3.7 HOME SCIENCE (441)



The year 2012 Home science examination tested mastery and application of knowledge and skills as specified in the syllabus. This year's report analyses the performance of candidates both in the theory and practical paper. It concentrates on the poorly performed items.

The report analyses the expected responses, the weaknesses of the candidates in the poorly performed items. It goes further to give recommendation to the teachers on how to improve the teaching/learning processes for future learning and examinations.

Paper 1 (441/1) Home Science Theory

This is a theory paper which comprises three sections worth 100 marks as follows:

Section A: consists of short structured questions worth 40 marks.

Section B: consists of one compulsory application question worth 20 marks.

Section C: consists of essay questions worth 20 marks each. Candidates are required to answer any two out of the three questions.

Paper 2 (441/2) Clothing Construction

This is a practical paper which tested the candidates on skills in clothing construction. The paper is worth 45 marks.

Paper 3 (441/3) Foods and Nutrition

This is a practical paper which tested on skills in Foods and Nutrition worth 25 marks. Candidates were required to prepare and serve a meal. It is considered a project paper and is assessed by the teachers at the school.

3.7.1 CANDIDATES GENERAL PERFORMANCE

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

Table 14: Candidates' Performance in the last four years.

Year	Paper	Candidature	Maximum Score	Mean Score	Standard Deviation
2009	1 2 overall	12,312	100 70 170	50.10 36.05 86.12	12.93 9.68 19.47
2010	1 2 overall	12,322	100 70 170	54.76 38.36 93.08	11.43 9.22 18.60
2011	1 2 Overall	12,995	100 70 170	53.27 24.88 78.15	12.47 7.54 17.79
2012	1 2 3 Overall	13,463	100 45 25 170	57.98 24.92 14.26 96.84	11.35 7.98 2.60 19.16

Candidates overall performance in Home Science in the years 2009, 2010, 2011 and 2012

Observations from the above table:

- (i) Candidature increased by 468(3.6%) from the previous year 2011.
- (ii) For computation of this year's final score, all papers were graded separately and then combined unlike previously where marks for paper 2 and paper 3 were combined to give a final score for the practical component.
- (iii) The mean increased significantly in 2012 by 16.69 (21.36%) indicating a better performance.

Analysis of the poorly performed questions

3.7.2 Home Science Paper 1 (441/1)

SECTION A

Question 3

Outline two precautions to take when handling calabashes

(2marks)

Requirement

To outline precautions to take when handling calabashes.

Weaknesses

Some candidates had no idea of what a calabash is and therefore could not answer the question.

Expected responses

Precautions to take when handling calabashes:

- avoid banging or hitting with heavy objects
- do not expose to naked flame
- always store in a cool, dry place.
- avoid scrubbing the inside
- avoid soaking/steeping

any $2 \times 1 = 2 \text{ marks}$

Advice to teachers

Expose learners to all materials used for making kitchen equipment.

Question 4

Give two reasons for using dried fruits in cake making

(2marks)

Requirement

To give reasons for using dried fruits in cake making

Weaknesses

The learners discussed the use of fruits generally in cake making not paying attention to the use of dried fruits.

Expected responses

Reasons for using dried fruits in cake making: To;

- enrich
- preserve
- add flavour
- improve texture
- improve appearance

 $2 \times 1 = 2 \text{ marks}$

Advice to teachers

The learners should read questions carefully to be able to understand all the details being asked in a question.

Question 6

Give two methods of removing dust from surfaces in a home

(2marks)

Requirement

To give the methods of removing dust from surfaces in a home

Weaknesses

Some candidates mentioned the equipment used for cleaning instead of the methods.

Expected responses

Methods of removing dust from surfaces in a home:

- sweeping
- dusting
- brushing
- suction
- dispersal

 $2 \times 1 = 2 \text{ marks}$

Advice to teachers

Expose the learners to the different methods of cleaning. Learners need to differentiate between the procedure, methods and equipment for cleaning

Question 11

State two benefits of manipulative play

(2marks)

Requirement

To state the benefits of manipulative play

Weaknesses

Some candidates gave their responses on the general benefits of play without referring to manipulative play as the question required.

Expected responses

Benefits of manipulative play. It:

- enables children to exercise their limbs/their muscles/strength
- enables children to enjoy play
- teaches size, colours, volume and shapes
- improves co-ordination.

any $2 \times 1 = 2 \text{ marks}$

Advice to teachers

During classroom instruction the different types of play should be well differentiated

Question 15

Give two reasons for starching articles

(2marks)

Requirement

To give the reasons why articles are usually starched during laundering

Weaknesses

Some candidates could not distinguish between starching and bleaching

Expected responses

Reasons for starching articles. To:

- restore body and feel of the article
- improve appearance
- give article glossy surface (crease resistant)
- make them dirt resistant
- making them crease resistant

any $2 \times 1 = 2$ marks

Advice to teachers

All types of special treatment in laundry should be taught well in both theory and practice where possible so that the learners can appreciate the role of each process.

