



# MURANG'A UNIVERSITY OF TECHNOLOGY

## SCHOOL OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRICAL & ELECTRONICS  
ENGINEERING

UNIVERSITY ORDINARY EXAMINATION

2018/2019 ACADEMIC YEAR

**THIRD YEAR FIRST SEMESTER EXAMINATION FOR DIPLOMA IN  
ELECTRICAL AND ELECTRONICS**

EEE 059 - I.O.M

DURATION: 2 HOURS

DATE: 18/4/2019

TIME: 2-4 P.M.

**Instructions to candidates:**

1. Answer question One and Any Other Two 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 – ANSWER ALL QUESTIONS IN THIS SECTION**

**QUESTION ONE (30 MARKS)**

- (a) Explain the following terms:
- (i) Trade off
  - (ii) Opportunity cost (4marks)
- (b) Differentiate between primary and secondary production. (4marks)
- (c) Explain the following terms;
- (i) Division of labour
  - (ii) Specialisation (4marks)
- (d) State any four advantages of preventative maintenance. (4marks)
- (e) State any four sources of law. (4marks)
- (f) Describe the following types of contracts:
- (i) Express
  - (ii) Implied
  - (iii) Executed (6marks)
- (g) State any two types of torts. (2marks)
- (h) Explain the term activity as used in critical path analysis. (2marks)

**SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION**

**QUESTION TWO (20 MARKS)**

- (a) Define the term economics. (2marks)
- (b) Explain the following terms as applied in economics:
- i. Efficiency
  - ii. Equity (4marks)
- (c) Define the term production (2marks)
- (d) Describe four factors of production and for each state the income earned. (12marks)

**QUESTION THREE (20 MARKS)**

- (a) State any three losses that may occur due to poor maintenance. (3marks)
- (b) Explain what happens during “construction site” meetings. (3marks)
- (c) Briefly explain the following functions of management:
- i. Planning
  - ii. Organizing
  - iii. Control (6marks)

(d) Explain the following terms as used in law of contracts:

- i. Fraud
- ii. Duress
- iii. Undue influence
- iv. Breach of contract

(8marks)

**QUESTION FOUR (20 MARKS)**

(a) Explain the following elements that must be present in a tort:

(4marks)

- i. Tortfeasor
- ii. Plaintiff

(b) Outline the steps in the process of tendering.

(7marks)

(c) Table I

ACTIVITY	PRECEEDING ACTIVITY	DURATION (WEEKS)
A	O	8
B	A	10
C	A	15
D	A	7
E	B	8
F	B	5
G	E	3
H	E	8
I	DEG	6

From the table:

- i. Draw the network
- ii. Determine the critical path

(9marks)