



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES

DEPARTMENT OF HEALTH SCIENCES

QUALIFICATION : BACHELOR OF HUMAN NUTRITION	
QUALIFICATION CODE: 08BOHN	LEVEL: 5
COURSE CODE: IFN521S	COURSE NAME: INTRODUCTION TO FOODS, NUTRITION AND HEALTH
SESSION: JANUARY 2023	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

SUPPLEMENTARY/ SECOND OPPORTUNITY QUESTION PAPER	
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INSTRUCTIONS	
<ol style="list-style-type: none">1. Answer ALL the questions.2. Write clearly and neatly.3. Number the answers clearly.4. Have a calculator	

PERMISSIBLE MATERIALS

NONE

THIS MEMORANDUM CONSISTS OF 8 PAGES (Including this front page)

SECTION A

QUESTION 1

(23 MARKS)

Evaluate the following statements in each numbered section and select the most appropriate answer from the given possibilities. Write the appropriate letter next to the number of the statement/phase in the ANSWER BOOK. *(Each question carries 1 mark.)*

- 1.1 The following are keyways of preventing iron deficiency anaemia in children and women of childbearing age except:
- a. Deworming
 - b. Fortification
 - c. Promotion of breastfeeding
 - d. Promotion of vegetable consumption
- 1.2 Hidden hunger can also be referred to as:
- a. Protein energy malnutrition
 - b. macronutrient malnutrition
 - c. vitamin A deficiency
 - d. none of the above
- 1.3 Bilateral pitting oedema is a clinical sign of:
- a. marasmus
 - b. pregnancy induced fluid accumulation
 - c. micronutrient deficiency
 - d. none of the above
- 1.4 Which of the following categories of malnutrition results into growth retardation in children in the first 1000 days:
- a. wasting and underweight
 - b. stunting and wasting
 - c. stunting and underweight
 - d. none of the above

- 1.5 Which of the following are not a sign of marasmus:
- a. muscle wasting and baggy pants
 - b. moon face and brown hair
 - c. visible ribs and old man's face
 - d. monkey face and baggy pants
- 1.6 Which of the following terms refers to the balance between nutrition requirements and nutritional intake:
- a. nutritional assessment
 - b. balance of nutrients
 - c. optimal nutritional status
 - d. none of the above
- 1.7 Which of the following ways is the standard one for determining the height of the child below two years of age:
- a. Child stands on the height board supported by the mother
 - b. Child stands on the height board supported by two people
 - c. Child lies flat on the height board supported by two people
 - d. None of the above
- 1.8 Ready to use therapeutic food is used for the treatment of:
- a. moderate acute malnutrition and severe acute malnutrition
 - b. Protein energy malnutrition and moderate acute malnutrition
 - c. micronutrient deficiencies and severe acute malnutrition
 - d. severe acute malnutrition
- 1.9 A child that has Z-scores of between -2 to -3 can be categorised as having:
- a. normal nutritional status
 - b. severe acute malnutrition
 - c. moderate acute malnutrition
 - d. severe and moderate acute malnutrition

- 1.10 Plumpy sup is another term that refers to:
- Ready to use therapeutic food
 - Ready to use supplementary food
 - Food used for treatment of severe and moderate acute malnutrition
 - None of the above
- 1.11 It is recommended that a patient that presents with severe acute malnutrition without medical complication is treated as:
- Inpatient therapeutic care
 - Outpatient therapeutic care
 - Both as inpatient therapeutic and outpatient therapeutic care
 - None of the above
- 1.12 Hypothermia can also be referred to as:
- Low blood sugar
 - High blood sugar
 - low body temperature
 - low blood sugar and low body temperature
- 1.13 Which of the following dietary assessment methods involve taking records of foods consumed on daily basis:
- Food frequency questionnaire
 - Dietary history
 - observed food consumption
 - None of the above
- 1.14 Recumbent length can be referred to as:
- Height of child when standing
 - Height of child when lay down
 - Height of child when bending
 - None of the above

