



---

**TECHNICAL UNIVERSITY OF MOMBASA**  
FACULTY OF ENGINEERING AND TECHNOLOGY  
DEPARTMENT OF BUILDING & CIVIL ENGINEERING  
**UNIVERSITY EXAMINATION FOR:**  
BACHELOR OF SCIENCE IN CIVIL ENGINEERING  
**ECE 2216: ENGINEERING DRAWING IV**  
END OF SEMESTER EXAMINATION  
**SERIES: SEPT. 2017**  
**TIME: 3 HOURS**

**Instructions to Candidates**

You should have the following for this examination

-Answer Booklet, examination pass and student ID

-Drawing instruments

This paper consists of five questions.

Answer question ONE (COMPULSORY) and any other TWO questions

**Do not write on the question paper.**

Study the set of architectural drawings consisting of the dimensioned ground floor plan and sectional elevation A-A. 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)

**ATTEMPT ANY TWO QUESTIONS**

**QUESTION TWO**

Draw elevation 02 at a scale of 1:50. (20 marks)

**QUESTION THREE**

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

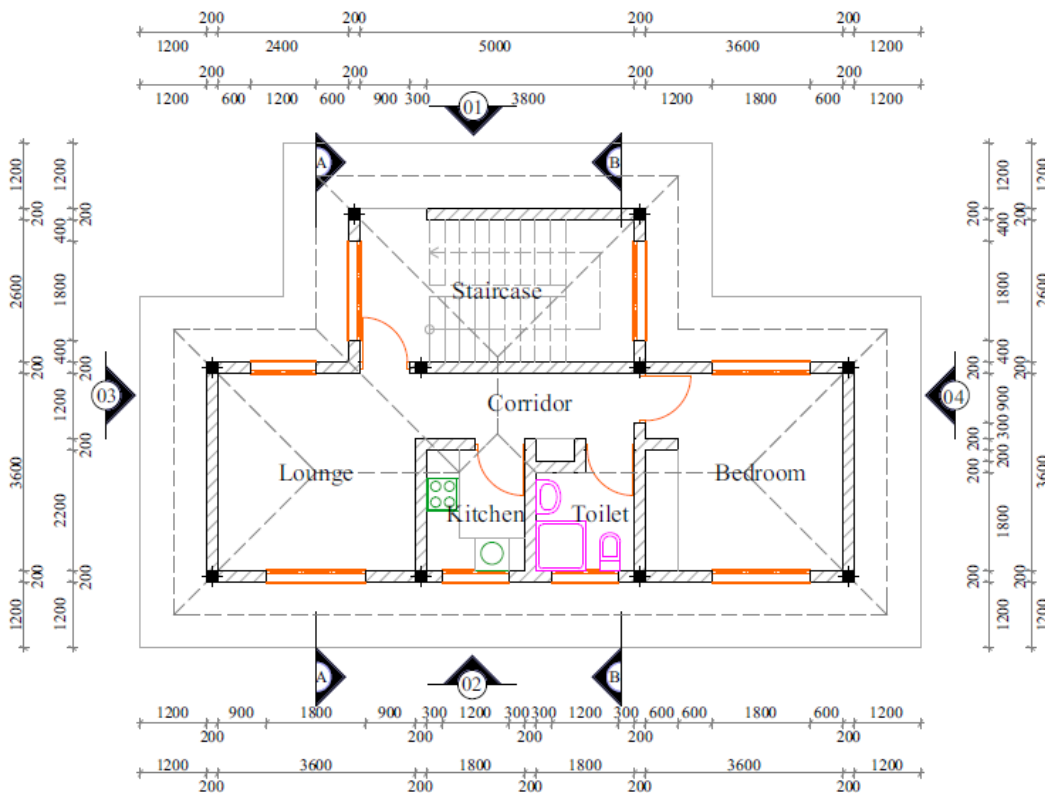
- i. 50mm concrete blinding (1:4:8) (2 marks)
- ii. Strip foundation with reinforcements (6 marks)
- iii. 200mm masonry foundation walling (2 marks)
- iv. 300mm approved hardcore (2 marks)
- v. 50mm murrum blinding (2 marks)
- vi. 100mm thick concrete slab (2 marks)
- vii. Damp proof membrane (DPM) (2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

#### **QUESTION FOUR**

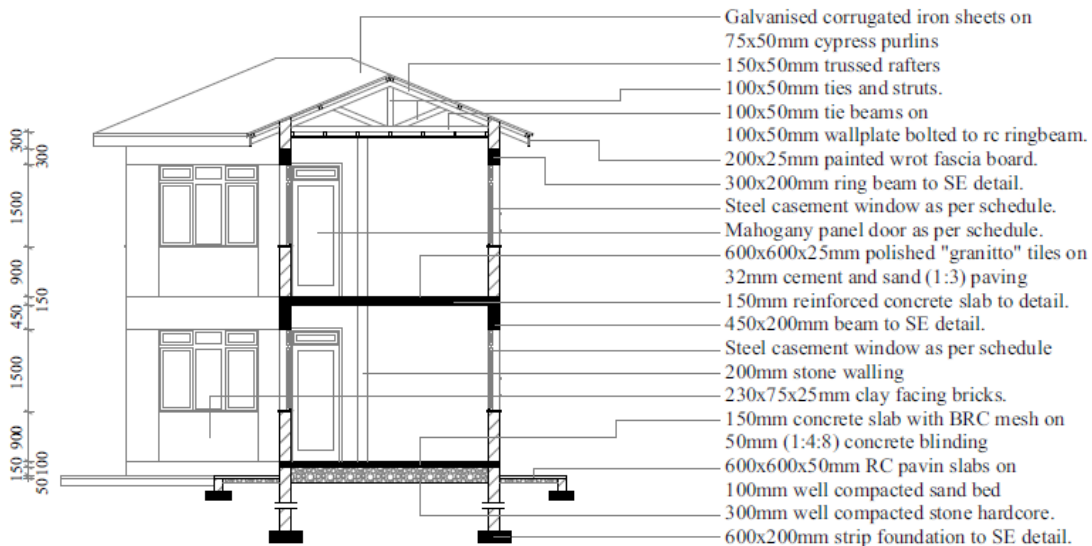
Draw at a scale of 1:25 a section showing the reinforced concrete details of the second flight of the staircase from the landing to the first floor slab. (20 marks)

#### **QUESTION FIVE**

Draw at a scale of 1:50 the foundation general arrangement details (20 marks)



DIMENSIONED GROUND FLOOR PLAN



SECTIONAL ELEVATION-A-A