THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)
Faculty of Engineering and Technology

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBC 10A)

DIPLOMA IN ARCHITECTURE (DA 10A)

EBC 2310: MEASUREMENT OF BUILDING WORKS II

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2011

TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
- *Answer Booklet*
- *Pocket calculator*
- *Dimension papers*
- *A copy of the Standard Method of Measurement of Building Works (SMM)*

This paper consists of **FIVE** questions in two sections **A** & **B**
Answer question **ONE (COMPULSORY)** and any other **TWO** questions.
Maximum marks for each part of a question are clearly shown

SECTION A (COMPULSORY)

Question 1(30 marks)

Take off all quantities for the site clearance and demolition works shown in drawing no. 01D.
                    (Use SMM)   (30 marks)

SECTION B (Answer any TWO questions from this section)

Question 2 (20 marks)

Take off all quantities for the Flat roof works shown in drawing no 02D. Excluding formwork, reinforcement and finishes   (20 marks)

Question 3 (20 marks)

Drawing no. 03D shows the plan of residential house, indicating finishes for each room. Take off all quantities for the floor and ceiling finishes   (20 marks)

Question 4 (20 marks)

The table below shows a Bar Bending Schedule for the reinforcement to foundation bases and columns for a multi-storey building

Take off all the quantities for the reinforcement   (20 marks)

Ref	Type	Location	Length	No. per unit	No. of units
BIB	Y16	Column base 1 bottom	1248	5	14
BIT	Y12	Column base 1 top	1176	6	14
B2B	Y12	Column base 2 bottom	1036	4	6
B2T	Y10	Column base 2 top	1000	5	6
C1M	Y8	Column base 1 rings	1224	12	14
C2M	Y12	Column 2 main bars	1860	4	6
C2R	R6	Column 2 rings	988	10	6

All high tensile steel reinforcement to BS 4461 and all mild steel bars to BS 4449.

Question 5 (20 marks)

Take off all quantities for the formwork and finishes for the Flat roof shown in drawing no. 02D. referred in question no. 2 above   (20 marks)