



# **MURANG'A UNIVERSITY OF TECHNOLOGY**

## **SCHOOL OF ENGINEERING AND TECHNOLOGY**

DEPARTMENT OF

UNIVERSITY ORDINARY EXAMINATION

2023/2024 ACADEMIC YEAR

**FIRST YEAR SECOND SEMESTER EXAMINATION FOR BACHELOR OF  
SCIENCE IN**

**EBT100: CONSTRUCTION TECHNOLOGY**

**DURATION: 2 HOURS**

### **INSTRUCTIONS TO CANDIDATES:**

1. Answer Question one and any other two questions.
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

## **SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION**

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

- a) Define the following terms as used in construction technology (6marks)
  - i) Rereal
  - ii) Levelling
  - iii) Datum
- b) Explain 3 classifications of doors according to the method of construction (6marks)
- c) Distinguish between the two types of datum. (4marks)
- d) Explain any 4 environmental considerations of a built environment (8marks)
- e) Distinguish between sheet piles and load bearing piles (4marks)
- f) State 4 visual and physical activities in site investigations (4marks)
- g) State 2 external and 2 internal elements of a built environment (4marks)
- h) Distinguish between a damp roof course and a damp proof membrane (4marks)

## **SECTION TWO: ANSWER ANY TWO QUESTIONS**

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

- a) Explain six different types of raft foundation (12marks)
- b) Simon has been contracted to construct a concrete floor slab for ongoing construction. Explain the process he is to undertake (8marks)

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

The function of a wall is to enclose and protect a building or to divide space within a building. To provide a check that a particular wall construction satisfies a range of functional requirements it is convenient to adopt a list of specific requirements. Explain the commonly accepted requirements of a wall (20 marks)

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

- a) Natural defects of a site will involve considerable expenditure on construction and maintenance of the building. While unsatisfactory conditions in the neighbourhood of locality will cause unhappy living conditions on one hand and possible deterioration of the value of property on the other. Explain 5 general factors that should be considered while selecting a site for building construction. (10marks)
- b) With an aid of a diagram, discuss pier foundation (10marks)