



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

UNIVERSITY EXAMINATION FOR DECREE IN:

BACHELOR OF SCIENCE IN CIVIL ENGINEERING (BSCE 15JA)

ECE 2207: ENGINEERING DRAWING III

END OF SEMESTER EXAMINATION

SERIES: APRIL 2015

TIME ALLOWED: 3 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*
- *Pocket Calculator*

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

Use neat, large and well labeled diagrams where required

This paper consists of **FOUR** printed pages

Question One (Compulsory)

Figure 1 shows the section through a soak pit. Draw the plan and the section A-A using a scale of 1:50 for soak pit of 50 users. **(30 marks)**

Question Two

Draw the following steel stanchion connections:

- (i) Simple connection of beams to corner stanchion
- (ii) Stanchion splices for different sections reverted detail
- (iii) Stanchion with slab base welded on
- (iv) Connection of beams to stanchions simple welded and bolted detail **(20 marks)**

Question Three

Draw the following timber joints using 50 x 150 timber members **(20 marks)**

- a) Loose tongue joint
- b) Mortise and tennon joint
- c) Stopped housing joint
- d) Tee halving joint
- e) Lapped dovetail joint

Question Four

Figure 2 shows the section through a road. Draw an industrial road using a scale of 1:10 **(20 marks)**

Question Five

Draw the following timber trusses and label all the respective members: **(20 marks)**

- a) Double roof
- b) Lean-to roof
- c) Close couple roof
- d) Collar tie roof