



62502

**First Basic B.Sc. Nursing Examination, Summer 2017**  
**NUTRITION AND BIOCHEMISTRY**

Total Duration : Section A + B = 3 Hours

Total Marks : 75

**SECTION – A and 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) Describe the deficiency diseases of vitamin D.
  - b) Factors affecting food and nutrition.
  - c) Composition of body fluids.
  - d) Describe the functions of protein.
  - e) Methods of cooking and effect of cooking on food constituents.
  - f) Integrated Child Development Scheme.
  
2. Long answer questions (**any two** out of three) : **(2×5=10)**
  - a) Define and classify fat.
  - b) Write the sources and effect of deficiency of iron.
  - c) List sources of thiamine and effect of its deficiency.

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3. Short answer questions (**any two** out of three) :

(2×5=10)

- a) Prevention of Food Adulteration Act, 1954.
- b) Define balanced diet and write the steps in planning balanced diet.
- c) Define BMR and write the factors affecting energy requirement.

SECTION – B (30 Marks)

(Biochemistry)

4. Short answer questions (**any four** out of five) :

(4×5=20)

- a) Write any five functions of cholesterol.
- b) Draw urea cycle mentioning enzymes, coenzymes, substrate and product formed in the cycle.
- c) Factors regulating blood calcium level.
- d) Diagnostic and clinical significance of enzymes.
- e) What are blood buffers ? Explain their role in maintaining blood pH.

5. Long answer questions (**any one** out of two) :

(1×10=10)

- a) Define and classify vitamins. Write sources, daily requirement, functions and deficiency manifestation of vitamin A.
  - b) Define carbohydrate. Explain glycolysis in detail with its energetics.
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