- 1.15 Which of the following is an example of indirect nutrition assessment method:
- taking individual height and weight
 - assessing sanitation and hygiene practices
 - taking a 24-hour recall
 - assessing the body mass index
- 1.16 Which of the following are examples of water-soluble vitamins:
- vitamin B₁ and B₁₂
 - vitamin E and A
 - vitamin B₃ and A
 - vitamin K and B₆
- 1.17 Which of the following vitamins is mostly synthesised by micro-organisms:
- Biotin
 - vitamin B₆
 - vitamin B₃
 - vitamin B₁₂
- 1.18 Which of the following minerals are essential in the maintenance of body fluid osmolarity:
- Phosphorus and magnesium
 - Sodium and Potassium
 - Calcium and magnesium
 - Sodium and phosphorus
- 1.19 In the food guide pyramid, the various section sizes represent:
- the types of foods to be avoided in the diet
 - the types of food to be consumed frequently
 - the frequency of consumption of a given food group
 - None of the above
- 1.20 A standard cup is equivalent to:
- 300ml
 - 500ml
 - 240ml
 - 100ml

- 1.21 Which of the following food guide models uses pictorials to demonstrate recommendations for health diets:
- a. Food pyramid
 - b. Traffic light food guide
 - c. Vegetarian food guide
 - d. Good health plate
- 1.22 Which of the following statement is true about empty kilocaloric foods:
- a. Empty kilocaloric foods contain no nutrients
 - b. Empty kilocaloric foods contain all essential nutrients
 - c. they contain mainly energy and less of other essential nutrients such as protein, vitamins
 - d. None of the above
- 1.23 Which of the following mineral is required in large amounts during early childhood, pregnancy and lactation:
- a. potassium
 - b. sodium
 - c. iron
 - d. iodine

QUESTION 2

(8 MARKS)

Assess the following statements and decide whether they are **true or false**. Write only the number of the question and next to it indicate your answer as **true or false** in the ANSWER BOOK. (Each question carries **1 mark**)

- 2.1 Vitamin A can also be referred to as retinol and carotenoid.
- 2.2 Calcium is essential for the regulations of neural, muscular functions and blood formation.
- 2.3 Vitamins taken in excess can have adverse side effects to the body.
- 2.4 It is not recommended to increase protein and fat intake for HIV positive individuals.
- 2.5 Breastfeeding is not recommended for HIV positive mothers due to high risk of mother-baby transmission.
- 2.6 The asymptomatic phase of HIV does not involve muscle wasting.

- 2.7 Poverty and malnutrition form a vicious cycle.
- 2.8 Diet quality is determined based on the type of food consumed and not necessarily balance of nutrients.

SECTION B

QUESTION 3

(28 MARKS)

- 3.1 Outline five (5) examples of water-soluble vitamins (5)
- 3.2 Explain three (3) determinants that influence what someone eats (6)
- 3.3 Outline three (4) characteristics of a healthy diet. (4)
- 3.4 Explain the steps followed in determining the height of children 2 years and above (5)
- 3.5 Define the following terms
- 3.5.1 Nutritional assessment (2)
 - 3.5.2 Calorie (2)
 - 3.5.3 Fat soluble vitamins (2)
 - 3.5.4 Basal metabolic rate (2)

QUESTION 4

(34 MARKS)

- 4.1 Explain three factors that affect basal metabolic rate (6)
- 4.2 Explain five (5) ways of preventing wasting in children under five years of age (10)
- 4.3 Explain how the following factors influence food choices
- 4.3.1 Social interaction (2)
 - 4.3.2 Ethnic heritage (2)
 - 4.3.3 Emotions (2)
- 4.5 Explain briefly three (6) principles of diet planning (12)

SECTION C

QUESTION 5

(7 MARKS)

- 5.1 You are a nutritionist of Katutura Health Centre and you asked to design a diet that contains 0.07kg carbohydrate, 0.02kg protein and 0.012kg fat.

Calculate the total energy available from the diet (7)

GOOD LUCK!!!