify lipids with examples. Write functions of lipids.

2. Long answer question (any two out of three) : [2 × 5 = 10]
- Explain principles of cooking.
  - Define carbohydrates and classify it with examples.
  - Explain different methods of food preparation.
3. Short answer question (any two out of three) : [2 × 5 = 10]
- Explain principles of weaning.
  - Describe clinical features of severe protein energy malnutrition.
  - Explain role of fibre in diet.

**SECTION - B (30 Marks)**

**(Biochemistry)**

4. Long answer question (any four out of five) : [4 × 5 = 20]
- Describe deficiency manifestations of vitamin D.
  - Write a note on homopolysaccharides.
  - Describe regulation of blood calcium level.
  - Describe hormonal regulation of water and electrolyte balance.
  - Discuss nitrogen balance.
5. Long answer question (any one out of two) : [1 × 10 = 10]
- Describe Tricarboxylic acid cycle. Write about its amphibolic nature.
  - Define enzymes. Classify them giving examples. Add a note on clinical significance of enzymes in heart disease.

