



**AMREF INTERNATIONAL UNIVERSITY  
SCHOOL OF MEDICAL SCIENCES  
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES  
BACHELOR OF SCIENCE IN NURSING  
END-OF-SEMESTER EXAMINATIONS**

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

**DATE: 30<sup>TH</sup> NOVEMBER 2022**

**Duration: 2 HOURS**

**Start: 2:00 PM**

**Finish: 4:00 PM**

**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 recommended diet for individuals who experience symptoms of nutrient losses when high fat foods are eaten is:-
  - A. High protein- high calorie diet
  - B. Fat restricted diet
  - C. Low protein diet
  - D. Low sodium diet
  
2. A diet high in saturated fats is linked to:-
  - A. Kidney failure
  - B. Bulimia
  - C. Anorexia
  - D. Cardiovascular disease
  
3. Children under five years at risk of malnutrition have a Mid Upper Arm Circumference ( MUAC) of:-
  - A. 17.5 cm
  - B. 10.5- 11cm
  - C. 15.5 – 16.5 cm
  - D. 12.5-13.4 cm
  
4. The head circumference of a malnourished child:-
  - A. Is smaller than the chest
  - B. Is bigger than the chest
  - C. Is equal to the chest
  - D. Has no relationship with that of the chest
  
5. Simple carbohydrates include: -
  - A. Glucose
  - B. Galactose
  - C. Maltose
  - D. Starch
  
6. The following statement is true about proteins: -
  - 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

7. Iodine deficiency in pregnancy can result in the following outcomes in the baby:-:-
- A. Reduced head circumference
  - B. Cretinism
  - C. Increased risk of infection
  - D. Decrease bone density
8. An overweight person: -
- A. Has grade II obesity
  - B. Has BMI of up 24.5
  - C. Has grade II obesity
  - D. Should be admitted to nutritional clinic with immediate effect
9. Hypertensive patients should have a diet with restricted:-
- A. Sodium
  - B. Potassium
  - C. Calcium
  - D. Magnesium
10. The folloeing is NOT a feature of marasmus :-
- A. Watery diarrhea with acid stools
  - B. Subnormal temperature
  - C. Visible peristalsis from thin abdominal wall
  - D. Generalized edema
11. Prolonged administration of total parenteral nutrition is associated with complications such as:-
- A. Kidney failure
  - B. Heart Failure
  - C. Enteral dysfunction
  - D. Respiratory dysfunction
12. Which of these is TRUE about the daily recommendation of fat intake:-.
- A. Consume 20- 35 percent of kilocalories from fat mainly from vegetable oils, fish and nuts
  - B. Consume at least 10 percent of calories from saturated fatty acids
  - C. More than 300 milligrams of cholesterol
  - D. Consume trans fatty acids as much as possible
13. The hormones is facilitating uptake of glucose by cells is:-
- A. Thyroxine
  - B. Insulin
  - C. Parathyroid
  - D. Estrogen

14. An amino acid that cannot be synthesized by the body is referred to as a(n) \_\_\_\_\_  
Amino Acid.
- A. Complementary
  - B. Complete
  - C. Non -essential
  - D. Essential
15. The nutrient correctly matched with its role in wound healing is:-
- A. Protein- maintains homeostasis
  - B. Zinc- normal lymphocyte and phagocyte response
  - C. Calories- increase metabolic rate
  - D. Iron- needed for antibody formation
16. The following is NOT a dietary source of vitamin A:-
- A. Eggs
  - B. Butter
  - C. Oranges
  - D. Fish oil
17. Nutrient density means:-
- A. The amount of energy consumed should balance with the amount of energy used by the body
  - B. Choosing different food items within each food group or class rather than eating the same food daily
  - C. Eating foods containing a high ratio of nutrients to food energy.
  - D. The diet provides all the essential nutrients, fibre and energy in amounts sufficient to maintain health
18. Citrus fruits are an excellent source of:-
- A. Vitamin C
  - B. Calcium
  - C. Vitamin B6
  - D. All of the above
19. The nutrient is essential for production of hormones, healthy skin and cell membranes:
- A. Fat
  - B. Carbohydrate
  - C. Fibre
  - D. Vitamin B12

20. A breastfeeding mother should drink plenty of water to:-

- A. Produce more milk
- B. Suppress lactation
- C. Prevent dehydration
- D. Dilute nutrient concentration

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

1. State five (5) importance of good nutrition status in an individual. (5 Marks)
2. Give five (5) reasons why meal planning is important (5 Marks)
3. List five (5) roles of nutritional fibre in the body (5 Marks)
4. Outline five (5) differences between complete and incomplete proteins. (5 Marks)
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.
  - a. Discuss the management of Protein Energy Malnutrition (PEM). (10 Marks)
  - b. Discuss the complications of Protein Energy Malnutrition (PEM). (10 Marks)

**AMMU**