TECHICAL UNIVERSITY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

UNIVERSITY EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE IN CIVIL ENGINEERING

ECE 2207: ENGINEERING DRAWING III

SPECIAL/SUPPLEMENTARY EXAMINATION
SERIES: FEBRUARY 2013
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
- *Answer Booklet*
- *Mathematical Table/Pocket Calculator*

This paper consists of **FIVE** questions. Answer any **THREE** questions
Maximum marks for each part of a question are as shown
This paper consists of **THREE** printed pages

SECTION A (COMPULSORY – 30 MARKS)

a) Draw a typical road pavement, vertical kerb and gutter (show the standard dimensions) **(10 marks)**

b) Draw a typical manhole chamber flow channelization for:-
- **(i)** Single curve flow **(3 marks)**
- **(ii)** 3-way flow **(3 marks)**
- **(iii)** 4-way flow **(4 marks)**

SECTION B (ANSWER ANY TWO QUESTIONS FROM THIS SECTION)

Question Two (20 marks)

a) Name the **FIVE** elements of the typical timber roof truss shown in figure 1 **(10 marks)**

Figure 1

b) Sketch a typical road pavement gravel and wire mesh sediment filter **(10 marks)**

Question Three (20 marks)

Draw the following typical timber joints

(i) SCARFED (bolted) splicing joint **(10 marks)**
(ii) Re-draw and show the bolting on the heel joint shown in figure 2. **(10 marks)**

Figure 2

Question Four (20 marks)

Draw the section A-A of the road catch drain type 2 shown in figure 3. **(20 marks)**

Figure 3

Question Five (20 marks)

Draw a typical timber roof truss showing all the elements highlighting the purposes of each element. **(20 marks)**