



# MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF HEALTH SCIENCES

DEPARTMENT OF PUBLIC AND COMMUNITY HEALTH

FIRST YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (FOODS NUTRITION AND DIETETICS)

**HFN 149: INFORMATION COMMUNICATION TECHNOLOGY FOR FOOD  
NUTRITION AND DIETETICS**

**DATE: 27/5/2022**

**TIME: 8.30-10.30 AM**

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## INSTRUCTIONS:

This paper consists of two sections A and B

### SECTION A

#### Specific Instructions

- This section has one question
- The question is compulsory
- The question is 30 marks

#### QUESTION ONE (30 MARKS)

- Outline the functions of a computer. (4 marks)
- You have been invited to make a seminar presentation on importance of ICT in nutrition. At the end of the session you are required to hand in a seminar report to the convener; -
  - Identify the Microsoft office program you will use to prepare your presentation and give reasons for your choice. (2 marks)
  - Identify the Microsoft office program you will use to prepare your report to the convener and give reasons for your choice. (2 marks)
- Outline the relationship between hardware and software. (3 marks)
- Highlight common computer software crimes tools. (3 marks)
- Outline the features of computer storage devices. (3 marks)
- State the various types of computer viruses. (3 marks)

- g) Highlight the importance of a nutrition information systems. (3 marks)
- h) You have been provided with a data set on children height, weight, age and sex and you are expected to give a report on the nutritional status of the children. Identify two nutrition softwares that you would use to derive your results. Give reasons for your choice. (4 marks)
- i) Outline the challenges in the use of nutrition digitalized tools. (3 marks)

## **SECTION B:**

### **Specific Instructions**

- **This section has four (4) questions**
- **Answer any two (2) questions**
- **Each question is 20 marks**

### **QUESTION TWO (20 MARKS)**

- a) Peter, a nutritionist in charge of nutrition education programs has worked for World Health Organization for the last 10 years. Recently the organization automated core functions. Explain how this new development will impact his work. (10 marks)
- b) Explain the methods that can be used to establish nutrition surveillance systems. (10 marks)

### **QUESTION THREE (20 MARKS)**

- a) You are developing a proposal on intake of micronutrients. Explain how you would use the internet to source for information to write the proposal. (10 marks)
- b) Describe the various types of computers. (10 marks)

### **QUESTION FOUR (20 MARKS)**

- a) Company X dealing with nutrition related information has lost crucial data due to cyber-attack. Explain some computer security techniques that they would explore to avoid such attacks in the future. (10 marks)
- b) Describe the various types of digitalized data collection tools that can be used in nutrition assessments. (10 marks)

### **QUESTION FIVE (20 MARKS)**

- a) Discuss the functions of computer operating systems. (10 marks)
- b) Explain the features of a good nutrition information system. (10 marks)