

449/2

DRAWING AND DESIGN

Paper 2

July/Aug 2015

2 ½ hours

MACHAKOS COUNTY KCSE TRIAL & PRACTICE EXAMINATION
2015

Kenya Certificate of Secondary Education (K.C.S.E)

449/2
Drawing and Design
Paper 2

INSTRUCTIONS TO CANDIDATES

- (a) You should have the following 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.
- g) Candidates should answer the questions in English.

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 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)