



*(University of Choice)*

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN CAMPUS  
UNIVERSITY EXAMINATIONS  
2021/2022 ACADEMIC YEAR**

**THIRD YEAR SECOND SEMESTER**

**MAIN EXAMINATIONS**

**FOR THE DEGREE  
OF  
BACHELOR OF TECHNOLOGY EDUCATION IN ELECTRICAL AND ELECTRONIC  
ENGINEERING**

**COURSE CODE: TEE 324**

**COURSE TITLE: ELECTRICAL INSTALLATION AND PRACTICE**

**DATE: THURSDAY, APRIL 28<sup>TH</sup>, 2022.**

**TIME: 3:00 – 5:00 PM**

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**INSTRUCTIONS TO CANDIDATES**

Question ONE (1) is compulsory  
Answer Any Other TWO (2) questions

TIME: 2 Hours

**MMUST observes ZERO tolerance to examination cheating**

This Paper Consists of 4 Printed Pages. Please Turn Over. ►

- a. Explain the function of control equipment at the consumer's intake point.  
**(3 marks)**

### QUESTION THREE

- a. State three
- i. Reasons for the I.E.E. regulations in electrical installations
  - ii. Safety precautions when working on live electrical circuits
- (6marks)**
- b. With the aid of well labelled diagrams, differentiate between radial and ring distribution systems **(6marks)**
- c. Name THREE standard cables relevant to hazardous areas **(3marks)**
- d. Explain the M.I.M.S wiring system and state where it is applied  
**(5 marks)**

### QUESTION FOUR

- a. With the aid of diagram, describe how socket outlets are connected in a Ring. **(3 marks)**
- b. State the advantages of ring circuit over radial **(2 marks)**
- c. State two I.E.E regulations in regard to Ring and one I.E.E regulation in regard to Radial connection of socket outlets **(3 marks)**
- d. With the aid of diagram, define the following terms **(12 marks)**
- i. Earthing
  - ii. Earthing conductor
  - iii. C.P.C
  - iv. Over current
  - v. Protective conductor
  - vi. Consumer main earthing terminal

### QUESTION FIVE

- a. State two reasons for inspecting a completed installation before powering it. **(3marks)**
- b. Outline reasons for carrying out tests on a completed installation  
**(6 marks)**
- c. Outline the sequence of tests to be carried out on completed installation