

**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**](mailto:info@must.ac.ke)

**University Examinations 2015/2016**

FIRST YEAR, FIRST SEMESTER EXAMINATION FOR THE CERTIFICATE IN ELECTRICAL INSTALLATION

**EEE1101: ELECTRICAL INSTALLATION TECHNOLOGY I**

**DATE: DECEMBER, 2016 TIME: 11/2 HOURS**

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

**QUESTION ONE (30 MARKS)**

1. State four safety measures you must consider when working in an electrical workshop. (4 Marks)
2. Under the headings of the four items considered in question 1 (a) above briefly explain each of them. (6 Marks)
3. (i) Describe how a pvc conduit is prepared for installation. (4 Marks)

(ii) Name any three types of cables and three groups of cables. (3 Marks)

1. In relation to electrical conductor joints and termination , define the following terms;
2. Joint (2 Marks)
3. Termination (2 Marks)
4. What is voltage drop and what factors do affect voltage drop in a conductor? (5 Marks)
5. Briefly describe the types of jointing methods in relation to; (4 Marks)
6. Clamping
7. Welding
8. Bolting
9. Riveting

**QUESTION TWO (15 MARKS)**

1. Explain atleast three reasons for having separate final sub circuits. (6 Marks)
2. Outline the sequence of control in a domestic installation. (5 Marks)
3. Explain any two factors that determine the number of cables accommodated in a given conduit. (4 Marks)

**QUESTION THREE (15 MARKS)**

1. In relation to electrical installation define the term accessory. (2 Marks)
2. State any three power electrical accessories. (6 Marks)
3. State any four factors that determine the rating of a cable. (4 Marks)
4. State three advantages of a conduit wiring system. (3 Marks)

**QUESTION FOUR (15 MARKS)**

1. What considerations are made before selecting a certain wiring system? (7 Marks)
2. Describe the procedure of making a Brittania joint. (5 Marks)
3. State the advantage of copper as a good conductor of electricity compared to aluminium.

(3 Marks)