THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

(A Centre of Excellence)

Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

CERTIFICATE IN CONSTRUCTION TECHNICIAN PART II

EBC 1120: SITE ORGANIZATION II

SPECIAL/SUPPLEMENTARY EXAMINATION
SERIES: OCTOBER 2012
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination

- *Answer Booklet*

- *Mathematical Tables*

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 (20 Marks)

a) Briefly explain the **THREE** main stages involved in construction planning process. **(6 marks)**

b) Define:
- **i)** Project planning
- **ii)** Scheduling **(2 marks)**

c) Differentiate the following terms as used in project planning:
- **i)** A plan
- **ii)** A schedule **(2 marks)**

d) Outline **FIVE** disadvantages caused by poor project planning or failure to plan: **(10 marks)**

Question Two (20 Marks)

a) State **FIVE** characteristics of a good plan? **(10 marks)**

b) Site huts can be divided into **THREE** groups of hutments; Namely: **(2 marks)**

c) Briefly describe the following terms as used in site layout and organization especially in the pre-construction period.
- **i)** Adjoining property
- **ii)** Access to site and traffic routes
- **iii)** Contractor board
- **iv)** Site huts **(8 marks)**

Question Three (20 Marks)

a) Give **THREE** ways of counter-attacking the problem of unloading materials and loading spoils meant for disposal in a restricted site? **(6 marks)**

b) State **SEVEN** factors to consider when choosing a suitable supplier. **(7 marks)**

c) Whether **PLANT** on site is hired or bought; certain considerations are applicable to both. Highlight any **SEVEN** tasks that the operator should ensure or adhere to: **(7 marks)**

Question Four (20 Marks)

a) Outline **FIVE** ways of reducing material wastage in any project sites. **(10 marks)**

b) Describe any **FIVE** documents used in the supply of materials, stating their:- origin, destination and functions? **(10 marks)**

Question Five (20 Marks)

Using the following data (ACTIVITY SHEET) draw a pre-tender programme using the bar chart method to project completion. **(20 marks)**

ACTIVITY SHEET						
PROJECT: NAMBOLA MASSIONATE						
EVENTS	**DESCRIPTION**	**DURATION**	**EARLIEST**		**LATEST**	
			START	**FINISH**	**START**	**FINISH**
0 – 1	Site Preparation	5	0	5	0	5
1 – 2	Excavation of Trench	2	5	7	5	7
1 - 3	Excavation of Foundation	3	5	8	8	11
2 – 3	Drains & Man holes	4	7	11	7	11
3 – 4	Strip Foundation Conc.	4	11	15	11	15
4 – 5	Brickwork	12	15	27	15	27
5 – 6	Roof Structure	3	27	30	27	30
5 – 7	Partitions	2	27	29	28	30
5 – 8	Frames	3	27	30	29	32
6 – 7	Dummy	-	-	-	-	-
6 – 11	Roof finish	2	30	32	40	42
7 – 10	First Floor Fixtures	4	30	34	30	34
8 – 9	Window/Door Glazing	2	30	32	32	34
9 – 10	Dummy	-	-	-	-	-
9 – 13	External Painting	3	32	35	42	45
10 – 12	Plaster	6	34	40	34	40
11 – 13	Sanitary Fix	3	32	35	42	45
12 – 13	Internal Finish	5	40	45	40	45
13 – 14	Clean & Clear	4	45	49	45	49