



**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: 7
COURSE CODE: PHC 7115	COURSE NAME: PRINCIPLES OF PRIMARY HEALTH CARE NUTRITION
SESSION: JUNE 2022	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	MRS MARI-LOUISE JEFFERY
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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.

PERMISSIBLE MATERIALS

SCIENTIFIC CALCULATOR

THIS QUESTION PAPER CONSISTS OF 5 PAGES (Including this front page)

SECTION A

QUESTION 1

(10 MARKS)

Select the most appropriate answer from the options provided. (Each correct answer earns 1 mark)

- 1.1 Fat-free mass is defined as the quantity of non-adipose tissue body mass:
- a. True
 - b. False
- 1.2 Anthropometric measurements should be taken on a person dressed in light clothing, wearing socks and shoes:
- a. True
 - b. False
- 1.3 A weight-for-height Z-score below -2SD is generally interpreted as severely wasted:
- a. True
 - b. False
- 1.4 Satiety tells us to stop eating:
- a. True
 - b. False
- 1.5 The total energy that the body expends reflects:
- a. Energy expended for basal metabolism.
 - b. Energy expended for physical activity.
 - c. Energy expended for food consumption.
 - d. All of the above.
- 1.6 Resting metabolic rate is the rate at which the body expends energy to maintain life-sustaining activities:
- a. True
 - b. False

- 1.7 To avoid unhealthy weight gain:
- a. Total fat should not exceed 30% of total energy intake.
 - b. Intake of saturated fats should be less than 10% of total energy intake.
 - c. Intake of trans-fats less than 15% of total energy intake.
 - d. All of the above.
 - e. A and B
 - f. B and C
- 1.8 During the introduction of complementary feeding, at about 6 months of age:
- a. Begin to introduce whole foods, one food at a time.
 - b. Work with the family to decide what foods to provide.
 - c. Wait for at least 7 to 10 days before introducing another new food.
- 1.9 Eating whole grains increases the risk of heart disease and helps children of all ages grow at a healthy weight and avoid constipation:
- a. True
 - b. False
- 1.10 In low-resource settings, health-care costs for non-communicable diseases quickly drain household resources:
- a. True
 - b. False

QUESTION 2

(15 MARKS)

- 2.1 Define the following terms:
- a. Nutrition assessment (3 marks)
 - b. Anthropometry (2 marks)
 - c. Infantometer (2 marks)
 - d. Ghrelin (3 marks)
 - e. Adaptive thermogenesis (3 marks)

- f. Non-communicable diseases (2 marks)

SECTION B

QUESTION 3 (29 MARKS)

- 3.1 Discuss the purpose and importance of anthropometry. (6 marks)
- 3.2 Discuss practical advice that you would offer to a client aiming to reduce his/her salt intake with relevant examples. (4 marks)
- 3.3 Discuss the main nutrition-related problems that occur in prisons. (6 marks)
- 3.4 Name four (4) metabolic risk factor that contribute to or increase the risk of developing non-communicable diseases. (4 marks)
- 3.5 Complete the table below (9 marks)

<u>System or tissue</u>	<u>Physical finding</u>	<u>Possible nutrient deficiency / excess</u>
General	Poor wound healing	a)
Hair	Alopecia	b)
Hair	Sparce hair	c)
Skin	Follicular hyperkeratosis	d)
Nails	Koilonychia	e)
Mouth and lips	Cheilosis	f)
Eyes	Bitot's spots	g)
Neurologic	Ataxia	h)
Skeletal	Bone tenderness	i)

QUESTION 4 (29 MARKS)

- 4.1 Name and discuss the factors to take into consideration during diet planning. (20marks)
- 4.2 Elderly members of the community often suffer from constipation. Name five (5) reasons for this and how they can overcome it through dietary interventions. (9 marks)

SECTION C

QUESTION 5

(17 MARKS)

A 62-year-old female, Mrs. Mouton, was recently diagnosed with Hypertension and Type 2 Diabetes Mellitus.

Her anthropometric measurements are:

Height: 1.70 m

Weight: 80.8 kg

Weight 6 months ago: 90 kg

5.1 Calculate and interpret her:

- a) Body mass index (3 marks)
- b) Ideal body weight range (3 marks)
- c) % Usual body weight (3 marks)
- d) % Ideal body weight (3 marks)

5.2 It was suggested that Mrs. Mouton be placed on a weight loss diet and an exercise programme of moderate activity three times a week.

Calculate her total energy expenditure requirements using the Harris Benedict equation with an activity factor of 1.5.

BEE (kcal) for females: = $655.1 + (9,56 \times W) + (1,85 \times H) - (4,68 \times Y)$ (5 marks)

GOOD LUCK