

29.20.2 Drawing and Design Paper 2 (449/2)

449/2

DRAWING AND DESIGN

Paper 2

Oct./Nov. 2008

2½ hours

THE KENYA NATIONAL EXAMINATIONS COUNCIL

Kenya Certificate of Secondary Education

DRAWING AND DESIGN

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2½ hours

Instructions to Candidates

You should have the following materials for this examination:

4 sheets of drawing paper size A3

Drawing instruments.

*This paper has **ONE COMPULSORY** question.*

*This paper is to be issued to the candidates **30 minutes** before the examination starts.*

*The candidates are advised to spend this time **understanding the design problem and planing the work** on one of the drawing papers provided.*

This paper consists of 2 printed pages.

Candidates should check the question paper to ascertain that both pages are printed as indicated and no questions are missing.

DESIGN PROBLEM (40 marks)

Smartly dressed people prefer to wear clothes that are properly ironed. Ironing clothes is however, tiring particularly if the ironing surface is too high or too low. It is also a common problem to store ironing board in a limited space.

Design a suitable ironing board considering the following:

- 1 The ironing board should be adjustable to obtain the required heights quickly and conveniently.
- 2 The whole board should be collapsible to allow for storage in a limited space.
- 3 The legs should be designed such that they remain stable during the ironing process and can allow for easy movement when there is need to move the board from one place to another.
- 4 There should be provision for holding the iron box when it is hot.

Requirements

- 1 Make rough sketches of **two** possible designs. (6 marks)
- 2 Select **one** of the designs in (1) above and make a refined pictorial sketch. (13 marks)
- 3 Make detailed sketches of the mechanisms used in each of the considerations above. (14 marks)
- 4 Name **two** materials used in the design and
 - (i) state where each material is used;
 - (ii) state a reason why each material is used. (4 marks)
- 5 State **three** methods of joining the main parts together. (3 marks)