



# **MURANG'A UNIVERSITY OF TECHNOLOGY**

## **SCHOOL OF ENGINEERING AND TECHNOLOGY**

### **TVET EXAMINATION**

#### **DEPARTMENT OF MECHANICAL ENGINEERING**

#### **UNIVERSITY ORDINARY EXAMINATION**

#### **SECOND YEAR TERM ONE EXAMINATION FOR DIPLOMA IN MECHANICAL TECHNOLOGY (PRODUCTION) LEVEL 6**

**UNIT CODE: ENG/ME/CR/8/06/A**

**UNIT TITLE: MANAGE MECHANICAL WORKSHOP**

**DURATION: 3 HOURS**

#### **INSTRUCTIONS TO CANDIDATES:**

1. Answer All Questions
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

## SECTION A (40MARKS)

Attempt *All* questions.

1. Define Engineering workshop (2marks)
2. Outline **two** ways of disposing workshop waste in a mechanical engineering workshop (4marks)
3. Identify **four** positive work values a workshop manager must have to efficiently manage workshop process. (4marks)
4. Highlight **five** procurement procedures in a mechanical engineering workshop. (5marks)
5. State **two** duties of workshop maintenance and repair personnel. (2marks)
6. List **four** advantage of a workshop maintenance schedule (4marks)
7. Highlight **four** benefits of keeping spare parts inventory in a workshop (4marks)
8. State **four** objectives of a good plant layout (4marks)
9. State **four** importance of proper storage of machines in the workshop (4marks)
10. Define the term plant layout. (3marks)
11. Outline **four** activities that you would carry out on machines to ensure they are in a good condition (4 marks)

## SECTION B (60MARKS)

Attempt *all* questions.

12. A workshop layout should allow for easy operation of activities.
  - a) Explain **five** factors that can be considered when designing the layout of a workshop. (5marks)
  - b) State **five** factors to consider in the general placement of machines in the workshop (5marks)
  - c) Discuss **five** factors you consider for a workshop location for a commercial mechanical workshop (10marks)
13. Fire safety is one of the most basic safety requirements for the effective operation in any workshop.
  - a) Discuss the different classes of fire caused in each and type of extinguishers to put off. (15marks)
  - b) State **five** common causes of fire in the workshop. (5marks)
14. With the aid of neat sketches, describe **four** types of mechanical engineering workshop layouts. (5marks)

**SECTION B (60MARKS)**

**QUESTION THREE (20MARKS)**

**QUESTION FOUR (20MARKS)**