First BASIC B.Sc. (Nursing) Examination, Summer – 2023 (Phase – III)
NUTRITION AND BIOCHEMISTRY

Total Marks : 75

Total Duration : 3 Hours

Instructions :
1) Use **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"
(Nutrition)

1. **Short answer questions (Solve any 5 out of 6) :**   [5 × 5 = 25]

   a) Functions of Nutrients.

   b) ICDS

   c) Sign and symptoms of dehydration

   d) Functions and deficiency of Potassium

   e) Ill effects of food adulteration

   f) Vitamin C

2. **Long answer questions (Solve any 2 out of 3) :**　　　　[2 × 5 = 10]

   a) Define protein, its function and deficiency.

   b) What is food preservation write down different methods of food preservations.

   c) Define Lipids its classification and functions.

3. **Short answer questions (Solve any 2 out of 3) :**　　　　[2 × 5 = 10]

   a) Importance vitamins to body and rules to follow to prevent vitamin loss during cooking.

   b) Classification of food as per its function.

   c) Define dehydration and its dietary management.

Section "B"

(Biochemistry)

4. **Short answer questions (Solve any 4 out of 5) :**　　　　[4 × 5 = 20]

   a) Electrophoresis

   b) Define Enzymes. Describe the factors affecting Enzymes activity.

   c) Free Radicals

   d) Functions and Deficiency Manifestation of vitamin C

   e) Describe fluid Mosaic Model with neat label Diagram.

5. **Long answer questions (Solve any 1 out of 2) :**　　　　[1 × 10 = 10]

   a) Define Hypoglycemia. List Bio-chemical indicators of Diabetic control. Explain hormonal regulation of Blood Glucose level.

<div align="center">OR</div>

   b) Discuss steps of β-Oxidation of fatty Acid with it's Location and Energy yielding

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