



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
END OF SEMESTER AUGUST 2023 EXAMINATIONS**

COURSE CODE AND TITLE BSN 217 HUMAN NUTRITION AND DIATETICS

DATE: 8TH AUGUST 2023

Duration: 2 HOURS START: 2:00 P.M. FINISH: 4:00 P.M.

INSTRUCTIONS

- 1.** This exam is out of 70 marks
- 2.** This Examination comprises THREE Sections. Section I: Multiple Choice Questions (20 marks) Section II: Short Answer Questions (30 marks) and Section III: Long Answer Questions (20 marks)
- 3.** Answer ALL Questions.
- 4.** Do not write anything on the question paper -use the back of your booklet for rough work if need be.

SECTION A: MULTIPLE CHOICE QUESTIONS

(20 MARKS)

1. The following is a limitation of biochemical nutritional analysis: -
 - A. Time consuming
 - B. Expensive
 - C. Require skilled manpower
 - D. All of the above

2. In a child suffering from marasmus which of the following clinical manifestations is not observed: -
 - A. Watery diarrhea with acid stools
 - B. Subnormal temperature
 - C. Visible peristalsis from thin abdominal wall
 - D. Generalized edema

3. A person who is suffering from high blood pressure should cut down on: -
 - A. Sodium
 - B. Potassium
 - C. Calcium
 - D. Magnesium

4. Deficiency of vitamin B1 (Thiamine) results into: -
 - A. Beriberi
 - B. Wernicke-Korsakoff syndrome
 - C. Cheilosis
 - D. Dermatitis

5. In case of muscle fatigue, which of the vitamins should be taken: -
 - A. A
 - B. D
 - C. E
 - D. K

6. All are true about milk as a diet except?
 - A. It's low in iron content but rich in calcium, sodium, and potassium
 - B. The major carbohydrate is lactose
 - C. The chief proteins are caseinogens and lactalbumin
 - D. Its rich in vitamin C and D but poor in vitamin A and Riboflavin

7. A child has presented with growth retardation, inability to walk and bruises all over the body. The following nutrients should be recommended as a supplement to the diet: -
 - A. Milk
 - B. Egg yolk
 - C. Citrus fruits
 - D. Pulses

8. A person who has had renal transplant should regulate the intake of: -
- A. Carbohydrates
 - B. Proteins
 - C. Fats
 - D. Vitamins
9. A breastfeeding woman should drink plenty of water to: -
- A. Produce more milk
 - B. Suppress lactation
 - C. Prevent dehydration
 - D. Dilute nutrient concentration
10. Cretinism is a condition which develops in the fetus from: -
- A. Deficiency of proteins
 - B. Deficiency of fluorine
 - C. Deficiency of iodine
 - D. Deficiency of vitamin B₃
11. The following statement is correct concerning historical development of nutrition: -
- A. Antoine Lavoisier, the "Father of Nutrition and Chemistry" discovered the actual process by which food is metabolized.
 - B. Justus Liebig of Germany, a pioneer in early plant growth studies, was the first to point out the chemical makeup vitamins.
 - C. William Rose discovered the water components
 - D. Nutrition as a field is not well developed
12. Good nutrition practices are prevention strategies for: -
- A. Secondary disease
 - B. Primary disease
 - C. Tertiary disease
 - D. All of the above
13. Simple carbohydrate includes: -
- A. Glucose
 - B. Galactose
 - C. Maltose
 - D. Starch
14. Factors that influence Glycemic Index Score include: -
- A. Whether the food is eaten raw or cooked
 - B. The amount and type of processing a food has undergone
 - C. The degree of ripeness of a piece of fruit
 - D. All of the above
15. The following is not a role of dietary fibers in the body: -
- A. A high fiber diet prevents the formation of diverticula
 - B. Protects against colon cancers
 - C. Protects against beriberi
 - D. Relieves and prevents constipation.

16. A true statement about proteins is that: -
- A. All proteins are broken down into a pool of amino acids
 - B. Milk is an example of incomplete proteins
 - C. There are 11 essential amino acids
 - D. plant proteins are complete proteins
17. Fatty acids: -
- A. Fatty acids with high melting point have shorter carbon chain
 - B. All have similar chain length
 - C. Unsaturated fatty acids miss some hydrogen atoms
 - D. Unsaturated fats are generally liquid at room temperature
18. The following statement is true about vitamins: -
- A. vitamins A, B, C are fat soluble
 - B. Yellow, green, purple, orange, dark green are precursors of vitamin A
 - C. Calciferol is required in plenty for maintenance of epithelial tissues
 - D. Vitamin E is mainly from fish
19. One of the factors that decrease calcium absorption is: -
- A. Vitamin D deficiency
 - B. Dietary fats
 - C. Alkalinity
 - D. Carbohydrate intake
20. The function of iodine is to: -
- A. Transport of nutrients and oxygen to cells
 - B. Participates in metabolic reaction
 - C. Regulates the effects of oestrogen and breast tissue
 - D. Fluid electrolyte balance

SECTION II: SHORT ANSWER QUESTIONS

(30 MARKS)

1. State five (5) importance of meal planning for a family (5 marks)
2. State five (5) benefits of good nutrition (5 marks)
3. State five (5) roles of fibers in the body (5 marks)
4. Outline five (5) differences between complete and incomplete proteins. (5marks)
5. Outline five (5) factors that influence diet planning. (5 marks)
6. Explain the difference between essential and non-essential amino acids. (5 marks)

SECTION III: LONG ANSWER QUESTION –

(20 MARKS)

1. Protein Energy Malnutrition refers to a group of related disorders that include marasmus, kwashiorkor, and a combination of both states, marasmic-kwashiorkor. The deficiency is one of the leading causes of death in children in developing countries.
 - a. Discuss the management of Protein Energy Malnutrition (PEM) (10 marks)
 - b. Discuss the complications of Protein Energy Malnutrition (PEM) (10 marks)

AMMU