



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ARCHITECTURE & BUILT ENVIRONMENT

UNIVERSITY EXAMINATION FOR:
DIPLOMA IN ARCHITECTURE
EAR 2307: ESTIMATING AND COSTING
END OF SEMESTER EXAMINATION
YEAR THREE SEMESTER TWO

SERIES: MAY 2025

TIME: 2 HOURS

DATE: MAY 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.

No mobile phones allowed in the exam room

QUESTION ONE (30 MARKS)-COMPULSORY

- a) Making the necessary assumptions, build up a unit rate for 1m³ of reinforced concrete in the ratio of (1:2:4) (15 marks)
- b) Explain FIVE monetary factors that are considered in pricing Labour (15 marks)

QUESTION TWO (15 MARKS)

Explain how the following conditions affect labour productivity

- a) Market conditions (5 marks)
- b) Climatic conditions (5 marks)
- c) Management condition (5 marks)

QUESTION THREE (15 MARKS)

Discuss FIVE methods of approximate estimating used in construction industry.

QUESTION FOUR (15 MARKS)

Explain the following terminologies as used in costing and estimation

- a) All in labour rate (3marks)
- b) Overhead cost (3marks)
- c) Cost accounting (3marks)
- d) Job order costing (3marks)
- e) Equipment versatility (3marks)

QUESTION FIVE (15 MARKS)

Discuss THREE main categories of factors that influence equipment selection within the construction sector.