



**THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE**

(A Constituent College of JKUAT)

# **Faculty of Engineering & Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

**DIPLOMA IN BUILDING & CIVIL ENGINEERING  
[Institutional Based Programmes]**

EBC 2332: BUILDING WORKS SPECIFICATIONS

**END OF SEMESTER EXAMINATION**

**SERIES: DECEMBER 2012**

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*
- *Calculator*
- *Drawing Instruments*

This paper consists of **FIVE** questions. Answer any **THREE** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

**Question One (20 marks)**

- a) Define the term specification in Civil Engineering Construction. **(2 marks)**
- b) Briefly describe the **THREE** main components in specification writing. **(6 marks)**
- c) State the duties of the Quantity Surveyor in specification writing in the following stages of construction.
- (i) Preliminary stage
  - (ii) Design stage
  - (iii) Tendering stage
  - (iv) Construction stage **(12 marks)**

**Question Two (20 marks)**

- a) State the main key components to be considered in specifications for general concrete works. **(8 marks)**
- b) An underground water Tank is to be cast in reinforced concrete. Write specification notes on formwork to soffit of cover slab under the following headings:
- (i) Materials
  - (ii) Setting up
  - (iii) Fabrication and strutting
  - (iv) Striking off **(12 marks)**

**Question Three (20 marks)**

- a) State the general roles of the following members of the Civil Engineering Construction in specification writing:
- (i) Engineer
  - (ii) Contractor
  - (iii) Quantity Surveyor
  - (iv) Manufacturer
  - (v) Client **(10 marks)**
- b) Under appropriate headings, write specification notes on the construction of corrugated iron sheeting Hoarding to a new construction site. **(10 marks)**

**Question Four (20 marks)**

- a) Write specification notes on fixing of a Hardwood Casement Window under the following headings.
- (i) First Fixing
  - (ii) Second Fixing
  - (iii) Iron Mongery
  - (iv) Surface Finish **(12 marks)**

- b) State the roles of the Inspector cite in the enforcement of construction specifications and statutory provisions in a construction process. **(8 marks)**

**Question Five (20 marks)**

- 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 Terrazo floor finish to a mature concrete floor slab under the following headings.

**(i)** Preparation and mixing

**(ii)** Batching and mixing

**(iii)** Laying procedure

**(iv)** Curing

**(v)** Surface finish

**(10 marks)**