BRAINWARE UNIVERSITY

Term End Backlog Annual Examination, March- 2023

Programme – Bachelor of Science in Nursing

Course Name – Nutrition and Biochemistry

Course Code – BNS102

(Year – I)

Time allotted: 3 hrs.   Full Marks: 75

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable. Write answer of Section – A and Section –B in separate Answer booklet.]

Section – A

1. Write short answer on any *four* of the following: 4 x 5 = 20

   (I)   National Nutritional policy.   [5]

   (II)   Classification of carbohydrate.   [5]

   (III) Essential fatty acid.   [5]

   (IV)   Pateurization of milk.   [5]

   (V)   ICDS.   [5]

2. Write long answer on any *one* of the following: 1 x 10 = 10

   (I)   Classify protein. Describe the digestion, absorption, metabolism &   [2+6+2= 10]
          importance of protein food. Write the dietary allowances (RDA) &
          caloric value of protein.

   (II)   Describe micro & macro elements of nutrition.   [5+5= 10]

3. Write long answer on any *one* of the following: 1 x 15 = 15

   (I)   a) What do you mean by mineral?   [2+4+4+5= 15]

          b) Classify the minerals with examples.

          c) Mention the rich sources & deficiency disorder of mineral.
   (II)   a) Write down the causes of dehydration.   [3+4+4+4= 15]

          b) What are the signs & symptoms of dehydration?

          c) Write down the importance of electrolyte potassium in human body.

          d) Describe the features of potassium imbalance.

Section –B

4. **Write short answer on any *two* of the following:** $2 \times 5 = 10$

   (I)   Mitochondria.   [5]

   (II)   Alkalosis.   [5]

   (III) Antioxidants.   [5]

5. **Write long answer on any *two* of the following:** $2 \times 10 = 20$

   (I)   Explain active and passive transport mechanism with labelled diagram.   [5+5= 10]

   (II)   Define Gluconeogenesis. Describe in detail about the pathway of   [2+8= 10]
          Gluconeogenesis?

   (III) What is normal serum calcium level? How is it regulated? Add a note on   [2+3+5= 10]
          hypercalcemia and hypocalcemia.