



## 15.0 HOME SCIENCE (441)

The year 2010 KCSE Home Science examination tested mastery of knowledge and skills specified in the syllabus. This year's report analyses the performance of the candidates in the three papers paying special attention particularly to the poorly performed questions.

The report further gives expected responses of those poorly performed questions and goes further to advise both teachers and candidates with the sole purpose of improving future performance in the subject.

The individual papers examined in the year 2010 KCSE Home Science examination were as follows:

**Paper 1 (441/1):** This is a theory paper divided into three sections and it was worth 100 marks. The three sections were:

- **Section A:** consisted of compulsory short answer questions worth 40 marks.
- **Section B:** Questions were compulsory and covered applied practices in Home Science. This was worth 20 marks.
- **Section C:** Consisted of three (3) essay questions each worth 20 marks of which candidates were expected to choose and answer any two (2) questions.

**Paper 2 (441/2):** This was a practical paper which tested skills in clothing construction and was worth 45 marks.

**Paper 3 (441/3):** This was also a practical paper which tested skills in Foods and Nutrition and was worth 25 marks.

For purposes of computing the results, the scores of Paper 2 (441/2) and Paper 3 (441/3) are added to form Paper 2.

### 15.1 CANDIDATES' GENERAL PERFORMANCE

The table below shows the candidature and the overall performance in the KCSE Home Science examination in the last three years.

**Table 19: Candidates' Overall Performance in Home science in the years 2008, 2009 and 2010**

Year	Paper	Candidature	Minimum Score	Mean Score	Standard Deviation
2008	1		100	47.18	11.42
	2		70	35.0	8.95
	<b>Overall</b>	<b>12,314</b>	<b>170</b>	<b>82.24</b>	<b>18.23</b>
2009	1		100	50.10	12.93
	2		70	36.05	9.68
	<b>Overall</b>	<b>12,312</b>	<b>170</b>	<b>86.12</b>	<b>19.47</b>
2010	1		100	54.76	11.43
	2		70	38.36	9.22
	<b>Overall</b>	<b>12,322</b>	<b>170</b>	<b>93.08</b>	<b>18.60</b>

From the table above it can be observed that there is a slight increase in candidature as compared to the year 2009, the mean and the STD deviation also went up. Meaning the performance improved.

In this part of the report, an analysis of performance and a discussion of questions which candidates performed poorly will be made.

## 15.1 PAPER 1 (441/1)

### Question 1

What do you understand by the term food hygiene?

Candidates were expected to define the term "food hygiene"

#### Weaknesses

Hygiene was confused for "good grooming" and " environmental hygiene"

#### Expected responses

- A practice that safeguards against food contamination which may lead to food poisoning.
- A way/ method that prevents food spoilage.

Teachers should teach and differentiate all types of hygiene covered in Home Science.

### Question 4

Highlight two characteristics of buffet service.

#### Weaknesses

Some students gave advantages rather than characteristics.

#### Expected responses

- Guests move from left to right on table/ queuing.
- Food is placed on the table.
- Plates/ cutlery are placed at a point where service starts/ plates are put at starting point and cutlery at the end.
- Guests pick plates and serve themselves/ are served.
- There is a variety of dishes on offer.
- It is convenient for large groups of people.
- Guests may eat while standing or sitting/ at a separate table.
- Food should be easy to eat with or without cutlery.

Teachers should demonstrate a buffet set-up and other food services especially in areas where students were not very exposed.

### Question 6

Give two reasons why butter is suitable for creaming in cake making.

Candidates were expected to give reasons for using butter for creaming.

#### Weaknesses

Butter is never used in schools so students wrote about the qualities of butter.

#### Expected responses

- Has a good flavor/ good taste
- Has the ability to hold air/ plasticity
- Is lighter/ easy to manipulate/ softer/easy to mix

Teachers should emphasize on all types of shortening used for creaming. Buy a sample to show the students.

**Question 7**

Explain the following terms:

- i. inflation
- ii. consumer rights

**Weaknesses**

Students did not understand consumer rights and confused inflation with fluctuation.

**Expected Responses**

- Inflation is an increase in price of goods and services with no corresponding increase in earnings/ low income.
- Consumer rights is the freedom/ advantages that everyone should be allowed to have when purchasing goods and services.

Teachers should cover topics in consumer education adequately.

**Question 10**

Name two opportunistic diseases related to HIV and AIDS

Candidates were expected to name the opportunistic diseases related to HIV and AIDS.

**Weaknesses**

Many candidates dwelt on STDs. Some did not understand the word "opportunistic".

**Expected responses**

- Pneumonia/ bronchitis
- Tuberculosis
- Typhoid
- Influenza/common cold
- Herpes zoster

Teachers should expose students to all terms.

**Question 16**

Mention two physical changes in puberty that are unique to girls.

Candidates were expected to mention physical changes unique to girls.

**Weaknesses**

The term unique was misunderstood to mean the opposite sex.

**Expected responses**

- Development of breasts
- Enlargement of hips
- Onset of menstruation
- Defined waistline

Teachers should teach about the unique changes in both sexes.

**Question 23**

Give one point to bear in mind when cutting a worked button hole.

**Requirement**

Candidates were expected to give one point to bear in mind when cutting a worked buttonhole.

**Weaknesses**

Candidates gave points to consider when stitching a buttonhole and not when cutting.

**Expected responses**

Size of button/ diameter of button + 3mm (1/8")

Position of the button -hole/ button

Type of the fabric

Cut on straight grain

Teachers to teach hand worked buttonholes practically and cut them.

**Question 24**

Differentiate between a bound opening and a continuous wrap opening

**Requirements**

Candidates were expected to differentiate between a bound and a continuous wrap opening.

