



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

Faculty of Engineering and Technology

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**DIPLOMA IN CIVIL ENGINEERING WITH COMPUTER AIDED DESIGN
DIPLOMA IN BUILDING AND CIVIL ENGINEERING**

EBC 2332 SPECIFICATIONS I

END OF SEMESTER 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 importance of specification in civil engineering construction (6 marks)
- b) State **FOUR** main sources of information in civil engineering specifications writing (6 marks)
- c) Briefly describe **FOUR** forms of specifications in Civil Engineering construction (8 marks)
- d) State the role of the following members of the building team in specification writing
 - (i) Client
 - (ii) Quantity Surveyor
 - (iii) Inspectorate
 - (iv) Engineer
 - (v) Contractor (10 marks)

SECTION B (Answer any TWO questions) – 20 MARKS

Question 2

- a) Briefly describe the duties of the Architect in specification writing in the following stages of Construction
 - (i) Inception stage
 - (ii) Conception stage
 - (iii) Selection stage
 - (iv) Construction stage (12 marks)
- b) A newly proposed site is to be fenced along the boundary defined by the surveyor's beacons. Under appropriate headings write specification notes for the works. (8 marks)

Question 3

- a) State the various items to be considered in specifications for general concrete works (8 marks)
- b) A concrete underground 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
 - (iv) Striking off (12 marks)

Question 4

- a) State the importance of ISO standards in civil engineering construction (8 marks)

- b) A cement floor screed is to be laid on a mature concrete floor slab. Write specification notes for this process under **FOUR** appropriate headings,. (12 marks)

Question 5

- a) Write brief specification notes on site hoarding under the following headings:

- (i) Site boundary
- (ii) Framework
- (iii) Cladding
- (iv) Access

(8 marks)

- b) The foundation of a proposed new building is to set up using coral stone blocks. Under appropriate headings write specification notes on the setting and building up process. (12 marks)