



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Engineering

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

CERTIFICATE IN ARCHITECTURE

MEASUREMENT

END OF SEMESTER I EXAMINATION

SERIES: APRIL/MAY 2010

TIME: 3 HOURS

Instructions to Candidates:

You should have the following for this examination:

- Answer Booklet
- Calculator
- Dimension papers
- Abstracting papers
- A copy of the Standard Method of Measurement of Building Works

This paper consists of **FIVE** questions.

Question No.1 in Section **A** is Compulsory.

Answer question **ONE** in Section **A** and any other **TWO** questions in Section **B**.

Question 1 carries 40 marks while those in Section **B** carries 30 marks each.

Maximum marks for part of question are as shown.

SECTION A
(Compulsory)

- Q.1 Take off **all** quantities for the Substructure works shown in drawing No.01E up to and including the DPC. (40 marks)

SECTION B
(Answer any **TWO** questions from this Section)

- Q.2 (a) List and briefly explain **FIVE** types of Building and Civil Engineering Contracts. (15 marks)
- (b) Explain with illustrations the use of the **FOUR** columns of the dimension paper. (15 marks)
- Q.3 (a) Define **SIX** roles of the Quantity Surveyor in a Construction Project, two at each of the following stages: During design, During construction and after completion. (12 marks)
- (b) With suitable illustrations, explain how the following are used in the Traditional method of Bill of Quantities preparation. (12 marks)
- Grouping of dimensions
 - Grouping of descriptions
 - Dotting-on
 - Ditto
- Q.4 (a) Define **SIX** purposes of a Bill Quantities with a brief explanation of each. (18 marks)
- (b) Outline and briefly describe **THREE** sections of a Bill of Quantities which have a cost implication. (12 marks)
- Q.5 (a) Differentiate between Trade by Trade and Elemental bill giving **FIVE** examples of each. (20 marks)
- (b) Explain the meaning of the term 'Preliminaries' and list **FIVE** items which may appear in a Preliminary Bill. (10 marks)