

2705/203

**CONSTRUCTION MANAGEMENT I  
AND WORKSHOP TECHNOLOGY II**

June/July 2021

Time: 3 hours



**THE KENYA NATIONAL EXAMINATIONS COUNCIL**

**DIPLOMA IN BUILDING TECHNOLOGY**

**MODULE II**

**CONSTRUCTION MANAGEMENT I AND WORKSHOP TECHNOLOGY II**

**3 hours**

**INSTRUCTIONS TO CANDIDATES**

*You should have the following for this examination:*

*Answer booklet;*

*Scientific calculator.*

*This paper consists of **EIGHT** questions in **TWO** sections; **A** and **B**.*

*Answer **THREE** questions from section **A** and **TWO** questions from section **B**.*

*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 3 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: CONSTRUCTION MANAGEMENT I

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

1. (a) State **five** roles of each of the following stakeholders in the construction industry:
- (i) Local Authority;
  - (ii) National Environmental Authority.
- (10 marks)
- (b) Explain **three** types of organisational relationship. (6 marks)
- (c) Explain each of the following terms used in construction:
- (i) tender;
  - (ii) contract.
- (4 marks)
2. (a) State **four** roles of a clerk of works in a construction project. (4 marks)
- (b) Explain each of the following types of contractors:
- (i) speculative;
  - (ii) briefcase;
  - (iii) turnkey.
- (6 marks)
- (c) Explain **five** functions of management. (10 marks)
3. (a) Explain **three** methods of communication in the construction industry. (6 marks)
- (b) Outline **six** principles of management. (9 marks)
- (c) With the aid of a line diagram, explain the functional organizational structure. (5 marks)
4. (a) Explain **five** remedies to a breach of contract. (10 marks)
- (b) Explain **five** types of contracts in the construction industry. (10 marks)
5. (a) Explain **five** methods of tendering in the construction industry. (10 marks)
- (b) Explain **five** benefits of planning a site layout. (10 marks)



## SECTION B: WORKSHOP TECHNOLOGY II

Answer any *TWO* questions from this section.

6. (a) State **five** roles of the state department of energy in Kenya. (5 marks)
- (b) Sketch and label each of the following system:
- (i) single phase two-wires;
  - (ii) single phase three-wires. (7 marks)
- (c) Explain **four** types of water heater circuit. (8 marks)
7. (a) Explain **three** types of alarm systems. (6 marks)
- (b) Sketch and label a closed circuit for an alarm. (6 marks)
- (c) State **four** advantages of each of each of the following transmission systems:
- (i) national grid;
  - (ii) interconnected grid. (8 marks)
8. (a) Sketch each of the following electrical symbols:
- (i) intermediate switch;
  - (ii) transformer;
  - (iii) buzzer. (6 marks)
- (b) Sketch and label each of the following electrical lighting circuits:
- (i) **two** lighting points controlled from one point;
  - (ii) **two** lighting points controlled from two points. (10 marks)
- (c) (i) Explain the term 'parallel circuit' as used in electrical installation.
- (ii) State **two** advantages of a parallel circuit. (4 marks)

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