



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

UNIVERSITY EXAMINATION FOR:

BACHELOR OF TECHNOLOGY IN ELECTRICAL AND ELECTRONIC ENGINEERING

BFI4450/TEE4431: ENGINEERING SERVICES, CONTRACT AND LAW

END OF SEMESTER EXAMINATIONS

SERIES: APRIL 2025

TIME: 2 HOURS

DATE: April 2025

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

- a) Explain the main characteristics of Law (10 marks)
- b) Explain four key components typically found on a material takes off sheet, (10 marks)
- c) Explain how the choice of tender type may impact project cost and duration in a new power station project. (10 marks)

Question TWO

- a) Explain four essential elements of a valid Contract. (10 marks)
- b) Explain the characteristics of Law of Agency (10 marks)

Question THREE

- a) Explain the features of Force Majeure in Law. (10 marks)
- b) Discuss three factors that influence labor productivity on a construction site. (10 marks)

Question FOUR

- a) Evaluate whether it is necessary to include evaluation criteria in the instructions to tenderers. (10 marks)
- b) Explain the difference between time study and method study in work measurement. (10 marks)

Question FIVE

- a) Discuss the effectiveness of Gantt charts compared to network diagrams (e.g., PERT charts) in managing project timelines. (10 marks)
- b) Discuss the structure or agenda of a site meeting for a project involving new pumps in a manufacturing facility. (10 marks)