

First Basic B.Sc. (Nursing) Examination, Summer 2015
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 answer book for all Section**.

SECTION – A (45 Marks)

Nutrition

1. Short answer questions (**any five** out of six) : **(5×5=25)**
- a) Write the factors interfering in absorption of calcium.
 - b) Methods of food preservation and storage.
 - c) Describe the effect of deficiency of water and its management.
 - d) Describe the effect of deficiency and excess of fat in diet.
 - e) Classify minerals and write some general functions of minerals.
 - f) Define food and classify.



2. Long answer questions (**any two** out of three) : (2×5=10)
- Write the sources, deficiency manifestation of vitamin A.
 - Discuss the effect of deficiency of protein and its preventive measures.
 - Define basal metabolic rate and factors affecting basal metabolic rate.

3. Short answer questions (**any two** out of three) : (2×5=10)
- Describe the classification of carbohydrate.
 - Food fortification.
 - List the uses of recommended dietary allowances.

SECTION – B (30 marks)

Biochemistry

4. Long answer questions (**any four** out of five) : (4×5=20)
- Define proteins, classify them giving suitable examples.
 - Outline the pathway of glycolysis with its energetics.
 - Classify lipoproteins with their functions.
 - Describe competitive and non-competitive inhibition of enzymes with their examples.
 - Functions and deficiency manifestations of calcium.
5. Long answer questions (**any one** out of two) : (1×10=10)
- Describe sources, recommended daily allowance, biological functions and deficiency manifestations of vitamin D .
 - Define oxidative and non-oxidative deamination. Describe urea cycle with its metabolic disorders.