Name:_____ Index No._____

2306/305
BUILDING ECONOMICS, CONSTRUCTION LAW, ESTIMATING AND COSTING
Oct./ Nov. 2014
Time: 3 hours

Candidate's Signature:_____

Date:_____

THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN QUANTITY SURVEYING

BUILDING ECONOMICS, CONSTRUCTION LAW, ESTIMATING AND COSTING

3 hours

INSTRUCTIONS TO CANDIDATES

Write your name and index number in the spaces provided above.
Sign and write the date of examination in the spaces provided above.
You should have a pocket scientific calculator for this examination.
*This paper consists of **EIGHT** questions in **THREE** sections; **A**, **B** and **C**.*
*Answer **FIVE** questions choosing **TWO** questions from section **A**, **ONE** question from section **B** and **TWO** questions from section **C**.*
***ALL** questions carry equal marks.*
Maximum marks for each part of a question are as shown.
Candidates should answer the questions in English.

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A		20	
		20	
B		20	
C		20	
		20	
TOTAL SCORE		100	

This paper consists of 16 printed pages

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A: BUILDING ECONOMICS

*Answer any **TWO** questions from this section.*

1. (a) State **three** major purposes of cost control in construction industry. (3 marks)

   (b) Outline **four** factors with cost implications which may influence the selection of a site for project development. (6 marks)

   (c) Using **three** construction elements, explain how increased storey height would affect the cost of a building. (6 marks)

   (d) Briefly explain the following types of firms:

   (i) sole proprietorship;
   (ii) limited partnership.

   (5 marks)

2. (a) Explain **four** methods of valuing landed properties. (10 marks)

   (b) Outline **five** major factors which may influence landed values. (10 marks)

3. (a) Highlight **six** characteristics of a perfect competition in a market. (9 marks)

   (b) Outline **four** features of labour as a factor of production. (6 marks)

   (c) Explain the following methods of credit control by Central Bank of Kenya:

   (i) bank rate policy;
   (ii) open market operations.

   (5 marks)

SECTION B: CONSTRUCTION LAW

*Answer any **ONE** questions from this section in the spaces provided.*

4. (a) (i) Name **six** sources of law in Kenya.

   (ii) List the hierarchy of courts system in Kenya in descending order.

   (8 marks)

   (b) Describe the following forms of contracts applicable in sale of land:

   (i) agreement;
   (ii) memorandum;
   (iii) enforcement.

   (12 marks)

5. (a) Explain the following as used in the law of torts:

(i) tress-pass;
(ii) negligence;
(iii) vicarious liability;
(iv) independent contractor.

(8 marks)

(b) (i) Outline **four** factors considered in breach of duty. (6 marks)

(ii) Outline **four** forms of remedies for breach of contract. (6 marks)

SECTION C: ESTIMATING AND COSTING

*Answer any **TWO** questions from this section in the spaces provided.*
Use DATA given in Appendix "A"

6. (a) List **four** sources of cost information available to the estimator for pricing.

(2 marks)

(b) The duration of completing a contract was computed to be 24 months. The cost of the project was estimated to be ksh. 500 million. Price the following items in the preliminaries section:

(i) fencing and hoarding, taking the perimeter of 100 m length;
(ii) water for the site.

(12 marks)

(c) Outline **four** design variables that affect the cost of a building. (6 marks)

7. Using the data given in appendix "A" build up a unit rate for 150 mm thick vibrated reinforced concrete (1:2:4) in suspended slab (per m^2). (20 marks)

8. (a) (i) Outline **four** methods of valuing variations.

(ii) State **six** items which are not subjected to retention when preparing valuations.

(9 marks)

(b) Using the data given in appendix "A" build up a unit rate for the following items:
225 mm thick natural stone walling in cement and sand mortar (1:3) (per m^2).

(11 marks)

Appendix A

	Kshs.	Cts.
CONCRETE:		
Cement per 50 kg bag	800	00
Sand per tonne	1200	00
Ballast per tonne	1200	00
Hiring rate of $^{10}/_{7}$ mixer per day including running charges (output 2.5 $^{m^3}/_{hr}$ per day)	6000	00
Hiring rate of vibrator inclusive of running charges per day	4000	00
Density of cement 1440 kg/m^3		
Density of sand 1500 kg/m^3		
Density of ballast 1600 kg/m^3		
NATURAL STONE WALL		
Stone 225 × 225 Ndarugu dressed	40	00
Transport cost for 1 trip of stones 300 pieces using 7 tonne lorry	5000	00
Skilled labour per hour	90	00
Unskilled labour per hour	40	00
Gang of 1 skilled to 3 unskilled to lay 1m^2 of stone wall		