

1704/203  
BUILDING CONSTRUCTION II AND  
COMPUTER AIDED DESIGN  
Oct./Nov. 2018  
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL  
CRAFT CERTIFICATE IN BUILDING TECHNOLOGY  
MODULE II

BUILDING CONSTRUCTION II AND COMPUTER AIDED DESIGN

3 hours

INSTRUCTIONS TO CANDIDATES

*You should have the following for this examination:*

- Answer booklet;*
- A, printing papers;*
- Drawing instruments;*
- Compact disk (CD);*
- Computer Installed with CADD software.*

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

*Answer FIVE questions choosing THREE questions from Section A, TWO questions from section B.*

*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.**

**SECTION A: BUILDING CONSTRUCTION II**

*Answer THREE questions from this section.*

1. (a) Define the following terms used in chimney construction:
- (i) fire place;
  - (ii) flue;
  - (iii) hearth;
  - (iv) throat.
- (4 marks)
- (b) Sketch and label a detail to show the fixing of a window pane using putty. (6 marks)
- (c) Describe the following types of coats in painting of new work:
- (i) priming coat;
  - (ii) under coat;
  - (iii) finish.
- (6 marks)
- (d) State four functional requirements of a fireplace, flue and chimney construction. (4 marks)
2. (a) Sketch and label a ledged, braced and battened door. (9 marks)
- (b) Name six components of a truss. (3 marks)
- (c) Outline four advantages of precast concrete stairs. (8 marks)
3. (a) Define the following terms in staircase construction:
- (i) goings;
  - (ii) string;
  - (iii) balusters;
  - (iv) risers;
  - (v) nosing.
- (5 marks)
- (b) Outline two functions of a staircase. (4 marks)
- (c) Define the term 'scaffolding'. (1 mark)
- (d) Describe the following types of scaffolds:
- (i) patent scaffold;
  - (ii) suspended scaffold.
- (10 marks)



4. (a) Define the following terms:
- (i) plastering;
  - (ii) rendering.
- (2 marks)
- (b) Describe the procedure for plastering a masonry wall. (8 marks)
- (c) Sketch a typical eave detail. (10 marks)

**SECTION B: COMPUTER AIDED DRAWING AND DRAFTING**

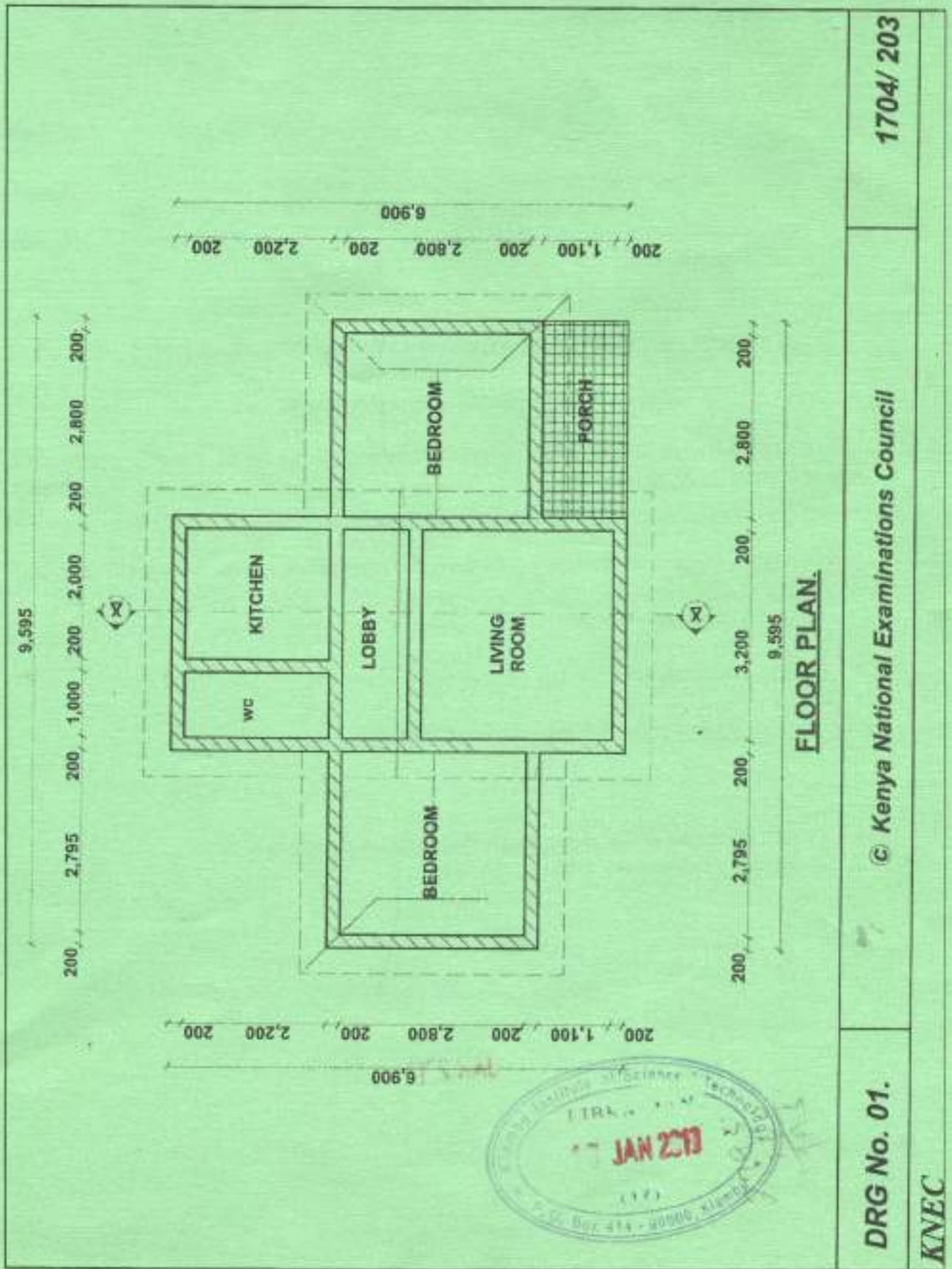
*Answer TWO questions from this section.*

5. Using CADD software, draw and label a typical strip foundation detail. Print the drawing to a scale of 1:10 on an A<sub>3</sub> paper. (20 marks)
6. Using CADD software and drawing no. 01 draw the layout floor plan to include the following:
- (i) doors and windows;
  - (ii) sanitary fittings;
  - (iii) dimensions.

Print the drawing to a scale of 1:100 on an A<sub>3</sub> paper. (20 marks)

7. Using CADD software and drawing No.01 draw and label section X-X. Print the drawing to a scale of 1:50 on an A<sub>3</sub> paper. (20 marks)





FLOOR PLAN.

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