449/2
DRAWING AND DESIGN
Paper 2
Oct./Nov. 2012
2½ hours

THE KENYA NATIONAL EXAMINATIONS COUNCIL
Kenya Certificate of Secondary Education
DRAWING AND DESIGN
Paper 2
2½ hours

449/2 - Drawing and Design - P2	
Thursday	8.00 am - 10.30 am
25/10/2012	(1st session)

Instructions to candidates

(a) You should have the following materials for this examination:

4 sheets of drawing paper size A3
Drawing instruments.

*(b) This paper has **ONE COMPULSORY** question.*
*(c) This paper is to be issued to the candidates **30 minutes** before the examination starts.*
*(d) The candidates are advised to spend this time **understanding the design problem** and **planning the work** on one of the drawing papers provided.*
(e) This paper consists of 2 printed pages.
(f) Candidates should check the question paper to ascertain that both pages are printed as indicated and that no questions are missing.

For Examiners Use Only

QUESTION	SECTION	MAXIMUM SCORE	CANDIDATES SCORE
DESIGN PROBLEM	a	6	
	b	16	
	c	12	
	d	3	
	e	3	
	TOTAL SCORE		

DESIGN PROBLEM (40 marks)

Urban lifestyle may not provide adequate outdoor space for cloth lines. This compels the house occupants to utilize any available space inside the house to hang washed clothes to dry.

Design a suitable device that can hold several hanging lines considering the following:

(i) the device should be collapsible for ease of movement and storage;

(ii) it should be stable and strong enough to hold clothes to dry;

(iii) it should also be adjustable to different heights.

REQUIREMENTS

(a) Make freehand pictorial sketches of **two** possible designs of the device. (6 marks)

(b) Select one of the designs in (a) above and make a refined pictorial sketch and label two parts. (16 marks)

(c) Make detailed exploded sketches of the mechanisms used in considerations i and iii above. (12 marks)

(d) (i) List **two** different materials used in the device.
(ii) State **one** reason for the choice of each material. (3 marks)

(e) List **two** methods that could be used in joining the parts of the device and state where each is applied. (3 marks)

THIS IS THE LAST PRINTED PAGE.