

NATIONAL UNIVERSITY OF LESOTHO

FACULTY OF HEALTH SCIENCES

DEPARTMENT OF NUTRITION

BASIC NUTRITION - NUT2301

SEMESTER II EXAMINATIONS

JUNE 2023

TIME: 3 HRS

MARKS: 100

Instruction:

Answer all questions

QUESTION 1

- a) Discuss the three basic functions of foods and their nutrients? (Describe the general roles of nutrients with regard to the following: (1) main nutrients for each function and (2) other contributing nutrients.) [12 marks]
- b) Explain how optimal nutrition contributes to a person's wellness. [8 marks]
- c) What are phytochemicals? How can you incorporate them into your diet? [4 marks]
- d) Mention and describe the **four (4)** nutrient standards. [8 marks]
- e) What two characteristics define a compound as a vitamin? [2 marks]
- f) List any **two (2)** major minerals. Describe their functions and the problems created by dietary deficiency or excess. [6 marks]

QUESTION 2

The African diet traditionally is, and has been, high in fat. However, eating too much fat can contribute to health problems, including obesity, heart disease, diabetes, and hypertension.

- a) What dietary recommendations can you suggest for people consuming this diet regarding fat intake? [10 marks]
- b) Compare the structure of saturated fat, monounsaturated fat, polyunsaturated fat, and trans-fat. Give food sources for each. [10 marks]

QUESTION 3

- a) Mention the classes of carbohydrates and give **one (1)** example each. [6 marks]
- b) Discuss the digestion of carbohydrates in the body. [10 marks]
- c) Explain the role of dietary fiber in health. [4 marks]

QUESTION 4

Thuli, a 32-year-old woman, wants to begin a strict vegan meal plan. She wants to make sure she eats well on this type of menu. She weighs 80 kg and eats approximately 1900 kcal per day. She is wondering how much protein she needs each day. To ensure Thuli maintains a healthy meal plan, she sets up a counseling session with you.

- a) Describe this type of diet and compare and contrast it to the other types of vegetarian diets. [10 marks]
- b) Mention **two (2)** health benefits and **two (2)** disadvantages of consuming this type of diet. [4 marks]
- c) Calculate her protein needs based on weight. [3 marks]
- d) Calculate her protein needs based on calorie intake. [3 marks]

The End