

14.0 HOME SCIENCE (441)



The year 2009 KCSE Home Science examination tested mastery of knowledge and skills specified in the syllabus. This years 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 advice both teachers and candidates with the sole purpose of improving future performance in the subject. The individual papers examined in the year 2009 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.

14.1 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 2007, 2008 and 2009

Year	Paper	Candidature	Minimum Score	Mean Score	Standard Deviation
2006	1		120	62.47	14.06
	2		80	35.18	8.25
	Overall	10,571	200	97.65	20.00
2007	1		100	51.69	12.15
	2		70	32.26	7.48
	Overall	11,384	170	83.94	18.40
2008	1		100	47.18	11.42
	2		70	35.0	8.95
	Overall	12,314	170	82.24	18.23
2009	1		100	50.10	12.93
	2		70	36.05	9.68
	Overall	12,312	170	86.12	19.47

The following observations can be made from the table above.

- There was a slight drop in candidature as compared to the year 2008.
- There was an improvement in overall performance of the subject as noted in the mean of **86.12** up from **82.24** in the year 2008.

- The standard deviation went up **19.47**.

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

PAPER 1 (441/1)
SECTION A

Question 2

Explain why frozen foods should be thawed before cooking.

Candidates were required to explain why frozen foods should be thawed before cooking.

Weaknesses

Some candidates were not familiar with the word thawing.

Expected responses

Frozen foods should be thawed completely before cooking to ensure that heat penetrates the food adequately and destroys any harmful bacteria during cooking/reduce the cooking time.

Advice to teachers

Teachers should expose the learners to kitchen equipment.

Question 4

Differentiate between macro and micro nutrients.

Candidates were required to give the difference between macro and micro nutrients.

Weaknesses

Most candidates were not familiar with the terms but guessed from their English Language.

Expected responses

Macro nutrients required in large quantities by the body while micro nutrients are those required in small amounts by the body.

Advice to teachers

Teachers should teach nutrients in details.

Question 6

State the use of each of the following tools in the kitchen.

- i) Paring knife
- ii) Kitchen shears

Candidates were required to give the use of each of the kitchen tools.

Weaknesses

Majority of the candidates were not familiar with the two kitchen tools.

Expected responses

- i) Paring knife is used for peeling vegetables and fruits.
- ii) Kitchen shears is used for portioning chicken.

Advice to teachers

Teachers should teach on kitchen tools and equipment and show samples.

Question 17

List four stitches used to finish a hem.

The candidates were required to list stitches used to finish a hem.

Weaknesses

The candidates guessed the stitches.

Expected responses

- | | |
|--------------------------|------------------|
| - Hemming | - Satin stitches |
| - Slip-hemming | - Loop stitches |
| - Herringbone | - Blanket |
| - Machine/edge stitching | - Over lock |
| - Shell edging | |

Advice to teachers

The teachers should teach on the different categories of stitches and their uses.

Question 18

Name two balance marks used on patterns in clothing construction.

The candidates were required to name balance marks used in clothing construction.

Weaknesses

The candidates did not know the meaning of balance marks.

Expected responses

- Dots/circles
- Notches

Advice to teachers

Teachers to teach well on pattern marks.

Question 20

State four qualities of well made backstitches.

The candidates were required to state qualities of well made backstitches.

Weaknesses

Most candidates gave the qualities of a good stitch.

Expected responses

- be firmly fastened at the beginning and at the end
- be continuous with no gaps
- be even in size
- be straight/follow stitching line
- have even tension/correct tension
- firmly stitched/strongly stitched.

Advice to teachers

Teachers to ensure learners make samples of different stitches.

Question 24(b)

Describe the procedure of removing an oil stain from an article.

The candidates were required to describe the procedure of removing oil stain.

Weaknesses

The actual stain was not attended to.

Expected response

- Place a blotting grease proof paper onto the stain and use a warm iron working from the outside to the centre to remove as much oil as possible.
- Remove the rest of the stain using a grease solvent rubbing with a clean cloth.
- Wash the article normally.

Advice to teachers

Teachers should give practicals on stain removal.

Question 24 (c)

Outline steps to follow when mending a gaping seam on an apron.

The candidates were required to outline steps followed when mending a gaping seam.

Weaknesses

Candidates concentrated on methods of repair, patching and darning.

Expected responses

- Pin and tack seam back in position.
- Using a thread that matches what was used before or the fabric
- Remove pins
- Sew using similar stitches as used before.
- Remove tacking
- Press the seam in position.

