

2916/104
DIET THERAPY I,
PRINCIPLES OF HUMAN NUTRITION,
INTRODUCTION TO NUTRITION AND
DIETETICS, ANATOMY AND PHYSIOLOGY
Oct./Nov. 2022
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN NUTRITION AND DIETETICS

MODULE I

DIET THERAPY I, PRINCIPLES OF HUMAN NUTRITION,
INTRODUCTION TO NUTRITION AND DIETETICS,
ANATOMY AND PHYSIOLOGY

3 hours

INSTRUCTIONS TO CANDIDATES

This paper consists of TWO sections; A and B.

Answer ALL the questions in section A and any THREE questions from section B in the answer booklet provided.

Each question in section A carries 4 marks, while each question in section B carries 20 marks.

Maximum marks for each part of a question are indicated.

Candidates should answer the questions in English.

This paper consists of 3 printed pages.

**Candidates should check the question paper to ascertain that
all the pages are printed as indicated and that no questions are missing.**

SECTION A (40 marks)

Answer ALL the questions in this section.

1. Explain the meaning of the following terms:
 - (a) nutrient utilization; (2 marks)
 - (b) tolerable upper intake levels. (2 marks)
2. Distinguish between a nutritionist and a dietitian. (4 marks)
3. Mention **four** ways of modifying the content of nutrients in a diet. (4 marks)
4. Explain the cause of the following complications of parenteral nutrition:
 - (a) hypoglycaemia; (2 marks)
 - (b) fluid imbalance. (2 marks)
5. State **four** causes of peptic ulcers. (4 marks)
6. Highlight **four** signs of niacin deficiency. (4 marks)
7. State **four** functions of vitamin in the body. (4 marks)
8. Indicate **four** functions of the skin. (4 marks)
9. Explain **two** roles of the spinal cord. (4 marks)
10. Identify **four** sensory organs of the body. (4 marks)

SECTION B (60 marks)

*Answer any **THREE** questions from this section.*

11. (a) Explore **five** factors that influence food selection for individuals. (10 marks)
- (b) Explain **five** strategies that can be used to prevent anaemia in an individual. (10 marks)
12. (a) Explain how the following determine health status:
- (i) heredity; (2 marks)
 - (ii) environment; (2 marks)
 - (iii) lifestyle; (2 marks)
 - (iv) political system; (2 marks)
 - (v) education. (2 marks)
- (b) Identify **five** female reproductive organs and **five** male reproductive organs. (10 marks)
13. (a) Describe the following:
- (i) skeletal muscles; (3 marks)
 - (ii) smooth muscles. (3 marks)
- (b) Examine **two** functions of the medulla oblongata. (4 marks)
- (c) Explain **five** dietary guidelines to manage gastroesophageal reflux disease. (10 marks)
14. (a) Examine **four** factors that may predispose individuals to zinc deficiency. (8 marks)
- (b) Differentiate between nutrition skills and nutrition competence in professional practice. (4 marks)
- (c) Explain **four** processes performed by the digestive system. (8 marks)
15. (a) Explain **four** ways in which drugs influence nutrient absorption. (8 marks)
- (b) Examine **three** health claims associated with the use of nutraceuticals. (6 marks)
- (c) Identify **six** constituents of blood plasma. (6 marks)

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