

**TECHNICAL UNIVERSITY OF MOMBASA**  
**FACULTY OF APPLIED AND HEALTH SCIENCES**  
**DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR**  
**OF SCIENCE IN COMMUNITY HEALTH**  
**BSCH 15S, BSDS 15S/YEAR4/ SEMESTER1**  
**APH 4104: PRINCIPLES OF NUTRITION AND HEALTH**

**SEMESTER EXAMINATION**

**SERIES: APRIL/MAY 2016**

**TIME: 2 HOURS**

*Instructions to Candidates*

This paper consists of FIVE questions

Answer question ONE (COMPULSORY) and any other TWO questions.

*This paper consists of two printed pages.*

QUESTION ONE

1.a) Explain the following terminologies

- I. Nutrition 2marks
- II. Food 2marks
- III. Basal metabolic rate 2marks
- IV. Dietary standards 2marks

e) State two (2) functions of vitamin C in human body (2marks)

f) Explain two remedies used to improve malnutrition 2marks

g) Describe genetically modified foods 2marks

h) Describe consumer protection 2marks

i) Explain consumer education 2marks

j) Explain two symptoms of protein-energy malnutrition (2marks)

k) Explain two(2) functions of calcium in the body (4marks)

l) Explain dietary requirement of pregnant and lactating mothers (4marks)

m) Explain complementary feeding (2marks)

#### QUESTION TWO

2.a) Jeremy is a researcher based in Mwala hospital he wants to carry out nutrition assessment in the community. Discuss anthropometric measurements that he is likely to use as a nutrition assessment tool under

i) Head circumference (5marks)

ii) waist to hip circumference ratio (5marks)

b) In his finding he has realised that many people are consuming fast carbohydrates and not in cooperating fibre containing foods. With a clearly labelled diagram explain to him the healthy eating pyramid. (10marks)

#### QUESTION THREE

b) Discuss five causes of malnutrition in any community (10marks)

a) Discuss starvation under malnutrition and give five signs of starvation (10marks)

#### QUESTION FOUR

a) Iron deficiency is a threat to humanities. Explain nutrition interventions that are used when one is suffering from iron deficiency (10marks)

b) You are in charge of Mukui health clinic where infants immunity is an issue. Discuss with the area lactating mothers the importance of exclusive breastfeeding and give two reasons why introduction of other foods should not be done before 6 months . (10marks)

#### QUESTION FIVE

a) Consumer education is one of the important aspects that make consumers make informed choices when buying goods and services without being short changed by the traders. Explain the role of parties involved in consumer education (10marks)

b) Discuss consumer protection and give two areas where consumers require protection (10marks)