

2705/203
CONSTRUCTION MANAGEMENT I
AND WORKSHOP TECHNOLOGY II
Oct./Nov. 2016
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; and

Scientific calculator.

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

*Answer **FIVE** questions; choosing **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.

5a

SECTION A: CONSTRUCTION MANAGEMENT I

Answer any THREE questions from this section.

1. (a) Outline **four** types of contractors in the construction industry. (6 marks)
- (b) State **three** roles of each of the following bodies in construction industry:
- (i) Local Authority;
 - (ii) Kenya Bureau of Standards;
 - (iii) Architectural Association of Kenya. (9 marks)
- (c) State **five** salient features of construction industry. (5 marks)
2. (a) Explain **five** principles of an organization. (10 marks)
- (b) State **five** characteristics of an organization. (5 marks)
- (c) Outline **five** functions of management. (5 marks)
3. (a) Outline **four** types of contracts stating **one** circumstance under which each is used. (10 marks)
- (b) Describe **four** methods of tendering. (10 marks)
4. (a) State **three** functions of signboards on a construction site. (3 marks)
- (b) State **two** roles of each of the following parties in construction industry:
- (i) factory inspector/occupational safety and health officer;
 - (ii) clerk of works;
 - (iii) nominated sub-contractor. (6 marks)
- (c) State **five** conditions that may render a contract null and void. (5 marks)
- (d) Explain **three** types of specifications. (6 marks)
5. (a) Explain the scope of works in construction industry highlighting **four** classifications. (8 marks)
- (b) Explain **four** filing systems used by construction firms. (8 marks)
- (c) State **four** forms of written communication in an organization. (4 marks)



SECTION B: WORKSHOP TECHNOLOGY II

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

6. (a) With the aid of a sketch, show the power transmission from the power station to the final consumer. (12 marks)
- (b) State **four** electrical quantities and their units of measurement. (8 marks)
7. (a) With the aid of a labelled sketch, explain the difference between a step-down and a step-up transformer. (10 marks)
- (b) State **two** classifications of safety when carrying out an electrical installation and outline **two** precautions to be observed for each. (6 marks)
- (c) State **four** sources of electrical power. (4 marks)
8. (a) Sketch and label a section through an incandescent lamp. (7 marks)
- (b) Illustrate a lighting circuit with a 4-terminal junction box and a 3-terminal rose controlling one lamp. (6 marks)
- (c) State **four** factors to consider when selecting a cable for electrical installation. (4 marks)
- (d) List **six** electric insulating materials. (3 marks)

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