



BRAINWARE UNIVERSITY

Term End Annual Examination 2020 – 21

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) Antioxidants. [5]
 - (II) Mid day meal programme. [5]
 - (III) Classification of carbohydrate. [5]
 - (IV) Principles of menu planning. [5]
 - (V) Therapeutic Diet. [5]
 - (VI) Food borne disease. [5]

2. Write long answer on any *one* of the following: 1 x 10 = 10
 - (I) Define Gluconeogenesis. Describe in detail about the pathway of Gluconeogenesis? [2 + 8 = 10]
 - (II) Explain sources, factors affecting absorption and the deficiency manifestations of Iron. [3+4+3 = 10]

3. Write long answer on any *one* of the following: 1 x 15 = 15
 - (I) Name the ketone bodies. Explain how ketone bodies are synthesized and utilized in our body. Enlist four function of bilirubin. [3+8+4 = 15]
 - (II) Define and classify the vitamins. Write sources, daily requirements, function and deficiency manifestation of Vit A. [2+5+8 = 15]

Section -B

- 1. Write short answer on any two of the following:** 2 x 5 = 10
- (I) Mitochondria. [5]
 - (II) Acidosis. [5]
 - (III) Glucose tolerance test. [5]
- 2. Write long answer on any two of the following:** 2 x 10= 20
- (I) Draw a eukaryotic cell and outline the functions of its organelles. [2+8 = 10]
 - (II) What is immunoresponse? Describe the mechanism of antibody production. [4+6= 10]
 - (III) What are omega 3 fatty acids? Give an account of three major such fatty acids. What are omega 6 fatty acids and their sources? (OMIT) Why are Unsaturated fatty acids called 'Healthy Fats'? [3+3+4 = 10]