Question 16

State two precautions to take when laundering viscose rayon

(2marks)

Requirement

To state the precautions one needs to bear in mind as they launder viscose rayon.

Weaknesses

Some candidates could not demonstrate knowledge of the characteristics of viscose rayon and the care needed when laundering.

Expected responses

Precautions to take when laundering viscose rayon:

- do not rub or twist
- dry under the shade/away from sunlight
- dry evenly
 - use a warm iron
 - iron when damp.
 - use kneading and squeezing method

Advice to teachers

Expose the learners to the different types of fibres and the type of care each fibre requires during the laundering process.

Question 17

Give two examples of inconspicuous seams

(2marks)

Requirement

To write down examples of inconspicuous seams

Weaknesses

Some candidates could not differentiate between conspicuous and inconspicuous seams.

Expected responses

Examples of inconspicuous seams are:

- Plain
- Open seam
- French seam.

 $2 \times 1 = 2 \text{ marks}$

Advice to teachers

Learners need to be taught well on the types of seams and practise making the seams in order to appreciate the differences and their distinct functions.

Question 20

Differentiate between trimmings and trimming as used in clothing construction

(2marks)

Requirement

To give the differences between trimmings and trimming as used in clothing construction

Weaknesses

The two terms confused the candidates and could therefore not bring out the differences.

Expected responses

Difference between trimmings and trimming in clothing construction.

- Trimmings are sewing notions used for decorating garments such as laces and bias binding while
- Trimming is the action of cutting off excessive fabric on seams or edges of fabric.

Advice to teachers

The learners to be exposed to the similar terms with different meanings so as to avoid confusing terms.

Question 21

Complete the following table on classification of fibres.

FIBRE	CLASS
Viscose Rayon	
Elastofibre	
Polyester	
Asbestos	

(2 marks)

Requirement

To match fibres into their respective classes in the given table.

Weaknesses

Most of the candidates guessed to complete the table.

Expected responses

Completing the table on classification of fibres

Fibre	Class		
Viscose rayon	Regenerated fibres (½ mark)		
Elastofibre	Synthetic (½ mark)		

Polyester	Synthetic (½ mark)
Asbestos	Mineral (½ mark)

 $4 \times \frac{1}{2} \text{ mark} = 2 \text{ marks}$

Advice to teachers

The topic on classification of fibres should be taught in detail.

Question 23

(a) Giving a reason in each case, state four rules to observe when making short crust pastry.

(8 marks)

(b) Explain **three** hygiene practices to observe during food storage.

(6 marks)

(c) Explain three points to take into account when buying quality baking tins.

(6 marks)

Requirement

- a) Explaining rules to observe when making short crust pastry
- b) Explaining hygiene practices to observe during food storage.
- c) Explaining points to note to ensure quality when buying baking tins.

Weaknesses

- a) Candidates gave their responses on flour mixtures instead of pastries.
- b) Candidates concentrated more on personal hygiene instead of general hygiene practices in food storage.
- c) Candidates could not give the factors to consider when buying quality baking tins.

Expected responses

- (a) Rules to observe when making short crust pastry:
 - all ingredients must be weighed accurately to come up with a quality product
 - the mixture should be aerated as much as possible to allow proper raising of the product
 - pastry should be kept as cool as possible to avoid the fat melting
 - the pastry should be handled as little as possible to avoid hardening the product
 - the pastry should be rolled on a light floured surface to avoid sticking
 - pastry should be rolled with light to and fro movement to avoid extracting the trapped air
 - the pastry should be baked in a fairly hot oven so that the water is quickly turned to steam to puff up the pastry
 - all measured liquids should be added at once to give an even texture.

any $4 \times 2 = 8$ marks

- (b) Hygiene practices to observe during food storage:
 - storage equipment such as refrigerators, kitchen stores, must be kept clean at all times to avoid attracting pests and micro-organisms
 - the principal of first in, first out should be practiced when storing foods to prevent food spoilage
 - containers used to hold cooked food should be free from cracks and chips to avoid harbouring micro-organisms
 - dry foods should be stored in well ventilated storage places which are free from pests

to avoid spoilage.

