



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN ELECTRICAL & ELECTRONIC ENGINEERING

EEP2309: ESTIMATING, TENDERING & ENGINEERING SERVICES

END OF SEMESTER EXAMINATION

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 **ANY THREE Questions**

Do not write on the question paper.

Question ONE

- a) Design a board to be installed at contractors site explaining the roles of the following
- (i) Consultant
 - (ii) Main contractor
 - (iii) Site engineer
 - (iv) Electrical foreman
- (8marks)**
- (b) Explain the procedure of estimating and tendering for an installation given a contract document **(6marks)**
- (c) Explain the following types of tendering giving the merits and demerits of each
- (i) Open tender
 - (ii) Selective tender
- (8marks)**

Question TWO

- (a) Outline the points of distinction between:
- (i) International Law & Municipal Law
 - (ii) Civil Law & Criminal Law
 - (iii) Public Law & Private Law
- (9marks)**
- (b) Explain the following as applied to law making process
- (i) Direct legislation and indirect legislation
 - (ii) advantages of delegated legislation
- (6marks)**
- (c) Discuss the purpose of law in engineering contracts
- (5marks)**

Question THREE

- a) Name FOUR objectives of law of tort (4marks)
- b) Highlight the three Relief / Remedies to tort of nuisance. (4marks)
- c) Explain THREE defenses to the tort of nuisance (6marks)
- d) Explain the following types of defamation (6marks)
 - (i) Slander
 - (ii) Libel

Question FOUR

- a) Explain the following types of construction contracts (6marks)
 - (i) Lump-Sum Construction Contract (fixed price)
 - (ii) Unit Price Construction Contract
- (b) Explain any **FOUR** essentials elements of valid contract (6marks)
- (c) Explain the following vitiating factors in the law of Contract (4marks)
 - (i) Mistake
 - (ii) Illegality
- (d) Highlight **ANY FOUR** remedies entitled to the injured party whenever there is a breach of contract (4marks)

Question FIVE

- a) Briefly explain the FIVE project development stages in project management (10marks)
- b) Explain the importance of the following in the use of network analysis in planning and controlling projects: (4marks)
 - (i) The critical path
 - (ii) PERT
- c) The information in table Q5 are activities needed to replace a broken window pane

Activity		Duration (in mins)	Preceding activities
A	Order glass	5	-
B	Collect glass	40	A
C	Remove broken pane	20	B,D
D	Buy putty	20	-
E	Put putty in the frame	3	C
F	Put in new pane	15	E
G	Putty outside and smoothen	10	F
H	Sweet up broken glass	5	C
I	Clean up	10	ALL

Table Q5

- (i) Construct an activity network

(ii) Determine the critical path of the project

(6marks)