

2305/306
CONSTRUCTION MANAGEMENT
Oct./Nov. 2010
Time: 3 hours

THE KENYA NATIONAL EXAMINATIONS COUNCIL
DIPLOMA IN BUILDING
CONSTRUCTION MANAGEMENT

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

*Answer booklet;
Drawing instruments.*

*Answer any FIVE of the following EIGHT questions.
All questions carry equal marks.
Maximum marks for each part of a question are as shown.*

This paper consists of 5 printed pages.

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

1. (a) State five powers of a factory inspector. (10 marks)
- (b) With reference to management of a construction project, explain the meaning of the following terms:
- (i) Leadership;
 - (ii) Motivation;
 - (iii) Team spirit. (6 marks)
- (c) List four items of information which need to be recorded in the construction site daily diary. (4 marks)
2. (a) Outline the roles of the following in the construction industry:-
- (i) Architect;
 - (ii) Quantity Surveyor;
 - (iii) Clerk of works;
 - (iv) Supplier;
 - (v) Structural Engineer. (10 marks)
- (b) Explain the following in relation to construction contracts:
- (i) Defects liability period;
 - (ii) Preliminaries;
 - (iii) Interim Certificate;
 - (iv) Bill of Quantities;
 - (v) Retention. (10 marks)
3. (a) Explain four control measures that need to be taken in order to minimise pilfering and theft of materials on site. (8 marks)
- (b) State two essential of an efficient filing system. (2 marks)

- (c) Table 1 shows the activity, duration and number of operatives required for a project. Determine the project duration by means of network diagram and indicate the critical path. (10 marks)

Table 1

Activity	Duration (in weeks)	No. of Operatives (per week)
1 - 2	4	4
1 - 3	3	6
1 - 4	6	5
2 - 7	7	6
2 - 5	0	0
3 - 5	5	4
4 - 5	4	3
4 - 6	2	2
5 - 7	5	7
6 - 7	3	4

4. (a) Outline the procedure of pre-tender planning. (3 marks)
- (b) Explain **two** benefits of work study for each of the following:
- the organisation;
 - the supervisor;
 - the operative. (3 marks)
- (c) The work of a carpenter to fix a door has been timed and rated as shown in table 2. Table 3 shows the allowances. Calculate the standard time. (14 marks)

Table 2 FIXING OF A DOOR

NO.	ELEMENT	OR	WR
1	Collect tools and start	-	8.00
2	Measure opening	90	8.02
3	Prepare timber (lining)	80	8.12
4	Form holes in walls	80	8.32
5	Fix lining	90	8.44
6	Prepare to fix hinges	80	8.50
7	Hang door	85	9.10
8	Fix architraves	90	9.14
9	Fix locks	95	9.34

Table 3

No	Total Allowance
1	25
2	5
3	10

5. (a) Explain the objectives of the following in books of accounts:
- Trial balance;
 - Final account;
 - Trading account. (6 marks)
- (b) List **two** types of each of the following:
- Financial incentives;
 - Non-financial incentives. (2 marks)
- (c) Define the following as used in accounting:
- Fixed assets;
 - Intangible assets;
 - Liabilities;
 - Current liabilities. (4 marks)

- (d) Differentiate between the following as used in business:
- (i) Sole trader and partnership;
 - (ii) Ordinary shares and preference shares;
 - (iii) Public company and private company;
 - (iv) Deposit account and current account. (8 marks)
6. (a) Explain **three** remedies for a breach of contract. (6 marks)
- (b) Outline **three** defences which a defendant may put forward for an action of "trespass to land". (6 marks)
- (c) Outline **four** ways of terminating an offer. (8 marks)
7. (a) Define the following as used in property ownership:
- (i) Lease;
 - (ii) Mortgage;
 - (iii) Freehold. (6 marks)
- (b) List **five** sources of Law in Kenya. (5 marks)
- (c) Explain **three** ways in which a dispute may be referred to arbitration. (9 marks)
8. (a) State **five** aspects that are included in contract documents. (5 marks)
- (b) Explain the following documents as used in the supply of materials on a construction site:
- (i) Advice Note;
 - (ii) Delivery Note;
 - (iii) Invoice;
 - (iv) Requisition;
 - (v) Materials record book (10 marks)
- (c) List **five** causes of accidents on a construction site. (5 marks)