

Reg. No: .....

**Second Semester B.Sc Nursing Degree Regular/Supplementary  
Examinations October 2024  
Paper I – Applied Biochemistry and Applied Nutrition & Dietetics**

Time: 3 Hrs

Total Marks: 75

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers
- Indicate the question number correctly for the answer in the margin space • Answer all parts of a single question together
- Leave sufficient space between answers • Draw table/diagrams/flow charts wherever necessary
- Write section A and section B in separate answer books (32 Pages). Do not mix up questions from section A and section B.

**Section A – Applied Biochemistry**

Q.P. CODE: 221010

Max. Marks: 25

**1. Multiple Choice Questions****(4x1=4)****(choose the most appropriate answer from the options given)****The Answers to MCQ questions (Q.No. i to Q.No. iv) shall be written continuously on the first writing sheet (ie Page No. 3) only**

- i. The normal glucose tolerance curve reaches peak is
- a) 15 min                      b) 1 hr                      c) 2 hrs                      d) 2 ½ hrs
- ii. Which bond is present in the primary structure of protein
- a) Ester                      b) Hydrogen                      c) Ionic bond                      d) Peptide
- iii. Which of the following enzyme typically elevated in alcoholism
- a) Serum Alkaline Phosphatase (ALP)
- b) Serum Glutamic-Oxaloacetic Transaminase (SGOT)
- c) Serum Gamma-Glutamyl Transferase (GGT)
- d) Serum Acid Phosphatase (ACP)
- iv. Immunoglobulins are classified on the basis of
- a) Type of light chains                      b) Type of heavy chains
- c) Types of light and heavy chains                      d) Molecular weight

**Short notes****(3x5=15)**

2. Essential fatty acids.
3. Electrophoresis
4. Liver function tests.

**Differentiate the following****(3x2=6)**

5. Glycosuria and Ketonuria
6. High Density Lipoprotein (HDL) and Low Density Lipoprotein (LDL)
7. Metabolic alkalosis and Respiratory alkalosis.

**(PTO)**

**Section B – Applied Nutrition and Dietetics**

**Q.P. CODE: 222010**

**Max. Marks: 50**

**1. Multiple Choice Questions**

**(8x1=8)**

**(choose the most appropriate answer from the options given)**

**The Answers to MCQ questions (Q.No. i to Q.No. viii) shall be written continuously on the first writing sheet (ie Page No. 3) only**

- i. Children with pot belly is an indicative of which type of disease  
a) Goitre            b) Anaemia            c) Kwashiorkor            d) Marasmus
- ii. Richest source for ascorbic acid is  
a) Amla            b) Rice flakes            c) Yellow coloured fruits            d) Milk
- iii. Which of the following disease is caused by the deficiency of haemoglobin  
a) Malaria            b) Anemia            c) Rabies            d) Cholera
- iv. Beriberi disease caused by deficiency of which of the following vitamins  
a) Vitamin B<sub>12</sub>            b) Vitamin B<sub>2</sub>            c) Vitamin B<sub>1</sub>            d) Vitamin B<sub>3</sub>
- v. 1 gm of carbohydrates gives ----- kcals in our body  
a) 9 kcals            b) 4 kcals            c) 7 kcals            d) 5 kcals
- vi. The moist heat method of cooking used to peel the skin of fruits is -----  
a) Poaching            b) Blanching            c) Boiling            d) Toasting
- vii. Which of the following vitamin works with calcium to build strong bones  
a) Vitamin A            b) Vitamin D            c) Vitamin K            d) Folic acid
- viii. A diet high in saturated fats can be linked to which of the following  
a) Kidney failure            b) Bulimia  
c) Cardiovascular disease            d) Anorexia

**Essay**

**(1x10=10)**

- 2. Enlist the Nutritional Problems in India and explain the nutritional programs in India (3+7)

**Short notes**

**(4x5=20)**

- 3. Methods of Nutritional Assessment
- 4. Prevention of Food Adulteration
- 5. Functions of proteins
- 6. Factors influencing basal metabolic rate

**Differentiate the following**

**(3x2=6)**

- 7. Energy yielding food and Non energy yielding food
- 8. Breast feeding and Weaning
- 9. Thiamine and Riboflavin

**List Down the following.**

**(3X2=6)**

- 10. Advantages of cooking
- 11. Five keys to safer food handling
- 12. Principles of Nutrition Education.

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