



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

*Faculty of Engineering and Technology*

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**DIPLOMA IN ARCHITECTURE**

EBC 2333 SPECIFICATIONS II

**FINAL EXAMINATION**

SERIES: AUGUST/SEPTEMBER 2011

**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 in two sections **A** and **B**

Answer question **ONE (COMPULSORY)** from section **A** and any other **TWO** questions from section **B**

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

## **SECTION A – 30 MARKS**

### **Question 1 (COMPULSORY)**

- a) State the difference between product Standards and ISO Standards in the construction industry (4 marks)
- b) Describe a step by step process in the establishment of ISO standards in an organization (8 marks)
- c) State **FOUR** main sources of information in civil engineering specification writing (6 marks)
- d) Under appropriate headings write brief specification notes on provision of site access road to connect a new site with a nearby main road (12 marks)

## **SECTION B (Answer any TWO questions) – 20 MARKS**

### **Question 2**

- a) Outline **FOUR** types of specifications in the construction industry (8 marks)
- b) Write brief specification notes on site clearance under the following headings:
  - i) Site clearance
  - ii) Top soil excavation
  - iii) Site leveling
  - iv) Site drainage (12 marks)

### **Question 3**

- a) Write specification notes on pit excavation for column bases under the following headings:
  - (i) Subsoil excavation
  - (ii) Plunking and Strutting
  - (iii) Carting away
  - (iv) Dewatering (10 marks)
- b) A load bearing load bearing stone block wall is to be constructed. Write specification notes on the walling under the following headings: (10 marks)
  - (i) Materials for walling
  - (ii) Mixing of Mortar
  - (iii) Bonding
  - (iv) Curing (10 marks)

### **Question 4**

- a) The foundation of a proposed building is made up of columns and column bases. Write specification notes on Concreting work in column bases under the following headings
  - (i) Materials
  - (ii) Batching and mixing

- (iii) Transportation and placing
- (iv) Compaction
- (v) Curing

(10 marks)

b) Write specification notes on formwork to sides of foundation column bases under the following headings

- (i) Material quality
- (ii) Preparation
- (iii) Surface treatment
- (iv) Setting up
- (v) Striking

(10 marks)

### **Question 5**

a) Write specification notes on laying of a granolithic floor finish on a Mature concrete floor of a residential building (8 marks)

b) A stone wall is to be plastered in cement mortar. Under appropriate headings write specification notes on application of plaster to the wall surface (12 marks)