THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

((A Constituent College of JKUAT)
(A Centre of Excellence)

Faculty of Engineering & Technology in Conjunction with Kenya Institute of Highways and Building & Technology (KIHBT)

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

HIGHER DIPLOMA IN BUILDING & CIVIL ENGINEERING

EBE 3308: SITE ADMINISTRATION & ORGANIZATION WITH WORK STUDY II

END OF SEMESTER EXAMINATION
SERIES: AUGUST 2012
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
- *Answer Booklet*
- *Calculator*

This paper consists of **FIVE** questions
Answer question **ONE (COMPULSORY)** any other **TWO** questions

Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages
Question One (20 Marks)

a) (i) Briefly explain **FIVE** steps undertaken in time study.   **(10 marks)**

   (ii) Briefly describe any **THREE** types of rest allowances.   **(6 marks)**

b) Briefly describe any **TWO** types of financial incentives.   **(4 marks)**

Question Two (20 marks)

a) A worker is observed to complete a task within 4 minutes. His rating is 85% and allowance factor is 13%. Determine the following:
(i) Normal time
(ii) Standard time   **(4 marks)**

b) The following activities were observed on site with allowance factor of 15%:

Job Element	Cycle Observed (in minutes)					Performance Rating
	1	**2**	**3**	**4**	**5**	
(A) Walking & Picking Shovel	8	10	9	10	11	120%
(B) Excavating	2	3	2	1	3	105%
(C) Moving Excavated Material	2	1	5	2	1	110%

  i) Compute average times for each element
  ii) Compute the normal time for each element
  iii) Compute the total normal time
  iv) Compute the standard time for the job   **(16 marks)**

Question Three (20 marks)

a) (i) Briefly explain **FOUR** importance of cost control in construction industry with relevant examples.
                                                                                                                   (8 marks)
  (ii) Briefly explain **FOUR** advantage of non-financial incentive scheme.   **(8 marks)**

b) Briefly explain **TWO** issues that may necessitate variations in a construction contract. **(4 marks)**

Question Four (20 marks)

a) Briefly explain **FIVE** work measurement techniques.   **(10 marks)**

b) Briefly explain **FIVE** importance of standard times in construction industry.   **(10 marks)**

Question Five (20 marks)

a) Briefly describe **FIVE** factors taken into consideration towards designing a financial incentive scheme.   **(10 marks)**

b) Briefly describe **FOUR** categories of financial incentive schemes. **(10 marks)**