

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**SPECIAL/RESIT**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN NURSING**

**NURS 121: NUTRITION AND HEALTH**

**STREAMS: B.Sc. (NURSING)**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 12/08/2021**

**11.30 A.M. – 1.30 P.M.**

**INSTRUCTIONS:**

- Answer **ALL** questions
- Do not write anything on the question paper
- This is a **closed book exam**, no reference materials are allowed in the examination room
- **No** use of mobile phones or any other unauthorized materials
- Write your answers legibly and use your time wisely

**SECTION A: MULTIPLE CHOICE QUESTIONS [ONE MARK EACH] [20 MARKS]**

1. Which of the following is not a consequence of vitamin A deficiency?
  - A. Xerophthalmia
  - B. Keratomalacia
  - C. Bitots spot
  - D. Osteomalacia
2. Lack of vitamin B may result in?
  - A. Weak bones
  - B. Tooth decay
  - C. Poor cellular respiration
  - D. Itchy skin.
3. Which of the following statements does not describe water-soluble vitamins?
  - A. Water-soluble vitamins are absorbed easily from the intestinal tract into the blood
  - B. Water-soluble vitamins are stored in large amounts in the body
  - C. Water-soluble vitamins are found in a wide variety of foods
  - D. Water-soluble vitamins are rarely toxic

4. Which of the following is not a function of amino acids (from protein digestion) in the body?
  - A. Energy production
  - B. Regulation of body processes
  - C. Growth of body tissues
  - D. Maintenance and repair of body tissues
5. Those nutrients that the body cannot synthesize and must be supplied in the diet are called?
  - A. Trace elements
  - B. Micronutrients
  - C. Essential nutrients
  - D. Non-essential nutrients
6. Which of the following foods contain goitrogens;
  - A. Rice
  - B. Meat
  - C. Nuts
  - D. Brassicas
7. Which of the following is a disaccharide?
  - A. Galactose
  - B. Fructose
  - C. Hemicellulose
  - D. Sucrose
8. A BMI of 18.4 is considered to be which of the following??
  - A. Underweight
  - B. Normal
  - C. Overweight
  - D. Obese
9. Which of the following methods of dietary assessment is more likely affected by recall bias?
  - A. 24-hour recall
  - B. Food record
  - C. Diet history
  - D. Food frequency
10. RDA represents the:
  - A. The highest amount of a nutrient that appears safe for most healthy people.
  - B. The lowest amount of a nutrient that will maintain a specified criterion of adequacy.
  - C. The average amount of a nutrient considered adequate to meet the known nutrient needs of practically all healthy people in a population.
  - D. The average amount of a nutrient considered adequate to meet the known nutrient needs of half of all healthy people in a population
11. Units of heat that measures the energy available in food.
  - A. Nutrients
  - B. Metabolism
  - C. Macronutrients
  - D. Calories

12. A collection of chemical reactions that takes place in the body's cells. Determines the rate at which our bodies break down and use food for energy.
- A. Calorie
  - B. Metabolism
  - C. Anabolism
  - D. Catabolism
13. Which of the following values represent the recommended daily intake of fiber per day
- A. 35-40g
  - B. 25-30g
  - C. 15-20g
  - D. 5-10g
14. Which of the following is not a health benefit of dietary fiber?
- A. Enhances weight control
  - B. Enhances cell differentiation
  - C. Help prevent and alleviate hemorrhoids
  - D. Help prevent diverticulitis
15. Which one of the following is true about Global Acute Malnutrition rates(GAM)?
- A.  $GAM = SAM + MAM$
  - B.  $GAM = SAM + HAZ$
  - C.  $GAM = SAM + WHZ$
  - D.  $GAM = SAM + WAZ$
16. Which of the following is not considered a diagnostic feature of anorexia nervosa?
- A. Fear of becoming fat
  - B. Fear of big pot belly
  - C. Significant weight loss
  - D. Depressive symptoms
17. Deficiencies of which of the following nutrients can lead to anaemia?
- A. Iodine and vitamin C
  - B. Copper and Vitamin B12
  - C. Calcium and Protein
  - D. Vitamin D and zinc
18. Which of the following nutrient is the preformed type of Vitamin A?
- A. Carotenoid
  - B. Beta carotene
  - C. Retinal
  - D. Lycopene
19. Protein-energy malnutrition (PEM) corresponds to a state where the infant's dietary intake is deficient in?
- A. Carbohydrates
  - B. Overall calories
  - C. Proteins
  - D. Both (B) and (C)
20. The World Health Organization recommends zinc supplements for which groups of people?
- A. Pregnant and lactating women
  - B. Children with severe malnutrition or diarrhoea
  - C. All children in low-income areas with high prevalence of stunting
  - D. Elderly people with low incomes

**SECTION B: SHORT ESSAY QUESTIONS**

**[20 MARKS]**

1. Explain the following terms as used in nutrition and health.[4 marks]
  - i. Gluconeogenesis
  - ii. Food glycemic index
2. Explain four (4) clinical manifestation of iron deficiency in an individual. [4 marks]
3. Explain four(4) dietary methods of nutrition assessment. [4 marks]
4. Daniel has just heard an advert from a local radio station promoting the intake of Vitamin C. Explain to him the main functions of Vitamin C in the human Body. [4 marks]
5. Highlight four (4) sources of errors when taking anthropometric measurements in an individual. [4 marks]

**SECTION C: LONG ESSAY QUESTIONS**

**[30MARKS]**

1. Explain the factors affecting dietary modification in the prevention and management of disease. [10 marks]
  2. Malnutrition is a major problem in developing countries. Explain five (5) underlying causes of malnutrition in the population. [10 marks]
  3. Discuss the digestion and functions of proteins in the human body. [10 marks]
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