



TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering and Technology

Department of Electrical & Electronics engineering

UNIVERSITY EXAMINATION FOR:

BACHELOR OF ELECTRICAL AND ELECTRONIC ENGINEERING
EEE 4411: LONG TERM AND STRATEGIC PLANNING FOR
ENGINEERS

END OF SEMESTER EXAMINATION

ORDINARY PAPER

SERIES: AUGUST 2024

TIME: 2 HOURS

Pick 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. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE (COMPULSORY) – 30 Marks

- a) (i) State the vegetation requirement for projects within an airport operation.
- (ii) Describe the general requirements for a baggage handling system.

[10 marks]

- b) Describe the requirements for an audio visual system in an airport projects.
- [8 marks]

- c) Outline airport terminal announcement system components.

[12 marks]



TUM is ISO 9001:2015 Certified

Question Two

- a) State the submittals required for a large electrical project at 90% design completion. **[10 marks]**
- b) (i) Explain the general requirements when.
(ii) Adding electrical load to an existing panel
(iii) Shutting down electrical utilities. **[10 marks]**

Question Three

- a) (i) Outline the factors that influence the choice of technology in a project.

(ii) Describe the technical arrangement that need to be made so that personnel can get technical knowhow. **[10 marks]**
- b) Describe the important charts and layout drawing required to define the scope of a project. **[10 marks]**

Question Four

- a) In long-term plan for a project draw a diagram of project cost interrelationships. **[10 marks]**
- b) Describe the various means of financing a large infrastructure project. **[10 marks]**

Question FIVE

- a) Outline the pre-requisites for effective project implementation. **[10 marks]**
- b) Develop a typical project schedule for an airport substation and power distribution system upgrade. **[10 marks]**

