THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

University Examination 2010

SECOND YEAR/SECOND SEMESTER EXAMINATION
FOR THE DEGREE IN BACHELOR OF SCIENCE IN CIVIL ENGINEERING

ECE 2207: CIVIL ENGINEERING DRAWING III

SERIES: APRIL/MAY 2010   **TIME:** 2 HOURS

Instructions:

This paper contains **THREE** questions.
Answer **ALL** questions.
All questions carry equal marks.

You should have the following for the examination:
-     Drawing paper A2 size   -   Drawing instruments
-     Tee square   -   A table for "Universal Beams" attached.

QUESTION ONE

The water supply plan for a domestic house is shown in Diagram No.Q1.
Draw the isometric diagram of the cold and hot water supply and distribution
for the house using a scale of 1:100.   (marks)

QUESTION TWO

The survey data for a section of an estate road 6.0m wide is given in
table Q2.

(a)   Draw the longitudinal section to scale of 1:250 horizontal and 1:50
          vertical.   (marks)

(b)   Draw the section at distance point 20.0 to scale of 1:100 and 1:50
          horizontal and vertical respectively.   (marks)

Table Q2

Station No.	1	2	3	4
Distance (m)	0	20	40	60
Road level	50.435	50.361	50.285	50.213
Ground level	50.835	50.635	50.435	50.235

QUESTION THREE

Fig. Q3 show the beams and the columns layout plan for the first floor of a steel framed building.

(a)   (i)   Redraw the plan to a scale of 1:100 naming all the columns and beams.

        (ii)   Insert beam descriptions using dimensions picked from tables provided. (marks)

(b)   Draw the secondary to primary beam connection to show the arrangement of the cleats and method of dimensioning. (Scale 1:20) (marks)