



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT BUILDING AND CIVIL ENGINEERING

**UNIVERSITY EXAMINATION FOR:**

**BSC IN CIVIL ENGINEERING**

**ECE 2216: ENGINEERING DRAWING IV**

**END OF SEMESTER EXAMINATION**

**SERIES: APRIL 2016**

**TIME: 2 HOURS**

**DATE: 16 May 2016**

## Instructions to Candidates

You should have the following for this examination

*-Answer Booklet, Drawing Instruments, Scientific calculator, examination pass and student ID*

This paper consists of five questions. Attempt question ONE (Compulsory) and any other TWO questions.

## INSTRUCTIONS

Study the set of architectural drawings consisting of a dimensioned ground floor plan, sectional elevation and elevations. Use them to answer the questions. Note that the drawings are not to scale and you will have to use the dimensions given.

### QUESTION ONE (COMPULSORY)

Draw the first floor plan at a scale of 1:50.

(30 marks)

### QUESTION TWO

Draw at a scale of 1:25 the reinforced concrete details of a typical column footing showing:

- i. Plan (10 marks)
- ii. Section (10 marks)

### QUESTION THREE

Draw elevation 01 at a scale of 1:50.

(20 marks)

### QUESTION FOUR

Draw at a scale of 1:25 a section showing the reinforced concrete details of the first flight of the staircase up to the landing.

(20 marks)

### QUESTION FIVE

Draw at a scale of 1:25 a section through an internal wall and show the following:

- i. 50mm concrete blinding (1:4:8) (2 marks)
- ii. Strip foundation with reinforcements (6 marks)
- iii. 200mm masonry foundation walling (2 marks)
- iv. 300mm approved hardcore (2 marks)
- v. 50mm murrum blinding (2 marks)
- vi. 100mm thick concrete slab (2 marks)
- vii. Damp proof membrane (DPM) (2 marks)
- viii. Damp proof course (DPC) (2 marks)







