

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

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

NURU 271: NUTRITION AND HEALTH IN NURSING

STREAMS: B.Sc (NURSING) Y2T1

TIME: 2 HOURS

DAY/DATE: TUESDAY 23/03/2021

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. The following are micronutrients of public health concern except?
 - A. Zinc
 - B. Folate
 - C. Iron
 - D. Iodine
2. Which of the following is the most frequently used anthropometric measure to estimate body mass?
 - A. Fat-free mass
 - B. Body fat
 - C. Body weight

- D. Body height
3. Which of the following is not a macronutrient?
- A. Carbohydrates
 - B. Protein
 - C. Potassium
 - D. Lipids
4. Which disease is related with total energy depletion, where individuals are alert, ravenous and irritable, potentially causing cognitive impairment?
- A. Marasmus
 - B. Underweight
 - C. Stunting
 - D. Kwashiorkor
5. Mid Upper Arm Circumference (MUAC) estimates?
- A. Lean muscle mass
 - B. Body fatness
 - C. Skeletal muscles mass
 - D. None of the above
6. Deficiencies of which of the following nutrients can lead to anaemia??
- A. Zinc and protein
 - B. Copper and iron
 - C. Vitamin D and zinc
 - D. Iodine and vitamin C
7. Body mass index is:
- A. $\text{Weight (kg)/height (m)}$
 - B. $\text{Weight (kg)/height (m)}^2$
 - C. $\text{Weight (kg)/height (m)}^3$
 - D. None of the above
8. Abdominal obesity in females is defined as a waist-hip ratio greater than?
- A. 0.7
 - B. 0.8
 - C. 0.9
 - D. 1

9. Stunting in children is defined as:
- A. Low weight for height
 - B. Low weight for age
 - C. Low height for age
 - D. Low height for weight
10. Which one of the following statements is incorrect?
- A. Rickets is the major symptom of vitamin D deficiency
 - B. Goitre is the major symptom of iodine deficiency
 - C. Beriberi is the major symptom of vitamin B2 deficiency
 - D. Scurvy is the major symptom of vitamin C deficiency
11. Which of the following values represent the recommended daily intake of fibre per day
- A. 35-40g
 - B. 25-30g
 - C. 15-20g
 - D. 5-10g
12. Which one of the following gut hormones is responsible for suppressing appetite
- A. Leptin
 - B. Ghrelin
 - C. Insulin
 - D. Peptide YY
13. Which of the following is a water-soluble vitamin
- A. Vitamin A
 - B. Vitamin C
 - C. Vitamin D
 - D. Vitamin E
14. Which of the following is not a consequence of vitamin A deficiency?
- A. Xerophthalmia
 - B. Keratomalacia
 - C. Bitots spot
 - D. Osteomalacia
15. What do waste-to-hip circumference ratios measure?
- A. Fat-free mass

- B. Intra-abdominal fat and subcutaneous fat
 - C. Protein-energy malnutrition
 - D. Skeletal mass
16. The measurement of a specific biochemical status index for a micronutrient such as vitamin C is most likely to be useful in practice to estimate:
- A. The overall quality of a person's diet
 - B. The presence or risk of a clinical deficiency, such as clinical scurvy
 - C. The tissue levels, or body status, of that nutrient
 - D. Overall health and freedom from disease
17. A BMI of 31 is considered to be which of the following??
- A. Underweight
 - B. Normal
 - C. Overweight
 - D. Obese
18. Osteoporosis can result from a lack of sufficient amounts of which nutrients?
- A. Iron
 - B. Folic acid
 - C. Calcium
 - D. Magnesium
19. Which of the following is a prospective method of dietary assessment?
- A. 24-hour recall
 - B. Food record
 - C. Diet history
 - D. None of the above
20. A food contains 6g of carbohydrate, 4g of fat and 8g of protein. How many calories (kcal) does this food provide?
- A. 72
 - B. 82
 - C. 92
 - D. 102

SECTION B: SHORT ESSAY QUESTIONS**[20 MARKS]**

1. Explain the following terms as used in nutrition and health [4 marks]
 - i. Food glyceemic Index
 - ii. Anti-nutrients
2. Explain four (4) groups of people who are considered vulnerable to nutrition problems explaining clearly why they are considered vulnerable [4 marks]
3. Explain four (4) common nutrition problems faced in Kenya today [4 marks]
4. Explain two immediate causes of malnutrition as stipulated in the UNICEF conceptual framework on the causes of malnutrition [4 marks]
5. Iodine is considered a micronutrient of public health concern. Explain the functions of iodine in the human body [2 marks]
6. Explain any two conditions where a sodium-restricted diet may be recommended [2 marks]

SECTION C: LONG ESSAY QUESTIONS**[30 MARKS]**

1. Describe five (5) strategies that can be employed in the country to fight against the rampant problem of micronutrient deficiencies [10 marks]
2. Describe the gastrointestinal and metabolic complications associated with parenteral and enteral feeding during specialized nutrition support [10 marks]

3. Discuss the anthropometric and biochemical methods of nutrition assessment

[10 marks]

