



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

**UNIVERSITY EXAMINATIONS
2021 /2022 ACADEMIC YEAR**

MAIN EXAM

**SECOND YEAR FIRST SEMESTER EXAMINATIONS
FOR THE DEGREE
OF
BSC. HUMAN NUTRITION AND DIETETICS**

COURSE CODE: HND 203

COURSE TITLE: NUTRITION ASSESSMENT

DATE: 28/04/2022

TIME: 8:00-10:00

INSTRUCTIONS TO CANDIDATES

Answer **ALL** questions in SECTION A and B
Answer only **TWO** questions in SECTION C
Read additional instructions under various sections

TIME: 2Hours

MMUST observes **ZERO** tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over.

SECTION A: 10 MULTIPLE CHOICE QUESTIONS, ANSWER ALL QUESTIONS, EACH 1 MK –TOTAL 10MKS

1. The following is **UNTRUE** about nutrition assessment.
 - A. Dietary assessment is an imprecise procedure.
 - B. Nutrition assessment methodology chosen must be appropriate for the nutrient/s that are being assessed and for the individual or population being assessed.
 - C. The timing of the assessment is not important.
 - D. Nutrition assessment methodology must consider cultural variations.

2. Aliquot sampling is _____
 - A. a form of weighed inventory.
 - B. less wasteful than its original method.
 - C. a form of duplicate diet.
 - D. Both A and B.

3. Baby Ekai was born weighing 2.5 kgs, by 6 and 9 months his weight is expected to be at least _____ respectively.
 - A. 4.5 and 7.5 kgs
 - B. 5 and 7.5 kgs
 - C. 6 and 9.5 kgs
 - D. 6.0 and 9.0 kgs

4. Which of the following is **NOT** a surrogate measure of height
 - A. Recall height.
 - B. Ulna length.
 - C. Demispan.
 - D. Standing height.

5. BMI is used cautiously for the following group of people **EXCEPT**.
 - A. Body builders.
 - B. Pregnant women.
 - C. Old age adults.
 - D. muscular people.

6. Protein Urea is an indication of the following
 - A. Pregnancy.
 - B. Kidney failure.
 - C. Eclampsia.
 - D. B & C.

7. Low Transferrin levels indicates _____
 - A. Malnutrition.
 - B. Kindney function interruption.
 - C. Dehydration.
 - D. Anemia.

8. Moses Etyang' a cancer survivor has visited your clinic for health check-up. Part of the check-up involved lab work. The following are part of his lab results.

RESULTS: Hb: 7.5 mm/l

Creatinine: 45 (umol) micromole cut off for males 71-110 umol

This two readings are indicative of?

- A. Sickle cell and hypertension
- B. Anaemia and acute wasting
- C. Renal disease and acute hyperglycemia
- D. Anaemia and low immunity

9. Creatinine – clearance test is a measure of _____ function.

- A. Liver
- B. Pancrease
- C. Kidney
- D. Pituitary gland

10. The following are associated with which method of dietary assessment?

- Suitable for large-scale surveys
 - Can be posted
 - Short versions (or screeners) can focus on specific foods, e.g. fruit and vegetables
- A. 24- hour recall.
 - B. Food frequency questionnaire.
 - C. Food history.
 - D. 3- day food record.

SECTION B: ANSWER ALL QUESTIONS, EACH QUESTION, 6 MARKS (30 MARKS)

11. I. Define nutrition assessment. [1 mark]

II. Outline **FIVE** methods of nutrition assessment. [5 marks]

12. I. Outline any **THREE** errors an individual's diet assessment is susceptible to. [3 marks]

II. Outline **THREE** methods that can be used to assess an individual's diet. [3marks]

13. Explain **SIX** tools that can be used when conducting anthropometric assessment of an adult.

14. Match the assessment method in table I and use in table II. [6 marks]

TABLE I		TABLE II	
A	Triceps Skin- fold thickness	A	Can be used to monitor stress response during the acute phase e.g inflammation, sepsis or infection
B	Mid Upper Arm Circumference	B	Used as a marker for iron status in the body
C	Bioelectrical impedance Vector Analysis	C	Body cell mass, cell integrity and hydration status
D	Transferrin	D	Indicator of subcutaneous fat
E	Creatinine-clearance	E	Reflect muscle mass
F	C-Reactive Protein	F	Used as a measure for renal function.

14. Identify **SIX** ways of minimizing errors when conducting an anthropometric assessment.

[6 marks]

15. highlight **SIX** observations one will make while conducting a physical examination of an infant with SAM. [6 marks]

SECTION C: ANSWER ANY TWO QUESTIONS; EACH QUESTION CARRIES 15 MARKS (30 MARKS)

- 16.
- a. Describe a three-compartment model of body composition assessment. [3 Marks]
 - b. Discuss **THREE** methods of body composition analysis. [12 Marks]
17. Joan is your new client on a weight loss program. Her BMI on admission into the program is 40.
- a. Identify **THREE** methods you will use to monitor her progress. [3 marks]
 - b. Outline **TWO** observable features that will be observable at the end of the program.[2 marks]
 - c. Discuss how you will assess quality of life (QoL) at the beginning and end of the program.[10 marks]
18. You are a nutrition officer in Maternal and child health clinic. Mary is a pregnant woman who has just made her first prenatal visit to your clinic. Discuss Mary's entire nutrition assessment process upto six months postpartum. [15 marks]

