

## TECHNICAL UNIVERSITY OF MOMBASA

# FACULTY OF APPLIED AND HEALTH SCIENCES

### DEPARTMENT OF ENVIROMENT & HEALTH SCIENCES

## **UNIVERSITY EXAMINATION FOR:**

## BACHELOR OF SCIENCE IN COMMUNITY HEALTH

## BSCH/15J/YEAR 4/ SEMESTER 2

APH 4409: NUTRACEUTICALS AND FOOD SUPPLIMENTS

## SPECIAL/ SUPPLIMENTARY EXAMINATIONS SERIES: SEPTEMBER 2018 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.

Mobile phones are NOT allowed in the examination room

## **Question ONE**

- a) Differentiate
  - i. Nutraceuticals from food supplements.

4 marks

ii. Enrichment and restoration

4 marks

- b) Explain information that a manufacturer or distributor notify FDA about a dietary supplement it intends to market 4 marks
- c) Outline five health benefits that one is bound to achieve when they take functional food leeks

5marks

d) When advising on consumption of functional foods to clients Tumeric is one of the foods that you advise them to avoid because of its side effects. Explain two of its side effects to the body

4marks

e) Vitamin B1 is one of the vitamins used as a dietary supplement. Explain two functions of vitamin B1 that consumers look forward to getting in their body.

4marks

5 marks

#### **Question TWO**

Vitamin A has been used as a food supplement for many years due to beneficial health effects.

a) Explain the health benefits of vitamin A and give four food sources.

14 marks

b) Describe mass fortification.

6 marks

#### **Ouestion THREE**

a) Matenda is a primary school teacher and she comes to you and tells you that she is suffering from depression as told by a doctor she says she wants advice on how to cure the disease without using conventional medicine. Discuss with her what depression is and four ways of reducing depression using natural ways

10 marks

b) Explain three functional foods that can be eaten to help relieve constipation

10 marks

#### **Question FOUR**

a) Describe five safety issues of food supplements

10marks

b) Explain five factors that affect minerals bioavailability

10marks

### **Question FIVE**

- a) Discuss problems of consuming excess vitamins and minerals under the following;
  - Fat soluble vitamin
  - Water soluble vitamin
  - Minerals 12 marks

b) Faith is a doctor in the hospital where you work and is treating a patient who requires therapeutic foods. Explain to her what therapeutic diets are and two factors you are going to consider when planning for diet of that patient.

8marks