Advice to teachers

Teachers to teach the topic on repair of clothes well.

Question 25 (a)

State three actions to be avoided in the management of a burn and give a reason in each case.

Candidates were required to state actions to be avoided in management of a burn giving a in each case.

Weaknesses

Candidates explained first Aid steps to give in case of occurrence of burn.

Expected response

- Breaking the blisters as they may expose the burn to germs/cause more pain.
- Applying lotions/ointments/oils/fats to a severe burn as this will cause further damage to the tissues/increase the risk of infection.
- Removing adherent clothing as this will peel off the skin.
- Applying adhesive dressing/tape to the skin as it will peel off the skin.
- Exposure to air as this will cause more pain.

Advice to teachers

Teachers should advise learners to read questions well before answering.

14.3 PAPER 2 (441/2)

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

A pattern of a girl's skirt is provided. You are advised to study the sketches, instructions and layout carefully before you begin the test.

Materials Provided

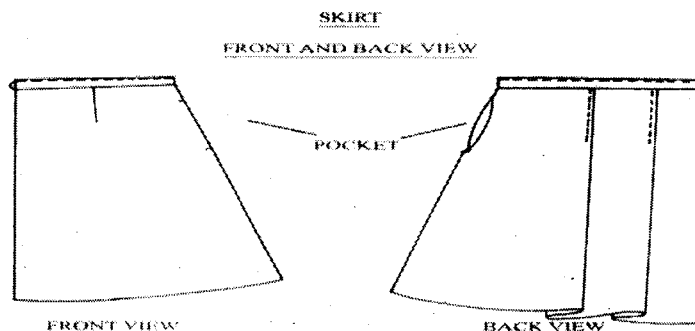
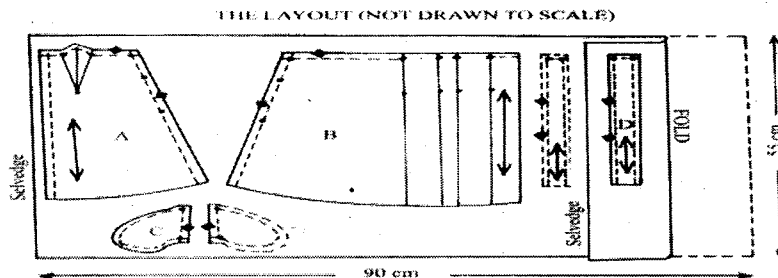
- 1 Pattern pieces:
 - A – skirt back
 - B – skirt front
 - C – pocket
 - D – waistband
- 2 Plain light weight cotton fabric 55 cm × 90 cm wide.
- 3 Sewing thread to match the fabric.
- 4 One large envelope.

THE TEST

Using the materials provided, cut out and make the **RIGHT HALF** of the skirt to show the following processes:

- (a) Making of the back dart.
- (b) Preparation of pleats on the skirt front.
- (c) Attachment of front pocket to the skirt front and back pocket to the skirt back. **Do not trim or neaten the seam.**
- (d) Making the side seam using an open seam. **Neaten below the pocket only.**
- (e) Joining of the pocket seam. **Do not neaten.**
- (f) Preparation of an interfaced waistband.
- (g) Attachment of the waistband, **slip-hem the back piece only.**
- (h) Making of the worked loop on the back waistband for a 1 cm wide button.

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



THE TESTS

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- (b) Preparation of pleats on the skirt front
- (c) Attachment of front pockets to the skirt front and back pocket to the skirt back

Do not trim or neaten

(d) *Making the side seam using an open seam.*

Neaten below the pocket only.

(e) *Joining of the pocket seam. **Do not neaten.***

(f) *Preparation of an interfaced waistband.*

(g) *Attachment of the waistband, slip-hem the back pieces only.*

(h) *Making of the worked loop on the back waistband for a 1 cm wide button.*

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

Weaknesses

Attaching of the pocket not well done i.e reinforcing towards the front and clipping of the pocket not well done.

Candidates displayed lack of knowledge on the neatening of the open seam. This was not flat and open at the waist band.

Candidates displayed lack of knowledge on the preparation and attaching of the waistband. The interfacing was not correctly fixed and slipping and clipping to get a sharp point was not well done.

Candidates displayed lack of knowledge on the construction of a worked loop.

Advice to Teachers

Teachers should encourage more practice on seam making and neatening.

Teachers should encourage more practice on needlework processes and pay attention to details.

Teachers are advised to prepare the candidates for the exam by doing coursework and not just drilling them using past papers.