



MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF ENGINEERING TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

UNIVERSITY ORDINARY EXAMINATION

2023/2024 ACADEMIC YEAR

**SECOND YEAR SECOND SEMESTER EXAMINATION DIPLOMA IN
ELECTRICAL AND ELECTRONICS ENGINEERING**

ENG/CU/PO/CR/09/6: ELECTRICAL PROJECT MANAGEMENT

DURATION: 2 HOURS

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) Define project planning. (2marks)
- b) Why are project plans important? (3marks)
- c) What are the four variables that are critical when managing a project. (4marks)
- d) Outline three elements of project planning. (3marks)
- e) State three types of maintenance tools, materials and equipment. (3marks)
- f) State two important of inventory management in electrical project management. (2marks)
- g) Outline three ways of managing electrical project inventory. (3marks)
- h) What is a project budget? (2marks)
- i) Outline three purposes of a project budget in electrical project management. (3marks)
- j) State two ways of avoiding a budget overrun. (2marks)
- k) Discuss three best practices for controlling quality in electrical project managements. (3marks)

SECTION TWO: ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

- a) What is a project report? (2marks)
- b) Discuss the four components of the structure of the project report. (8marks)
- c) Outline five reasons why progress reports are important during electrical project management. (5marks)
- d) State four values of project documentation. (5marks)

QUESTION THREE (20 MARKS)

- a) Discuss the four phases of a project in the project management lifecycle. (8marks)
- b) Discuss four elements of a budget. (8marks)
- c) Discuss two purposes of Work breakdown structure (WBS). (4marks)

QUESTION FOUR (20 MARKS)

- a) What is SWOT analysis? (2marks)
- b) Distinguish between program evaluation review techniques (PERT) and Critical path analysis (CPM) in project management. (6marks)
- c) Discuss four factors to consider during project planning. (8marks)
- d) Distinguish between deliverables and milestones. (4marks)