



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2021/2022 ACADEMIC YEAR**

**SECOND YEAR SECOND TRIMESTER SPECIAL  
EXAMINATION**

**FOR THE DEGREE**

**OF**

**BACHELOR OF SCIENCE IN GLOBAL HEALTH AND TRAVEL  
MEDICINE**

**COURSE CODE: NCG 223**

**COURSE TITLE: COMMUNITY HEALTH NUTRITION AND FOOD  
SAFETY**

**DATE: 04/10/2022 DAY: TUES TIME: 11.30-2.30PM**

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**INSTRUCTIONS TO CANDIDATES**

**THIS PAPER CONSIST OF THREE SECTIONS A, B AND C**

**ANSWER ALL QUESTIONS**

**TIME: 3 HOURS**

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 5 Printed Pages. Please Turn Over. 

**SECTION A: 20 MCQs (20 MARKS)**

*NCG 223*

1. ....is essential for strengthening teethes and bones.
  - a) Calcium
  - b) Iron
  - c) Phosphorous
  - d) Magnesium
  
2. Excess carbohydrates in the body are converted to
  - a) Muscle tissue
  - b) Adipose tissue
  - c) Connective tissue
  - d) None of the above
  
3. Deficiency of vitamins A in the body causes
  - a) Nyctalopia
  - b) Goiter
  - c) Brittle bones
  - d) Dermatitis
  
4. Which one is not a digestive enzyme
  - a) Amylase
  - b) Maltose
  - c) Lactase
  - d) Lipase
  
5. Which of the following is a macronutrient?
  - a) Vitamin K
  - b) Iodine
  - c) Triglyceride
  - d) Amino acid
  
6. Which method of nutritional assessment is used in assessing fat free mass?
  - a) Mid upper arm circumference
  - b) Head circumference
  - c) Hip-to-waist ratio
  - d) Weight/height m<sup>2</sup>

7. What is the building block of nutrient protein?
  - a) Triglyceride
  - b) Glyceride
  - c) Phenyl alanine
  - d) Amino acid
  
8. The nutrient found in sugar is
  - a) Fats
  - b) Proteins
  - c) Vitamins
  - d) Carbohydrates
  
9. Digestion of carbohydrates starts in the
  - a) Large intestines
  - b) Small intestines
  - c) Mouth
  - d) Stomach
  
10. Digestion of proteins starts in the
  - a) Large intestines
  - b) Small intestines
  - c) Mouth
  - d) Stomach
  
11. BMI is the abbreviation of
  - a) Body matrix index
  - b) Basal mass index
  - c) Body mass index
  - d) None of the above
  
12. Foods like kales, spinach and broccoli are rich in
  - a) Carbohydrates
  - b) Proteins
  - c) Vitamins
  - d) Fabre

13. What is the scientific name for vitamin B<sub>1</sub> ?
- a) Riboflavin
  - b) Thiamine
  - c) Niacin
  - d) Pyridoxine
14. Iodine deficiency causes .....in adults and .....in children.
- a) Goiter, cretinism
  - b) Cretinism, goiter
  - c) Goiter, iodinitis
  - d) Iodinitis, cretinism
15. Identify the sources of the mineral zinc
- a) Milk, eggs, green vegetables, and orange vegetables
  - b) Beans and lentils, citrus fruits, and leafy green vegetables
  - c) Beans, nuts, whole grains, and dairy products
  - d) All of the above
16. Deficiency in vitamin B<sub>9</sub> causes
- a) Severe birth defects, growth problems, or anemia
  - b) Scurvy, dermatitis, keratinitis
  - c) Cracked lips, sore tongue, sores in the corners of the mouth
  - d) Pernicious anemia
17. Deficiency of proteins and carbohydrates in infants leads to
- a) Marasmus
  - b) Goiter
  - c) Obesity
  - d) Kwashiorkor
18. Fat is completely digested in the
- a) Stomach
  - b) Mouth
  - c) Small intestine
  - d) Large intestines

19. Phytonadione is the chemical name of
- Vitamin E
  - Vitamin A
  - Vitamin B6
  - Vitamin K
20. Where does the enzyme amylase produced?
- Small intestines
  - Salivary glands
  - Stomach
  - Liver

**SECTION B: SAQs (40 MARKS)**

1. Explain the work of amylase hormone in digestion (8 marks)
2. Describe the different types of fats and oils (8 marks)
3. Using the ABCD acronym explain nutritional assessment (8 marks marks)
4. Explain the classifications of essential nutrients based on the amount required by the body (8 marks)
5. Describe the energy balance equation (8 marks)

**SECTION C: LAQs (40 MARKS)**

1. Explain the composition of a balanced diet and its importance on the body (20 marks)
2. Discuss the factors influencing energy requirements (20 marks)