- Food should be covered or wrapped during storage to avoid contamination

any $3 \times 2 = 6 \text{ marks}$

- c) Points to take into account when buying baking tins to ensure they are of good quality:
 - buy reliable and tested products as these are more likely to be of reasonable standards and good value for money
 - insist on a warranty as this is a good indicator of the quality of the item
 - buy from reliable and established dealers as they are dependable
 - buy renowned brands as they are a symbol of quality.
 - buy rust-free tins to avoid poisoning, discolouration or altering the taste of food
 - buy one that is smoothly finished to avoid injuries and ease of cleaning

any $3 \times 2 = 6$ marks

Advice to teachers

Expose learners to practise on the making of pastries.

Differentiate between different types of hygiene; personal, food, kitchen.

Question 24

a) Outline the steps followed in making pin tucks.

(6marks)

Requirement

To outline the steps followed in making pin tucks.

Weaknesses

Most students had no idea of what pin tucks are, most guessed the answers.

Expected responses

- (a) Steps followed in making pin tucks:
 - mark the position of the tucks
 - fold the fabric appropriately/on straight grain on the RS
 - hold the tucks with temporary stitches close to the fold
 - stitch close to the fold
 - work as above, until all tucks are made
 - remove the temporary stitches and press.

correct sequence $6 \times 1 = 6 \text{ marks}$

Advice to teachers

All the different types of tucks should be taught in detail.

3.7.3 Home Science Paper 2 (441/2) Clothing Construction

This is a practical paper where candidates are required to demonstrate their skills in clothing construction by making a sample of a garment as per the instructions. Patterns and sketches are provided for them to use in the examination.

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

Materials provided

- 1. Pattern pieces
 - A. Bodice front
 - B. Bodice back
 - C. Skirt front
 - D. Skirt back
 - E. Sleeve
 - F. Collar
 - G. Cut out a crossway strip measuring 18 cm long by 4cm wide.
- 2. Plain light weight cotton fabric 70 cm long by 90 cm wide.
- 3. Cotton sewing thread to match the fabric.
- 4. One large envelope.

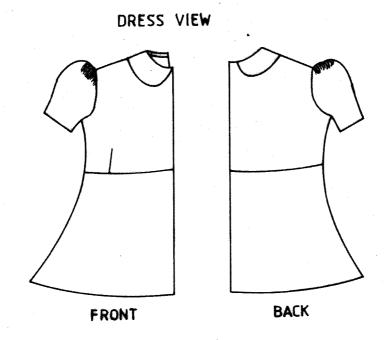
THE TEST

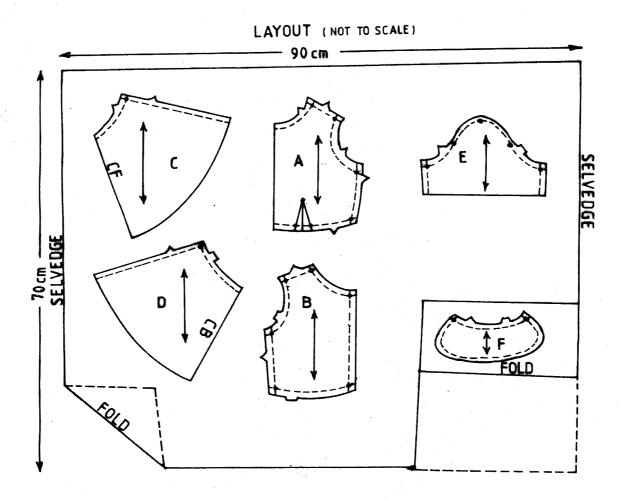
Using the materials provided, cut out and make the **LEFT SIDE** of the girl's dress to show the following processes:

- (a) making of the dart at the front bodice;
- (b) making of a shoulder seam using a double stitched seam;
- (c) making of the side seam on bodice and skirt using an open seam;
- (d) attaching of the bodice pieces to the skirt pieces using a plain seam and neatening *half* of the back seam using loop stitches.;
- (e) preparation of the collar.;
- (f) attaching of the collar using a crossway strip;
- (g) making of an underarm seam using an open seam;
- (h) preparation and attachment of the sleeve. **Do not trim or neaten the seam allowance.**

OMIT

The management of the lower hem of the skirt and the sleeve.





Weaknesses

- Most candidates did not cut out the fabric correctly.
- There was poor graining and use of crossway strip.
- Some candidates made darts that were of inaccurate length with the tapering and fastening

	missing.
	Some candidates ignored the neatening of the open seams. They also did not press it open
	and flat.
	The correct thread for making the loop stitches was not used.
	The hand stitches and trimming were poorly done.
	In the preparation and attachment of the collar, no trimming, snipping, knife edge and
	sandwiching were done. The collar was poorly attached.
	In the preparation and attachment of the sleeve the hang was poor, the gathers were not made
	and the seams were poorly matched. Some did not follow the instructions of DO NOT TRIM
	OR NEATEN.
	Some candidates did not remove the tacking when presenting their work.
П	Attachment of the labels on the fabric was poorly done.

