



TECHNICAL UNIVERSITY OF MOMBASA
**Faculty of Engineering &
Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
CERTIFICATE IN BUILDING & CIVIL ENGINEERING

EBC 1201: CONSTRUCTION MANAGEMENT

END OF SEMESTER EXAMINATION

SERIES: APRIL 2014

TIME ALLOWED: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer booklet*

This paper consists of **FIVE** questions. Answer question **ONE (Compulsory)** and any other **TWO** questions
All questions carry equal marks

Maximum marks for each part of a question are as shown
This paper consists of **THREE** printed pages

Question One

- a) (i) Illustrate the Abraham Maslow pyramid of needs listing each level of needs
(ii) Differentiate between intrinsic and extrinsic incentives.
(iii) Describe the fundamentals of motivation **(17 marks)**
- b) List and describe the forms of tendering giving one advantage of each. **(10 marks)**
- c) Describe each of the following:
(i) Conditions of contract
(ii) Agreement
(iii) Tender form **(3 marks)**

Question Two

- a) Describe the following types of contractors:
(i) Nominated sub-contractor
(ii) Appointed sub contractor **(10 marks)**
- b) Describe the following terms:
(i) Provisional sum
(ii) Defect liability period
(iii) Variation
(iv) Interim certificate
(v) Bill of quantity **(10 marks)**

Question Three

- a) Briefly explain the following types of contracts;
(i) Package deal contract
(ii) Cost reimbursement contract
(iii) Target cost contract **(12 marks)**
- b) Outline the duties of the following parties on a construction site:
(i) Architect
(ii) Clerk of works
(iii) Store keeper **(3 marks)**
- c) Define the term method statement. **(2 marks)**
- d) Outline the stages involved in pre-tender planning. **(3 marks)**

Question Four

- a) Give a list of members of the following teams

(i) Design team

(ii) Contractors team

(4 marks)

b) Outline the considerations applicable in the use of a PLANT on site.

(5 marks)

c) Give reasons why construction planning is necessary.

(4 marks)

d) List any FIVE factors influencing tendering policy.

(5 marks)

e) Outline the characteristics of a good man in contract planning.

(2 marks)

Question Five

Table 1 shows the activities and durations of a construction project:

a) Draw the network diagram showing the earliest and latest possible times

b) Determine the critical path

c) Determine the total project float

(20 marks)

Activity	Operation	Duration (Days)
1 – 2	A	6
1 – 6	B	5
2 – 3	C	13
2 – 4	D	4
3 – 5	E	11
4 – 5	F	6
6 – 7	G	11
5 – 8	H	3
7 – 8	I	15