



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Engineering & Technology

DEPARTMENT OF CIVIL AND BUILDING ENGINEERING

**CERTIFICATE IN CONSTRUCTION TECHNICIAN II
(09A)**

SEMESTER EXAMINATIONS

APRIL/MAY 2010 SERIES

EB 1120 - SITE ORGANISATION II

TIME: 2 HOURS

Instructions to Candidates

This paper consists of **TWO** sections, i.e.
Section **A**, consisting of question **ONE** which is **COMPULSORY** and Section **B**.
Choose **ANY TWO** questions in Section **B**.
Maximum marks for each question is shown.

SECTION A
(Compulsory)

Question ONE

- (a). (i). Define Pre-Contract planning. **(2 Marks)**
- (ii). State **THREE** major items addressed at this stage. **(1½ Marks)**
- (iii). What is the major aim of contract planning? **(1 Mark)**
- (b). (i). Briefly state **SIX** characteristics of a good construction plan. **(12 Marks)**
- (ii). State **FIVE** advantages of Critical Path Method (CPM) over Bar Chart.
- (iii). Briefly explain **THREE** principles of network construction. **(3½ Marks)**

SECTION B

(Attempt any **TWO** questions from this Section.)

Question TWO

- (a). (i). Define:
- (i). A float
- (ii). A critical activity
- (iii). A dummy **(6 Marks)**
- (b). Using figure 1 critical path method, determine:
- (i). Duration of the project
- (ii). Cost of the project
- (iii). Critical activity **(14 Marks)**

Fig. 1

Activity	Duration (Months)	Cost (Kshs.)
1 - 2	2	1,120,000
1 - 4	3	2,100,000
1 - 5	6	2,600,000
2 - 3	0	100,000
2 - 4	2	900,000
3 - 4	2	800,000
4 - 5	1	350,000
5 - 6	2	750,000

Question THREE

- (a). (i). State **THREE** types of hutments. **(½ Marks)**
- (ii). Define a Restricted/congested site. **(1½ Marks)**
- (b). (i). Briefly explain **FOUR** ways of addressing unloading materials, loading up spoil and rubbish in a restricted construction site. **(10 Marks)**
- (ii). State briefly **SEVEN** forms of defence employed to enhance site security. **(7 Marks)**

Question FOUR

- (a). Briefly explain any **FOUR** types of construction contracts. **(10 Marks)**
- (b). Briefly explain any **FIVE** items considered when planning and laying out a site. **(10 Marks)**

Question FIVE

- (a). Briefly explain **SIX** contract documents. **(12 Marks)**
- (b). Briefly explain any **FOUR** essentials of a valid contract. **(8 Marks)**