

TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF ELECTRICAL AND ELECTRONIC ENGINEERING

ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT

UNIVERSITY EXAMINATION FOR:

BSC ELECTRICAL AND ELECTRONICS ENGINEERING

EEE 4501 ENGINEERING MANAGEMENT I

END OF SEMESTER EXAMINATION

SERIES: MARCH 2025

TIME: 2 HOURS

DATE:

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **five** Questions; Question ONE is compulsory. In addition attempt any Other TWO Questions.

Do not write on the question paper

Question ONE

- (a) (i) Define the term work measurement. (7 marks)
- (ii) State any **FIVE** application areas of start time estimation.
- (b) Outline the steps in time study procedure. (7 marks)
- (c) Describe the use of any **THREE** methods and equipment in time study. (6 marks)

Question TWO

- (a) Describe in detail **FOUR** systems of rating, the performance of a job operator (12 marks)
- (b) Explain the concept of normal performance. (8 marks)

Question THREE

- (a) State the contribution of the Hawthorne experiment to the concept of meeting employee subjective requirements. **(7 marks)**
- (b) Describe the two-step approach to understanding employee motivation and satisfaction to developed by Fredrick Herzberg. **(10 marks)**
- (c) With the aid of a diagram describe Maslow Hierarchy Needs. **(5 marks)**

Question FOUR

- (a) Outline the key feature of systems approach to management. **(10 marks)**
- (b)
 - (i) Outline the contributions of system approach to management.
 - (ii) Outline the limitations of system approach.**(10 marks)**

Question FIVE

- (a) Discuss the major benefits of departmentization in an organization. **(10 marks)**
- (b) State the advantages and disadvantages of decentralization. **(10 marks)**

