



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
END OF SEMESTER AUGUST 2024 EXAMINATIONS**

COURSE CODE AND TITLE: BSN 217: HUMAN NUTRITION AND DIETETICS

DATE:

Duration: 2 HOURS

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 I: MULTIPLE CHOICE QUESTIONS

(20 MARKS)

1. The following is a simple carbohydrate;-
 - A. Starch
 - B. Fructose
 - C. Fiber
 - D. Glycogen
2. The primary lipid found in plant oils and some animal fats is;-
 - A. Triglycerides
 - B. Phospholipids
 - C. Sterols
 - D. Waxes
3. Proteins are composed of how many amino acids;-
 - A. 5
 - B. 9
 - C. 12
 - D. 20
4. The vitamin synthesized in the skin upon exposure to sunlight is;-
 - A. Vitamin A
 - B. Vitamin D
 - C. Vitamin E
 - D. Vitamin K
5. The mineral important for the formation of hemoglobin is;-
 - A. Calcium
 - B. Iron
 - C. Zinc
 - D. Magnesium
6. The percentage of the human body composed of water, on average is;-
 - A. 50%
 - B. 60%
 - C. 70%
 - D. 80%

7. The units used to measure the energy content in food is;-
 - A. Kilograms (kg)
 - B. Liters (L)
 - C. Joules (J)
 - D. Calories (kcal)
8. The nutrient group that provides the main source of energy in the diet is;-
 - A. Proteins
 - B. Carbohydrates
 - C. Fats
 - D. Vitamins
9. The principle that emphasizes consuming a variety of foods from different food groups is;-
 - A. Adequacy
 - B. Balance
 - C. Moderation
 - D. Variety
10. Food security at the family and community level includes aspects of:
 - A. Increasing food prices
 - B. Marketing strategies
 - C. Distribution systems
 - D. Export tariffs
11. The lipid that is a major component of cell membranes is;-
 - A. Triglycerides
 - B. Phospholipids
 - C. Sterols
 - D. Waxes
12. The statement about proteins that is true is;-
 - A. Proteins are the primary source of quick energy.
 - B. Proteins are composed of long chains of fatty acids.
 - C. Proteins are made up of amino acids.
 - D. Proteins provide no structural function in the body.

13. The water-soluble vitamin important for collagen synthesis is;-
- A. Vitamin A
 - B. Vitamin C
 - C. Vitamin D
 - D. Vitamin E
14. The mineral important for nerve function and muscle contractions is;-
- A. Sodium
 - B. Potassium
 - C. Chloride
 - D. Phosphorus
15. The nutrient essential for building and repairing tissues in the body is;-
- A. Carbohydrates
 - B. Proteins
 - C. Fats
 - D. Minerals
16. The principle focuses on consuming appropriate amounts of food to maintain a healthy weight is;-
- A. Adequacy
 - B. Balance
 - C. Moderation
 - D. Variety
17. The tool commonly used to estimate portion sizes is;-
- A. Food labels
 - B. Food diary
 - C. BMI calculator
 - D. Nutrient database
18. The purpose of rotating food items in a menu is;-
- A. To increase food costs
 - B. To reduce food variety
 - C. To ensure nutrient adequacy

- D. To limit customer choice
19. Buying food items in bulk is an example of:
- A. Increasing food waste
 - B. Reducing food costs
 - C. Limiting food variety
 - D. Decreasing nutrient density
20. The anthropometric measurement commonly used to assess nutritional status in children under five years old is;-
- A. Body Mass Index (BMI)
 - B. Mid-upper arm circumference (MUAC)
 - C. Waist-to-hip ratio
 - D. Skinfold thickness

SECTION II: SHORT ANSWER QUESTIONS **(30 MARKS)**

1. State five (5) roles of dietary fibers in the body (5 marks)
2. State five (5) functions of phosphorus in the body (5 marks)
3. State five (5) factors that decrease calcium absorption in the body (5 marks)
4. Outline five (5) benefits of breastfeeding to infants (5marks)
5. Outline five (5) factors influencing diet planning (5 marks)
6. State five (5) methods of nutritional status assessments (5 mark)

SECTION III: LONG ANSWER QUESTION – **(20 MARKS)**

1. Malnutrition is a state when the body does not have enough of the required nutrients (deficiency) or has excess of the required nutrients (over-nutrition). Discuss ten(10) risk factors that contribute to the development of nutritional deficiencies or malnutrition.