



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Engineering & Technology

DEPARTMENT OF CIVIL AND BUILDING ENGINEERING

HIGHER DIPLOMA (BRIDGING) IN CONSTRUCTION

END OF SEMESTER EXAMINATIONS

APRIL/MAY 2010 SERIES

SPECTIFICATIONS

TIME: 2 HOURS

Instructions to Candidates

You should have the following:

- Answer booklet
 - Calculator
 - Drawing instruments
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- This paper consists of **TWO** sections, **A** and **B**.
 - Question **ONE** from Section **A** is Compulsory.
 - Answer any **TWO** questions from Section **B**, each carrying 20 Marks.
 - Maximum marks for each part of a question are as shown.

SECTION A (COMPULSORY (30 Marks))

Question ONE

- (a). Define the following terms in specifications writing:
- (i). Specifications
 - (ii). Standards
 - (iii). Statutory regulations **(6 Marks)**
- (b). State **SIX** roles of specifications in building construction. **(8 Marks)**
- (c). State **FOUR** main sources of information in specification writing. **(4 Marks)**
- (d). Write brief specification notes on the following preliminary site works:
- (i). Site access road
 - (ii). Provision of sign board
 - (iii). Site storage compound
 - (iv). Supply of Water to site **(12 Marks)**

SECTION B - ANSWER ANY TWO QUESTIONS (EACH 20 MARKS)

Question TWO

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

Question THREE

- (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

(12 Marks)

- (b). Write specification notes on construction of solid stone block walling under the following headings:

- (i). Materials for walling
- (ii). Mixing of Mortar
- (iii). Bonding
- (iv). Curing

(8 Marks)

Question FOUR

- (a). 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 foundation columns under the following headings:

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

(10 Marks)

Question FIVE

- (a). Write specification note on fixing of a hardwood door under the following headings:

- (i). First fixing
- (ii). Second fixing
- (iii). Iron Mongery
- (iv). Surface finish

(12 Marks)

- (b). Write specification notes on application of plaster to wall surfaces.

(8 Marks)