

1301/313
1304/313
1305/313
SITE AND WORKSHOP MANAGEMENT
June/July 2017
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN CARPENTRY AND JOINERY
CRAFT CERTIFICATE IN MASONRY
CRAFT CERTIFICATE IN PLUMBING

SITE AND WORKSHOP MANAGEMENT

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

answer booklet;

scientific calculator.

Answer FIVE of the following EIGHT questions.

All questions carry equal marks.

Maximum marks for each part of a question are indicated.

Candidates should answer the questions in English.

This paper consists of 4 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:
- (i) **six** safety rules to be observed in a workshop.
 - (ii) **three** requirements of a good workshop layout. (9 marks)
- (b) List **two** essential services to a workshop. (1 mark)
- (c) Outline **five** factors to be considered when selecting an interperennial workshop site. (10 marks)
2. (a) Explain the following procurement documents:
- (i) advice note;
 - (ii) delivery note;
 - (iii) invoice. (9 marks)
- (b) State **five** items to consider in analysis of quotations for the supply of materials. (5 marks)
- (c) Outline the storage of the following materials on site:
- (i) roofing tiles;
 - (ii) door locks;
 - (iii) cement bags. (6 marks)
3. (a) State **six** factors to consider when buying an equipment. (6 marks)
- (b) Explain the following types of maintenance in a workshop:
- (i) preventive maintenance;
 - (ii) plant overhaul. (6 marks)
- (c) Explain the purpose of an inventory in a workshop. (2 marks)
- (d) Outline **three** reasons for keeping stock. (6 marks)

4. (a) Outline **three** roles of the following parties in a contract:

- (i) Architect;
- (ii) Quantity surveyor;
- (iii) National construction authority;
- (iv) Clerk of works.

(12 marks)

(b) Explain the following documents used in a contract:

- (i) specification;
- (ii) bills of quantities;
- (iii) form of tender;
- (iv) conditions of contract.



(8 marks)

5. (a) Explain the following:

- (i) open tendering;
- (ii) selective tendering.

(6 marks)

(b) Differentiate between an estimate and a tender.

(4 marks)

(c) Highlight where the following contracts are commonly used:

- (i) cost reimbursement contracts;
- (ii) target cost contract;
- (iii) continuity contracts;
- (iv) term contracts;
- (v) design and build contracts.

(10 marks)

6. (a) Explain the term 'span of control' as used in organisational structures.

(2 marks)

(b) With aid of a sketch, explain the following:

- (i) lateral relationship;
- (ii) direct relationship;
- (iii) functional relationship;
- (iv) mutual relationship.

(12 marks)

(c) Outline **six** items to consider when disciplining a worker.

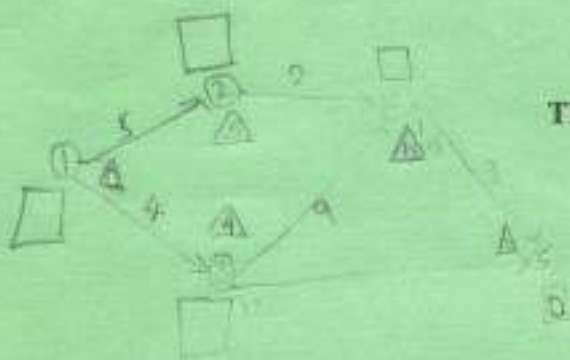
(6 marks)

7. (a) Outline the **four** factors to be considered when passing information to workers. (8 marks)
- (b) State the **seven** items that may be entered into a site diary. (7 marks)
- (c) State the **five** requirements of filing used in an office. (5 marks)
8. (a) State the **six** characteristics of a good programme. (6 marks)
- (b) State **four** advantages of critical path over bar-chart. (4 marks)
- (c) Using the data in **table 1**, prepare a activity analysis sheet to determine:
- (i) the earliest start time;
 - (ii) the latest start time;
 - (iii) the critical path.

(10 marks)

Table 1

Activity	Duration
1-2	5
1-3	4
2-4	2
3-4	9
3-5	5
4-5	3



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