



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
End of Semester April 2025 Examinations**

COURSE CODE AND TITLE: BSN 217 Human Nutrition and Dietetics

DATE: 10-APRIL-2025

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. A fat-soluble vitamin is: -
 - A. Vitamin B1
 - B. Vitamin C
 - C. Vitamin D
 - D. Vitamin B6
2. The best diet recommendation for a person with hypertension is: -
 - A. High in sodium and processed foods
 - B. Low in sodium and rich in potassium
 - C. High in fats and proteins
 - D. Rich in sugars and refined carbohydrates
3. A diet high in saturated fats can be linked to:-
 - A. Kidney failure
 - B. Bulimia
 - C. Anorexia
 - D. Cardiovascular disease
4. The food groups that provides the highest energy per gram is: -
 - A. Carbohydrates
 - B. Proteins
 - C. Lipids (fats)
 - D. Vitamins
5. The caused by iodine deficiency is: -
 - A. Scurvy
 - B. Goitre
 - C. Rickets
 - D. Pellagra
6. Children under five years at risk of malnutrition have a MUAC measuring of: -
 - A. 17.5 cm
 - B. 10.5- 11cm
 - C. 15.5 – 16.5 cm
 - D. 12.5-13.4 cm

7. _____ is designed for patient who experience symptoms of nutrient losses when high fat foods are eaten.
- A. High protein- high calorie diet
 - B. Fat restricted diet
 - C. Low protein diet
 - D. Low sodium diet
8. When a child is malnourished the circumference of the head :-
- 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
9. The primary function of dietary fibre is to: -
- A. Provide energy
 - B. Aid digestion and prevent constipation
 - C. Supply essential amino acids
 - D. Act as an antioxidant
10. The primary determinant of Basal Metabolic Rate (BMR) is: -
- A. Age
 - B. Muscle mass
 - C. Dietary intake
 - D. Hydration status
11. The nutrient most crucial during pregnancy for fetal brain development: -
- A. Protein
 - B. Calcium
 - C. Folic acid
 - D. Iron
12. Iodine deficiency during pregnancy may lead to: -
- A. Reduced head circumference
 - B. Cretinism
 - C. Increased risk of infection
 - D. Decrease bone density
13. The thermic effect of food (TEF) refers to:
- A. The number of calories burned at rest
 - B. The energy expenditure required to digest and absorb food

- C. The total daily energy expenditure of an individual
 - D. The energy loss due to inefficient digestion
14. A person who is suffering from high blood pressure should cut down on: -
- A. Sodium
 - B. Potassium
 - C. Calcium
 - D. Magnesium
15. An example of a supplementary feeding program in emergencies is; -
- A. General food distribution
 - B. Ready-to-use therapeutic foods (RUTF)
 - C. School meal programs
 - D. Food-for-work programs
16. Long periods of parenteral nutrition is not recommended because of: -
- A. It increases the toxicity of blood
 - B. It puts pressure on the kidney
 - C. It puts pressure on the heart
 - D. It causes the GI track to degenerate
17. The factors that influences bioavailability of dietary iron is: -
- A. The presence of oxalates and phytates
 - B. The intake of vitamin C
 - C. The type of iron consumed (heme vs. non-heme)
 - D. All of the above
18. The hormones important for the entry of glucose into the cells is: -
- A. Thyroxine
 - B. Insulin
 - C. Parathyroid
 - D. Estrogen
19. An amino acid that cannot be synthesized by the body is: -
- A. Complementary
 - B. Complete
 - C. Non -essential
 - D. Essential
20. NOT a symptom of protein-energy malnutrition (PEM): -
- A. Kwashiorkor
 - B. Marasmus

- C. Night blindness
- D. Growth retardation

SECTION II: SHORT ANSWER QUESTIONS

(30 MARKS)

1. State five (5) common nutritional deficiencies and their related diseases. (5 marks)
2. Outline five (5) factors influencing energy needs in the human body. (5 marks)
3. State five (5) importance of diet planning. (5 marks)
4. Explain five (5) nutritional interventions that can be implemented in the management of malnutrition among children under five years. (5 marks)
5. State five (5) functions of water in the body. (5 marks)
6. Outline five (5) key indicators used in nutritional status assessment and explain their significance. (5 marks)

SECTION III: LONG ANSWER QUESTIONS

(20 MARKS)

1. Discuss the role of nutrition in the lifecycle, focusing on special dietary needs during
 - a. Pregnancy (5 marks)
 - b. Infancy (5 marks)
 - c. Childhood (5 marks)
 - d. Old age (5 marks)