B.Sc.(N) [1st Year]
BF/2022/05
Nutrition & Biochemistry
[New Scheme w.e.f. 2006]

Time : 3 Hours   Max Marks : 75

Note: 1.) ***Attempt all questions.***
         2.) ***USE SEPARATE ANSWER BOOK FOR EACH PART.***
         3.) ***The Student must write separate Q.P. Code in the space provided on the Title Page of the respective Answer Book.***

SECTION-A   [45 Marks]

QP Code: BNN103   [NUTRITION]

1. (a) Define Balanced diet.   [2]

    (b) Explain the Macro-elements of Nutrition.   [5]

    (c) Factors affecting Food choices and Nutrition.   [3]

2. (a) Define Therapeutic diet.   [2]

    (b) Enumerate the Nutritional problem in India.   [3]

    (c) Discuss Nurses' role in Nutrition education.   [5]

3. (a) Write the unit and formula for Body Mass Index Calculation.   [2]

    (b) Explain principles of Cooking.   [4]

    (c) Discuss the parameters of Nutritional assessment.   [4]

4. **Write Short Notes on any THREE of the following :**   [3x5=15]

    (a) Hypervitaminosis   (b) Protein energy mal nutrition
    (c) Prevention of food adulteration (d) Nutritional needs of an infant
    (e) National nutritional policy

SECTION-B   [30 Marks]

QP Code: BNN104   [BIOCHEMISTRY]

1. (i) (a) Describe the Pentose phosphate pathway of glucose metabolism giving names of enzymes and coenzymes involved.   [5]

      (b) Describe absorption of Calcium in the body. Also explain how serum calcium level is regulated.   [5]

OR

   (ii) (a) Give an account of chemistry, functions and deficiency manifestations of Vitamin B_{12}.   [5]

       (b) Describe the importance of Serum enzymes in the diagnosis of disease.   [5]

2. Explain the Regulation of Cholesterol biosynthesis.   [5]

3. **Write Short Notes on any FIVE of the following :**   [3x5=15]

    (a) Essential fatty acid   (b) PUFA (Polyunsaturated fatty acids)
    (c) Krebs- Henseleit cycle   (d) Refsum's disease
    (e) Hinge region   (f) Electrophoresis
    (g) Iso enzymes