



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ARCHITECTURE & BUILT ENVIRONMENT

UNIVERSITY EXAMINATION FOR:
DIPLOMA IN QUANTITY SURVEYING

EQS 2104: MEASUREMENTS I

ORDINARY EXAMINATION

YEAR ONE SEMESTER II

SERIES: DEC2024

TIME: 2 HOURS

DATE: December, 2024

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.

A *nduthi* operator has hustled and he is planning to construct a rental house (rectangular on plan) with three equal rooms. The house has 3No. Door Openings each size 900mm x 2100mm high; and 5No. Window Openings each size 1500mm x 1500mm high. The house is unfinished; and the doors and windows are yet to be fixed.

NB: Use the information provided above to answer Questions 1 to 4

QUESTION ONE (30 MARKS) - COMPULSORY

Sketch out your impression of the rental house, and dimension it fully. While making reasonable assumptions, generate quantities for every conceivable item of work in the substructure level.

QUESTION TWO (15 MARKS)

Measure all the concrete superstructure works while making reasonable assumptions on reinforcements for tendering purposes.

QUESTION THREE (15 MARKS)

Measure the walling for tendering purposes.

QUESTION FOUR (15 MARKS)

Measure the entire roof structure and covering for tendering purposes.

QUESTION FIVE (15 MARKS)

Explain the following terms:

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|------------------------|----------|
| a) Taking-off | (3marks) |
| b) Squaring | (3marks) |
| c) Abstracting | (3marks) |
| d) Billing | (3marks) |
| e) Bills of Quantities | (3marks) |