



TECHNICAL UNIVERSITY OF MOMBASA
**Faculty of Engineering &
Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
**UNIVERSITY EXAMINATION FOR:
BACHELOR OF SCIENCE IN CIVIL ENGINEERING
(BSCE 13M – Y2 S1/S-FT)**

ECE 2207: ENGINEERING DRAWING III

**END OF SEMESTER EXAMINATION
SERIES: APRIL 2014
TIME ALLOWED: 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

All questions carry equal marks

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

Question One (Compulsory)

Figure Q1 shows a line diagram of a Timber roof truss suitable for a span of 20m with half the truss cut off.

a) Draw an arrangement drawing of shown part to a scale of 1:50

(10 marks)

- b) Draw neat sketches of all the joints marked A, B and C (20 marks)

Question Two

Sketch an indirect water system indicating the flow of water and label the various sanitary appliances. (20 marks)

Question Three

Sketch and label the following structural steel framework connection details.

- a) Stanchion base (6 marks)
- b) Beam to column bolted connection (4 marks)
- c) (i) Column splice for equal sections
- (ii) Column to column bolted connection for unequal sections (7 marks)
- d) Beam and beam connection. (3 marks)

Question Four

Draw neat sketches of the following

- a) Road Gulley (5 marks)
- b) Edge Kerb (5 marks)
- c) Road cross-section (10 marks)

Question Five

Draw the following trusses:

- a) W.W. Double link
- b) Shed
- c) Mansard
- d) Queen
- e) Howe (20 marks)