



TECHNICAL UNIVERSITY OF MOMBASA

**FACULTY OF ENGINEERING AND TECHNOLOGY IN CONJUNCTION WITH KENYA
INSTITUTE OF HIGHWAYS AND BUILDING TECHNOLOGY (KIHBT)**

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

UNIVERSITY EXAMINATION FOR:

HIGHER DIPLOMA IN BUILDING ECONOMICS

EBE 3111: SPECIFICATIONS AND QUANTITIES I A

END OF SEMESTER EXAMINATIONS
SERIES: OCTOBER 2016

TIME: 2 HOURS

Instruction to candidates

You should have the following for this examination

- Answer booklet
- Pocket Calculator

This paper consist of five question.

Answer any three questions of the five questions

All question carry equal marks

Maximum marks for each part of a question are as shown

This paper consist of two printed pages

Question 1

- a) Write Specification notes for supply of water to a new construction site under Preliminary site works on the following headings
- i) Preliminary works
 - ii) Actual Survey
 - iii) Earthworks
 - iv) Laying of pipework
 - v) Storage on site
 - vi) Usage on site
- (12 marks)
- b) Under appropriate headings write Specification notes for general Masonry walling in foundation works. (8 marks)

Question 2

- a) Write general specification notes for construction of a gable roof under the following headings
- i) Measurement and setting out
 - ii) Fabrication of Timber Trusses
 - iii) Fixing of corrugated Iron Sheeting
 - iv) Fixing of Fascia board
 - v) Rain water goods and drainage
- (10 marks)
- b) Concrete Storm water drainage pipes are to be laid in a proposed highway project. Write brief specification notes for the works under the following headings
- i) Loading and unloading of pipes
 - ii) Laying of pipes
 - iii) Building in of pipes
 - iv) Concrete surround to pipeline
 - v) Backfilling of trenches
- (10 marks)

Question 3

- a) Write specification notes for supply of water to a construction site under preliminary works. (10 marks)
- b) Write Specification notes for construction of a site access road under the following headings
- i) Preliminary works
 - ii) Earthworks
 - iii) Laying and
 - iv) Road drainage
 - v) Road maintenance
- (10 marks)

Question 4

- (a) Write specification note on fixing of a Standard flush hardwood door under the following headings:
- i) First fixing
 - ii) Second fixing
 - iii) Iron Mongery
 - iv) Surface finish
- (12 Marks)
- (b) Under appropriate headings write specification notes on application of Plaster to wall surfaces.
- (8 Marks)

Question 5

- a) A plastered wall surface is to be painted with white emulsion paint. Write specification notes on the painting scheme under the following headings:
- i) Surface preparation
 - ii) undercoat
 - iii) second coat
 - iv) Finishing coat
- (10 Marks)
- b) Write specification notes on laying Terrazzo floor finish to a mature concrete floor slab under the following heading:
- i) Preparation of slab
 - ii) Batching and mixing
 - iii) Laying procedure
 - iv) Curing
 - v) Surface finishing
- (10 Marks)