

December-25--3031
B. Sc. Nursing Sem - II Examination
December - 2025

Applied Biochemistry and Applied Nutrition and Dietetics

Total Marks : 75

Time : 3 Hours

- Instructions :**
1. The number to the right indicated full marks.
 2. Draw diagram wherever necessary.
 3. Answer each section in the respective answer sheet only.
 4. Answer written in the inappropriate sectional answer book will not be assessed in any case.

SECTION-A (25) APPLIED BIOCHEMISTRY

1. **Multiple Choice Questions :** (1 X 4 = 4)
1. The normal pH of the human blood is :
a. 7.0 - 7.1 b. 7.25 - 7.3 c. 7.38 - 7.42 d. 7.5 - 7.55
 2. What is the nature of enzymes
a. Vitamin b. Lipid c. Carbohydrate d. Protein
 3. All the following are essential amino acids except
a. Tyrosine b. Lysine c. Valine d. Phenylalanine
 4. Net generation of ATP is glycolysis
a. 5 b. 8 c. 15 d. 20
2. **Write Short Notes. (Any Three)** (5 X 3 = 15)
1. Urea cycle
 2. To explain the classification of enzyme
 3. To explain the metabolism of carbohydrate
 4. Immunity
 5. Jaundice
3. **Very Short Answer : (Any Three)** (2 X 3 = 6)
1. LFT
 2. ABG
 3. Regulation of blood pH
 4. Classification of lipid

SECTION-B (50) APPLIED NUTRITION AND DIETETICS

4. **Multiple Choice Questions :** (1 X 8 = 8)
1. One gram of carbohydrate produce _____ energy.
a. 4 K Cal b. 9 K Cal c. 5 K Cal d. 7 K Cal
 2. The chemical name of vitamin B12 is _____
a. Niacin b. Riboflavin c. Cyanocobalamin d. Thiamin
 3. Which of the following nutrients is needed to build and maintain the structural components of body ?
a. Calcium b. Protein c. Fat d. Fiber
 4. Which of the following nutrients if known as the sunshine vitamin ?
a. Vitamin C b. Vitamin A c. Vitamin K d. Vitamin D
 5. School lunch programme was launched in the year _____
a. 1970 b. 1961 c. 1975 d. 1985
 6. Xerophthalmia occurs due to deficiency of _____
a. Vitamin C b. Vitamin K c. Vitamin A d. Vitamin E

7. _____ is the method of preserving food by killing all microorganism present in the food and then sealing out air :

- a. Pasteurization
- b. Canning
- c. Extrusion
- d. Frying

8. Identify non essential amino acids from the following :

- a. Lysine
- b. Leucine
- c. Valine
- d. Alanine

5. **Essay type questions :**
To write in detail about PEM.

OR

To explain in detail about vitamins.

(1 X 10 = 10)

7

6. **Write Short Notes. (Any Four)**

- 1. ICDS
- 2. Cooking method
- 3. Balance diet
- 4. Function of protein
- 5. Food adulteration act

(4 X 5 = 20)

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7. **Very Short Answer : (Any Six)**

- 1. Weaning
- 2. Nutrients
- 3. Bulimia nervosa
- 4. DM
- 5. Potassium
- 6. Basal metabolism rate
- 7. Five keys to safe of food

(6 X 2 = 12)
