

- 2) a. What is meal planning? (2+3+5)  
b. Enlist the four food groups?  
c. Elaborate the meal planning for different age groups of people?

OR

- 3) Elaborate five keys to safer food? (10 MARKS)

**Q- 3. Short type Questions: - [3\*5=15 Marks]**

**ANSWER ANY 3 QUESTION**

1. What do you mean by food exchange system.
2. What are the types of malnutrition diseases.
3. Explain dietary management for hypertension.
4. Give note on Anemia Mukh Bharat Program

**Q- 4. Very short questions-[5\*2=10 Marks]**

1. What are the two most common nutritional deficiency diseases
2. Name some minerals important for our body
3. Enlist the various nutrition programs running in India
4. What are the types of therapeutic diet
5. Different between marasmus and kwashiorkor

\*\*\*\*\*

**SCHOOL OF NURSING**

**PRE UNIVERSITY EXAMINATION - DEC - 2023**

**COURSE- B. Sc. NURSING (2<sup>nd</sup> SEMESTER)**

**SUBJECT – APPLIED BIOCHEMISTRY AND APPLIED  
NUTRITION & DIETETICS**

**TOTAL MARKS – 75**

**TIME – 3 HOURS**

**Instructions to the Candidates:**

- Read the question paper very carefully.
- Start writing from 2nd page onwards; **don't write on the 1st Page Backside.**
- Do not write anything except your Roll No. on the question paper.
- Possession of **Mobile Phones** or any kind of **Written Material, Arguments with the Invigilator or Discussing with Co-Student** will come under **Unfair Means** and will **Result** in the **Cancellation of the Papers.**

---

**SECTION- A (APPLIED BIOCHEMISTRY) 25 M**

**Q- 1. Multiple Choice Question: - [12\*1=12 marks]**

1. The antibodies which contain J- chain are

- a) IgE & IgM    b) IgA & IgM  
 c) IgG & IgE    d) IgM & IgD
2. The blood group with antibody A and antibody B is
- a) A    b) B  
 c) AB    d) O
3. In Hybridoma technology, hybrid cells are selection in
- a) HAT media    b) MS media  
 c) X-gal Media    d) None of these
4. Which immunoglobulin can pass through placenta?
- a) IgD    b) IgE  
 c) IgM    d) IgG
5. pH of the blood is
- a) 6.8    b) 7.4  
 c) 7.8    d) 7.0
6. Factors affecting enzyme activity:
- a) Concentration    b) pH  
 c) Temperature    d) All of these
7. Pepsin is produced in
- a) Mouth    b) Stomach  
 c) Intestine    d) None
8. Hydrolytic enzymes break the chemical bond between atoms of large molecules in presence of
- a) CO<sub>2</sub>    b) CH<sub>4</sub>  
 c) O<sub>2</sub>    d) H<sub>2</sub>O
9. B cells that produce and release large amount of antibody are called
- a) Memory cell    b) Plasma cell  
 c) Secretory cell    d) none of above
10. Range of pH scale is
- a) 7-10    b) 10-14  
 c) 7-14    d) 0-14

**Q- 2. Essay type Question: - [2\*5=10Marks]**

1. What is ELISA? Describe different types of ELISA.

2. Draw labelled diagram of antibody. Write the function of different antibodies.

**Q- 3. Short type Questions: - [2\*2.5=5 Marks]**

- a) Defined pH. Calculate the pH of 0.02M sodium hydroxide solution? [ $\log 0.02=1.7$ ]  
 b) What is enzyme? Write the properties of enzyme.

**SECTION- B ( NUTRITION )                        50 M**

**Q- 1. Multiple Choice Question: - [5\*1=5marks]**

1. Per day diet requirement for a pregnant woman:
- a) 1800 kcl    b) 2000 kcl  
 c) 2200 kcl    d) 2100 kcl
2. Therapeutic diet is planned by:
- a) Mother    b) Friend  
 c) Physician    d) Pharmacist
3. High blood pressure patient should avoid foods which are rich in:
- a) Calcium    b) Iodine  
 c) Sodium    d) Iron
4. ICDS Scheme was launched on:
- a) 2<sup>nd</sup> October    b) 1<sup>ST</sup> October 1976  
 c) 4<sup>th</sup> October 1975    d) 2<sup>nd</sup> October 1976
5. All of the equipment used for preparing food should be:
- a) Wash    b) Sanitize  
 c) Both a and b    d) None of these

**Q- 2. Essay type Question: - [2\*5=10Marks] (ANSWER ANY TWO QUESTION)**

- a. Define Balanced diet?  
 b. Explain the principles of balanced diet.  
 c. Give in detail IYCF guidelines for breastfeeding.