

2705/203
CONSTRUCTION MANAGEMENT I
AND WORKSHOP TECHNOLOGY II
June/July 2017
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 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 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.

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- (a) (i) Define the term 'contract'. (2 marks)
- (ii) State four situations under which a contract may be discharged. (4 marks)
- (b) Describe the following types of contracts:
- (i) lump sum contract; - this is where
- (ii) cost plus contract; - this is where the contractor is paid the basic cost of materials & labour plus a fee for supervision, overheads & profit.
- (iii) labour only contract;
- (iv) package deal contract. (8 marks)
- (c) Describe negotiated tendering stating its advantages. (6 marks)

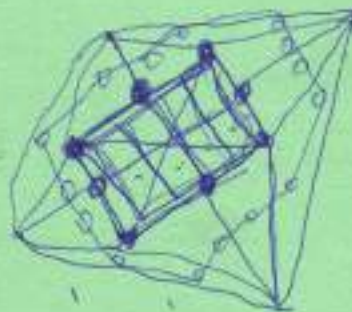
co-operation by law.
- breach
- agreement
- frustration
- impossibility

SECTION B: WORKSHOP TECHNOLOGY II

Answer any TWO questions from this section.



6. (a) Discuss IEE regulations with regard to installation of electrical conduits. (9 marks)
- (b) Distinguish between a switch and a circuit breaker. (4 marks)
- (c) State the colour identification of the following cables:
- (i) earth;
- (ii) neutral. (3 marks)



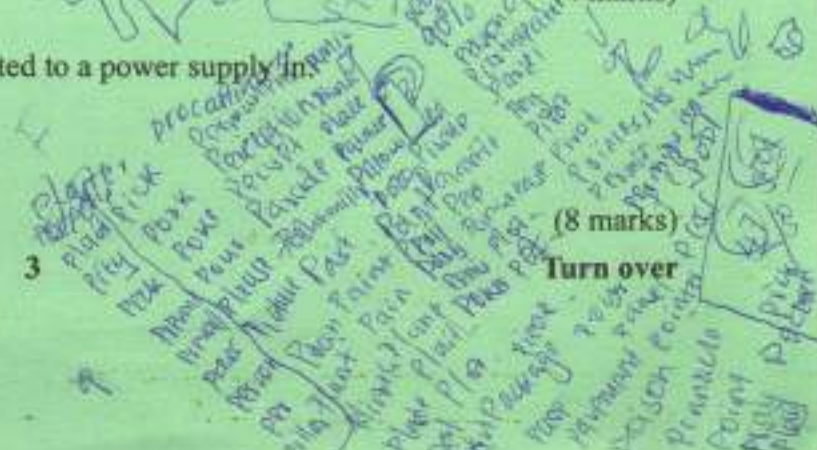
(d) Define the following:

- (i) cable;
- (ii) insulator. (4 marks)

7. (a) Sketch symbols used for the following electrical gadgets:
- (i) switch socket outlet;
- (ii) typical distribution board;
- (iii) two way one gang switch;
- (iv) intermediate switch. (4 marks)



- (b) Sketch to show two sockets connected to a power supply in:
- (i) parallel;
- (ii) ring circuit. (8 marks)



Handwritten notes: Planning, Ring

Turn over

- (c) Explain the importance of checking insulation of a circuit. (8 marks)
- 8. (a) Explain **four** reasons for earthing electrical appliances. (6 marks)
- (b) State **two** reasons why safety provisions in an electrical installation is important. (4 marks)
- (c) Explain why the following types of tests are carried out in a completed electrical installation to ensure safety according to IEE regulation:
 - (i) insulation test;
 - (ii) polarity test.(10 marks)

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