



# MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

**SCHOOL OF EDUCATION**  
**DEPARTMENT OF EARLY CHILDHOOD EDUCATION**  
**FIRST YEAR FIRST SEMESTER EXAMINATION FOR**  
**BACHELOR IN EDUCATION (EARLY CHILDHOOD)**

**ECE 115: FOODS AND NUTRITION**

**DATE:**

**TIME:**

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## **INSTRUCTIONS**

**Answer Question ONE (Compulsory) and any other TWO questions**

### **QUESTION ONE (30 MARKS)**

- a) Define the following terms
- |      |                   |           |
|------|-------------------|-----------|
| i.   | Food              | (2 marks) |
| ii.  | Nutrition         | (2 marks) |
| iii. | Energy metabolism | (2 marks) |
| iv.  | Balanced diet     | (2 marks) |
- b) Describe the health requirements recommended in the ABC nutritional guidelines. (6 marks)
- c) State six factors that influence the Basal Metabolic Rate. (6 marks)
- d) Identify five different types of minerals and describe each of their functions. (10 marks)

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

- a) Briefly explain the nutritional needs of the following groups of people.
- |      |                                |           |
|------|--------------------------------|-----------|
| i.   | Infants                        | (2 marks) |
| ii.  | ECDE children                  | (2 marks) |
| iii. | Pregnant and lactating mothers | (2 marks) |
| iv.  | Aged people                    | (2 marks) |
| v.   | Adult Heavy workers            | (2 marks) |

- b) Justify the use of FIVE specific methods of cooking for a given food. (10 marks)

**QUESTION THREE (20 MARKS)**

- a) Choose appropriate foods that could be cooked using each of the following methods and describe how you can cook the food you have chosen
- i. Roasting (2 marks)
  - ii. Pan-frying (2 marks)
  - iii. Sautee (2 marks)
  - iv. Braising (2 marks)
  - v. Stewing (2 marks)
- b) Describe common practices that make food unsafe for human consumption. (10 marks)

**QUESTION FOUR (20 MARKS)**

- a) Describe food safety in use of Microwaves. (5 marks)
- b) State five functions of lipids in the human body. (5 marks)
- c) Describe ways in which industrialization and urbanization negatively affects children of both the poor and the rich families in terms of nutrition. (10 marks)

**QUESTION FIVE (20 MARKS)**

- a) Outline and briefly describe with examples five food preservation processes. (10 marks)
- b) Discuss five ways of reducing nutrient losses and maintain food safety in different categories of foods. (10 marks)