

1301/313

1304/313

1305/313

SITE AND WORKSHOP MANAGEMENT

Oct./Nov. 2021

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;

This paper consists of EIGHT questions.

Answer FIVE questions.

All questions carry equal marks.

Maximum marks for each part of a question are as 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) List **eight** ways of achieving healthy environment in a workshop. (4 marks)
- (b) State:
- (i) **six** factors to be considered when planning for a site layout plan;
(ii) **four** items to include on a site layout plan. (10 marks)
- (c) State **four** Kenya building code requirements for application to construct temporary housing on site. (4 marks)
- (d) List any **four** items considered as preliminary on a construction site. (2 marks)
2. (a) State:
- (i) **four** duties of a supplier;
(ii) **six** considerations when selecting a supplier. (10 marks)
- (b) Explain the following documents used in materials procurement:
- (i) advice note;
(ii) requisition;
(iii) delivery note. (6 marks)
- (c) State **four** ways of reducing material wastage on site. (4 marks)
3. (a) Explain the importance of meetings in an organization. (2 marks)
- (b) (i) Explain the term 'Agenda' in a meeting.
(ii) Outline the composition of a meeting. (8 marks)
- (c) State **six** factors to consider before purchasing an office equipment. (6 marks)
- (d) State **four** barriers of communication in an organisation. (4 marks)
4. (a) State **five** reasons for plant maintenance. (5 marks)
- (b) Explain the following maintenance plans:
- (i) routine;
(ii) overhaul;
(iii) preventive. (6 marks)
- (c) State **four** advantages of hiring plant. (4 marks)
- (d) Sketch and label a 'backactor'. (5 marks)

5. (a) With the aid of sketches, differentiate between direct and lateral relationships in an organization. (6 marks)
- (b) Explain the following qualities of a good leader:
- (i) self confidence;
 - (ii) respect;
 - (iii) technical skill;
 - (iv) tact. (8 marks)
- (c) State **six** features of a sound incentive scheme. (6 marks)
6. (a) List **four** contract documents. (2 marks)
- (b) Explain the following types of contracts:
- (i) serial contract;
 - (ii) cost reimbursement contract;
 - (iii) package deal;
 - (iv) labour only contracts. (8 marks)
- (c) Explain the following tendering methods:
- (i) selective tendering;
 - (ii) negotiated tendering. (6 marks)
- (d) Differentiate between a tender and a contract. (4 marks)
7. (a) State **eight** items considered in site investigation. (8 marks)
- (b) Explain the following as used in pre-tender planning, giving tabulated examples:
- (i) method statement;
 - (ii) plant schedule. (12 marks)

8. (a) State **five** advantages of critical path over bar chart. (5 marks)
- (b) **Table 1** shows activities and duration in weeks of a work programme:
- (i) draw the network diagram showing the critical path;
- (ii) determine the earliest and latest starting times. (15 marks)

Table 1

Activity	Duration in weeks
1 - 2	6
1 - 4	7
2 - 3	26
3 - 4	3
4 - 5	3
5 - 6	12
6 - 7	1
6 - 8	2
7 - 9	3
8 - 9	4
9 - 10	4

THIS IS THE LAST PRINTED PAGE.