



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

SPECIFICATIONS

TIME: 2 HOURS

Instructions to Candidates

You should have the following:

- Answer booklet
- Calculator
- Drawing instruments
- 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). State the role of the following members of building team in specifications writing:
 - (i). Client
 - (ii). Architect
 - (iii). Quantity Surveyor
 - (iv). Engineer
 - (v). Contractor

(10 Marks)

(b). State **SIX** reasons for use of specification in building construction.

(6 Marks)

(c). State **FOUR** main sources of information in specifications writing.

(6 Marks)

(d). Outline **FOUR** forms of specification.

(8 Marks)

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

Question TWO

- (a). Outline the role of the Architect in specification writing in the following stages of Construction:
 - (i). Inception stage
 - (ii). Conception stage
 - (iii). Selection stage
 - (iv). Construction stage

(8 Marks)

- (b). Write brief specification notes on hoarding in preliminary site works under the following headings:
 - (i). Site layout
 - (ii). Hoarding framework
 - (iii). Sheeting material
 - (iv). Site access

(8 Marks)

Question THREE

- (a). Write specification notes on foundation excavation works under the following headings:
 - (i). Subsoil excavation
 - (ii). Plunking and Strutting
 - (iii). Carting away
 - (iv). Dewatering

(12 Marks)

- (b). Write specification notes on timbering to Trenches under the following headings:
 - (i). Materials
 - (ii). Preparation
 - (iii). Strutting
 - (iv). Safety precautions

(8 Marks)

Question FOUR

- (a). Write specification notes on production and placing of Concreting in general Construction works under the following headings:
 - (i). Materials
 - (ii). Batching and mixing
 - (iii). Transpiration and placing
 - (iv). Compaction
 - (v). Curing

(10 Marks)

- (b). Write specification notes on formwork to soffit of floor slab under the following headings:
 - (i). Materials
 - (ii). Setting up
 - (iii). Fabrication and strutting
 - (iv). Striking off

(10 Marks)

Question FIVE

- (a). Write specification note on fixing of a louvered hardwood window under the following headings:
 - (i). First fixing
 - (ii). Louvre fixing
 - (iii). Iron Mongery
 - (iv). Finishing

(12 Marks)

(b). Write specification notes on laying of floor screed on concrete floor background. (8 Marks)