**Weaknesses**

Candidates had no idea what it was all about.

**Expected response**

- A bound opening is seen on the R.S of the garment while a continuous wrap opening does not show on the R.S when closed.
- A bound opening has a strip on the bias while the continuous wrap is cut with a straight strip of fabric.
- Bound opening is not reinforced at the base while a continuous wrap opening is reinforced at the base/ 3 mm from the base.
- Bound opening can be both functional and decorative while continuous wrap is only functional/ bound opening may have a contrasting color while continuous wrap opening may not.

Teachers should make the students make samples practically.

**Question 27**

b) Outline five processes carried out on the skirt of an apron with a bib in readiness for attachment.

**Requirements**

Candidates were expected to;

b) Outline the processes carried out on an apron skirt in readiness for attachment.

**Weaknesses**

Candidates generalized the making of a full apron while others fixed the bib.

**Expected responses**

- Prepare the skirt
- Neatening/ finishing the sides of the skirt appropriately/ hemming/ binding/machine.
- Preparing the pocket
- Finishing the lower hem/putting a frill using a lace /bind/trimming
- Preparing the gathers and pulling to fit on the areas to be attached to/pleat/smock/fullness
- Press/iron

Teachers should do coursework in C/T.

**15.3 PAPER 2 (441/2)**

This is a practical paper where candidates were provided with a pattern to cut out and make.

A pattern of a pair of shorts is provided. You are advised to study the sketches, instructions and the layout carefully before you begin the test.

### Materials provided

- 1 Pattern pieces
  - A Short Front
  - B Short Back
  - C Pocket
  - D Waistband
  - E Front Short facing
  - F Back Short facing
- 2 Plain light weight cotton fabric 50 cm long by 90 cm wide.
- 3 Cotton sewing thread to match the fabric.
- 4 One large envelope.

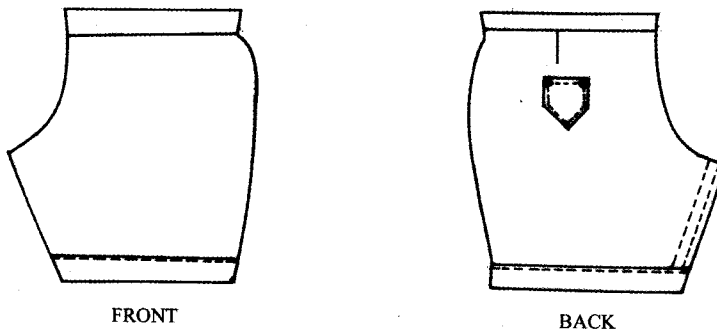
### THE TEST

Using the materials provided, cut out and make the **LEFT LEG** of the shorts to show the following processes:

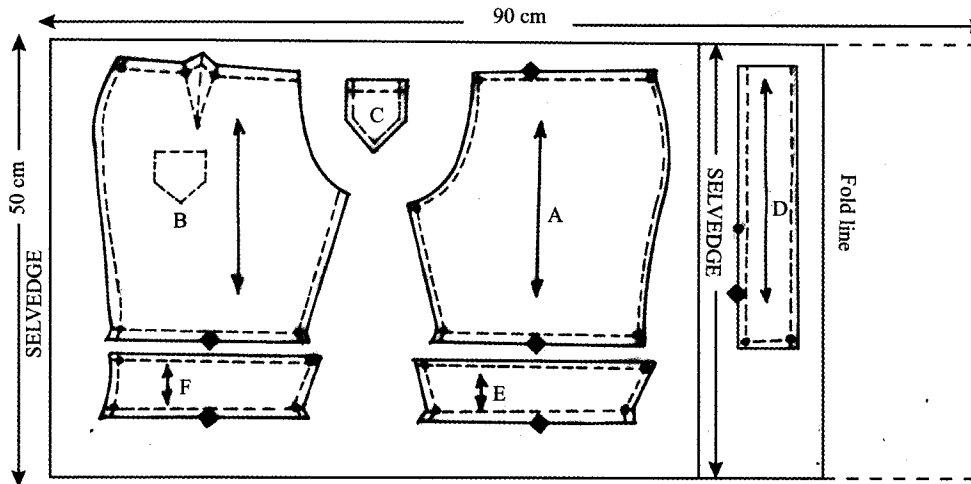
- (a) Making of the back dart.
- (b) Preparing and attaching the pocket.
- (c) Working of the inner leg seam using machine fell seam.
- (d) Working of the side seam using an open seam.
- (e) Preparing the facings and attaching them onto the lower edge of the shorts.
- (f) Fixing the facing using machine stitching.
- (g) Preparing and attaching the waistband.
- (h) Finishing the waistband using hemming stitches.

At the end of the examination, firmly sew on your work, on a single fabric, a label bearing your name and index number. Remove the needle and pins from your work, then fold your work neatly and place it in the envelope provided. **Do not put scraps of fabric in the envelope.**

### VIEW OF A PAIR OF SHORTS



LAYOUT (NOT DRAWN TO SCALE)



**Weaknesses**

- Some candidates still left threads hanging on the work. Some stitched label on double fabric.
- Most darts did not taper to a point and were not fastened.
- Pocket mouth preparation poorly done, trimming and snipping were also not well done.
- Quite a number of candidates did not neaten the side seam.
- Many candidates were not able to make double stitched seam. The major problems were flatness and the size of the seam which was more than 1 cm.
- Most candidates made a binding instead of leg facing and fixed the facing as a fly.
- The waistband was not well trimmed, knife edged and snipped.

**Advice to Teachers**

Teachers should encourage more practice on the needlework process by doing coursework.