



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBCE 11)
DIPLOMA IN ARCHITECTURE (DA 11)
DIPLOMA IN CIVIL ENGINEERING (DCE 11)

EBC 2307: CONSTRUCTION MANAGEMENT

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: OCTOBER 2013

TIME ALLOWED: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*
- *Drawing Instruments*

This paper consists of **FIVE** questions.
 Answer any **THREE** questions
 Maximum marks for each part of a question are as shown
 This paper consists of **THREE** printed pages

Question One

- a) State TWO duties and responsibilities for the following parties in a construction contract:
 (i) Client
 (ii) Building services engineer (5 marks)

b) (i) Fill the table below:

Event	Description	Duration (Days)	Earliest		Latest		Critical Path	Total Float
			Start	Finish	Start	Finish		
0 – 1	Preliminary	-	0	4	0	4	-	-
1 – 2	Excavation	-	4	7	-	-	-	-
1 – 3	Blinding	-	6	10	-	-	-	-
2 – 3	Formwork	-	7	9	-	-	-	-
3 – 4	Reinforcement	-	9	15	-	-	-	2 Days
3 – 5	Concreting	-	11	14	13	16	-	2 Days
5 – 6	Landscaping	-						

(8 marks)

(ii) Determine duration of the project (3 marks)

c) Illustrate a method statement (4 marks)

Question Two

a) State FIVE features of line organization. (5 marks)

b) Briefly describe THREE classification of construction works (3 marks)

c) Differentiate between vertical and horizontal specification (4 marks)

d) (i) Define delegation of authority (2 marks)

(ii) Differentiate between responsibility and accountability (4marks)

(iii) State TWO purposes of a Finance schedule (2 marks)

Question Three

a) State FIVE features of a line and staff organization (5 marks)

b) Illustrate a material schedule (5 marks)

- c) Briefly explain the **THREE** important steps followed in delegation of authority **(6 marks)**
- d) Using relevant examples briefly highlight contribution of Fredrick Taylor to management practices. **(4 marks)**

Question Four

- a) The table below defines activities in a construction project:

Activity	Duration (Weeks)
A	6
B, C	4, 8
D	6
E, F	7, 5
G	8
H, I	4, 3
J, K	6, 5
L	4
M	6

- (i) Draw the network diagram
- (ii) Determine duration of the project **(10 marks)**
- b) State FIVE advantages of critical path method over Bar (Gantt) Chart. **(5 marks)**

Question Five

- a) Using relevant sketches, briefly explain how to store the following materials on site:-
- (i) Timber
- (ii) Paint
- (iii) Cement **(9 marks)**
- b) Briefly explain the following types of construction contracts:-
- (i) Guaranteed maximum cost contract
- (ii) Unit price contract
- (iii) Target estimate contract
- (iv) Cost plus variable contract **(10 marks)**
- c) Define a nominated supplier **(1 mark)**