



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

(A Centre of Excellence)

## Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

**UNIVERSITY EXAMINATION FOR:**  
BACHELOR OF SCIENCE IN CIVIL ENGINEERING

ECE 2207: ENGINEERING DRAWING III

**END OF SEMESTER EXAMINATION**

**SERIES: DECEMBER 2012**

**TIME: 2 HOURS**

### Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions.

Answer question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

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### Question One (Compulsory)

a) Figure 1 shows the plan and section through a steel framed building. Sketch the details of the following joints:

- (i) (A) Stanchion base, base plate and pad footing
- (ii) (B) Column splice
- (iii) (C) Connection between stanchion and beams
- (iv) (D) Connection between main beam and secondary beams

Assume any other relevant information.

**(20 marks)**

### **Question Two**

The plan, section and tabulated standard dimensions for a septic tank are given in figure 2. Refer to the septic tank dimensions given in table 1 of figure 2 and draw the plan and section for a septic tank of 15,000 litres capacity. **(20 marks)**

### **Question Three**

With the aid of a well labeled diagram. Illustrated a detailed isometric drawing of hot and cold-water system. **(20 marks)**

### **Question Four**

Draw neat sketches of the following details:

- (i)** Edge Kerb
- (ii)** Road Gulley
- (iii)** Road Crossing
- (iv)** Main Hole **(20 marks)**

### **Question Five**

Figure 3 shows typical timber truss. Draw the details of all the connections 1, 2 and 3. **(20 marks)**