



(University of Choice)

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

**MAIN CAMPUS
UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR**

THIRD YEAR SECOND SEMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF TECHNOLOGY EDUCATION
IN
BUILDING AND CIVIL ENGINEERING**

COURSE CODE: TEC 302

**COURSE TITLE: WORKSHOP ORGANIZATION AND
MANAGEMENT**

DATE: THURSDAY 5TH NOVEMBER 2020 TIME: 9.00 – 11.00 AM

INSTRUCTIONS:

1. Answer Question ONE and any other TWO Questions
2. Marks for each question are indicated in the parenthesis.
3. It is in the best interest of the student to write legibly
4. Examination duration is **2 Hours**

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

Question 1

- i). Use well labeled diagram to show the Wood workshop outline and layout of various tools and equipment, gang ways, work benches and everything required to convenience work out put in a Technical Training institute. (16 marks)
- ii). Explain meaning of the term ‘layout planning’ as used in Plant layout. (2 marks).
- iii). Outline four aspects in an educational workshop that would require close Management. (8marks)

Question 2

- i). Explain the meaning of the statement, “*safety improves quality in a workshop*”. (8 marks)
- ii). State any *four* workshop safety rules in connection with attire (4marks)
- iii). Distinguish between the following plant layouts:
 - a). Process layouts (3marks)
 - b). Product layouts (3marks)

Question 3

- i). Briefly describe the concept of plant layout. (2 marks)
- ii). Explain the significance of ‘suitability of location’ as a point to consider before initiating a plant in that given area. (4 marks)
- iii). Mention eight objectives of plant layout: (8 marks)
- iv). Mention eight principles of plant layout: (8 marks)

Question 4

- i). State *four* potential sources of danger in a workshop. (4marks)
- ii). Explain with examples the meaning of the two terms below.
 - a). ‘Workshop organization’ (6 marks)
 - b). ‘Workshop management’ (6 marks)
- iii). Distinguish between the following plant layouts:
 - a). Hybrid layouts (3marks)
 - b). Fixed-Position layouts (3marks)