



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

Faculty of Engineering and Technology

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

BRIDGING TO HIGHER DIPLOMA

EBC 2223 : SPECIFICATIONS

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) Briefly describe the roles of the following building team in specifications writing:
- (i) Client
 - (ii) Architect
 - (iii) Quantity surveyor
 - (iv) Engineer
 - (v) Contractor
- (10 marks)
- b) Briefly describe the main components of civil engineering specifications (6 marks)
- c) State **FOUR** main sources of information in specifications writing (6 marks)
- d) Outline the role of the Quantity Surveyor in specification writing in the following stages of construction
- (i) Preliminary stage
 - (ii) Design stage
 - (iii) Construction stage
 - (iv) Completion stage
- (8 marks)

SECTION B (Answer any TWO questions) – 20 MARKS

Question 2

- a) Under **FOUR** appropriate headings write specification notes on supply of water to site for construction purpose under preliminary items. (8 marks)
- b) A proposed site is to be fenced by hoarding in order for the construction processes to begin. Write brief specification notes for the works under the following headings.
- (i) Preliminary survey
 - (ii) Site clearance
 - (iii) Fencing works
 - (iv) Access to site
- (12 marks)

Question 3

- a) A foundation is to be excavated on a moderately stable sub soil. Write specification notes for the excavation works under the following headings
- (i) Subsoil excavation
 - (ii) Plunking and Strutting
 - (iii) Carting away
 - (iv) Dewatering
- (10 marks)

- b) Workmen are to protected while working in a freshly excavated Trench. Write specification notes on timbering to Trenches under the following headings
- (i) Materials
 - (ii) Preparation
 - (iii) Strutting
 - (iv) Safety precautions
- (10 marks)

Question 4

- a) Write specification notes on Concreting in general foundation works under the following headings:
- i) Materials
 - ii) Batching and mixing
 - iii) Transportation and placing
 - iv) Compaction
 - v) Curing
- (10 marks)
- b) Formwork is to be provided to the soffit of a suspended floor slab. Write specification notes for the works under the following headings
- i) Materials
 - ii) Setting up
 - iii) Fixing
 - iv) Striking off
- (10 marks)

Question 5

- a) A stone wall surface is to be plastered to a fine fair finish. Under FOUR main heading write specification to describe a step by step plastering procedure. (12 marks)
- b) Under appropriate headings write specification notes on construction of corrugated iron sheeting roofing on timber truss. (8 marks)