**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**P.O. Box 972-60200 – Meru-Kenya.**

**Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411**

**Fax: 064-30321**

**Website:** [**www.must.ac.ke**](http://www.must.ac.ke) **Email:** **info@must.ac.ke**

**University Examinations 2015/2016**

SECOND YEAR SECOND SEMESTER EXAMINATION FOR DIPLOMA IN CIVIL ENGINEERING

**ECV 2300: CIVIL ENGINEERING QUANTITIES I**

 **DATE: NOVEMBER 2015 TIME: 11/2 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

Use diagram No.1 attached to ‘Take off’ all quantities of the sub-structure works upto and including the damp proof course (DPC). (30 Marks)

**QUESTION TWO (15 MARKS)**

Explain the duties and responsibilities of the following parties in a building and civil engineering works constract.

1. The client.
2. The architect.
3. The quantity surveyor.
4. The engineer.
5. The contractor. (15 Marks)

**QUESTION THREE (15 MARKS)**

1. State four functions of the bill of quantities. (4 Marks)
2. Describe the following types of bills:
3. Elemental bills.
4. Operational bills.
5. Trade order bills. (9 Marks)
6. Define the term ‘Taking off’ as used in measurement of building and civil engineering works. (2 Marks)

**QUESTION FOUR (15 MARKS)**

1. Explain the roles of a quantity surveyor in a building contract at each of the following stages:
2. Pre-construction stage.
3. Construction stage.
4. Post-construction stage. (9 Marks)
5. Describe the following terms in relation to a bill of quantities:
6. Pre-amble.
7. Prime cost.
8. Provisional sums.
9. Preliminaries.
10. Contingency sum. (6 Marks)