Advice to teachers

The teachers should not provide extra materials such as interfacing during the examination. More practice in clothing construction processes should be encouraged so that the learners acquire skills and confidence to perform tasks well.

4.6 HOME SCIENCE (441)



4.6.1 Home Science Paper 1 (441/1)

SECTION A (40 marks)

Answer all the questions in this section in the spaces provided.

1	Give two functions of Vitamin A in the body.	(2 marks)
2	State two symptoms of goitre.	(2 marks)
3	Outline two precautions to take when handling calabashes.	(2 marks)
4	Give two reasons for using dried fruits in cake making.	(2 marks)
5 .	Distinguish between shallow and deep fat frying.	(2 marks)
6	Give two methods of removing dust from surfaces in a home.	(2 marks)
7	Give two advantages of using loose covers in the home.	(2 marks)
8	State two ways of disposing refuse economically.	(2 marks)
9	Define good grooming.	(1 mark)
10	Give two ways in which medicine can be abused.	(2 marks)
11	State two benefits of manipulative play.	(2 marks)
12	State two problems that may occur on the feet as a result of wearing tight fitting sho	
		(2 marks)
13	Giving an example in each case, differentiate between goods and services.	(2 marks)
14	List two vegetable stains that commonly occur in homes.	(1 mark)
15	Give two reasons for starching articles.	(2 marks)
16	State two precautions to take when laundering viscose rayon.	(2 marks)
17	Give two examples of inconspicuous seams.	(2 marks)
18	Identify two functions of openings on a garment.	(2 marks)
19	State two advantages of using tacking stitches.	(2 marks)
20	Differentiate between trimmings and trimming as used in clothing construction.	(2 marks)

21 Complete the following table on classification of fibres.

FIBRE	CLASS
Viscose Rayon	
Elastofibre	
Polyester	
Asbestos	

(2 marks)

SECTION B (20 marks)

(COMPULSORY)

Answer question 22 in the spaces provided.

- You are planning to host your sister's graduation party at home. In preparation for the occasion;
 - (a) Without the use of chlorine, outline the procedure you would use to make muddy contaminated water safe for drinking and store ready for use. (6 marks)
 - (b) Outline the procedure you would follow to thoroughly clean the plastic chairs to be used for the occasion. (8 marks)
 - (c) Describe the procedure you would follow when laundering a coloured cotton handkerchief. (6 marks)

SECTION C (40 marks)

Answer any two questions from this section in the spaces provided at the end of this section.

- Giving a reason in each case, state **four** rules to observe when making short crust pastry. (8 marks)
 - (b) Explain **three** hygiene practices to observe during food storage. (6 marks)
 - (c) Explain three points to take into account when buying quality baking tins.

(6 marks)

- 24 (a) Outline the steps followed in making pin tucks. (6 marks)
 - (b) Explain **four** qualities of a well made in-seam pocket. (8 marks)
 - (c) Describe the procedure of laundering a polyester pair of trousers. (6 marks)
- 25 (a) Outline the procedure of daily cleaning a baby's bedroom. (6 marks)
 - (b) Giving **two** reasons in each case, identify a method of lighting each of the following rooms;
 - (i) Study room
 - (ii) Living / sitting room

(6 marks)

(c) Explain **four** practices necessary for maintaining healthy teeth. (8 marks)

4.6.2 Home Science Paper 2 (441/2)

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

Materials provided

- 1. Pattern pieces
 - A. Bodice front
 - B. Bodice back
 - C. Skirt front
 - D. Skirt back
 - E. Sleeve
 - F. Collar
 - G. Cut out a crossway strip measuring 18 cm long by 4cm wide.
- 2. Plain light weight cotton fabric 70 cm long by 90 cm wide.
- 3. Cotton sewing thread to match the fabric.
- 4. One large envelope.

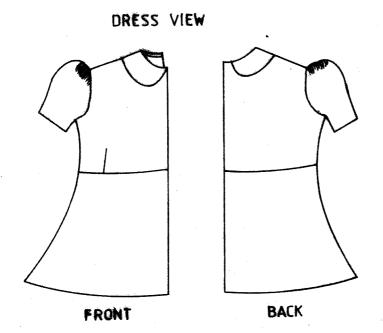
THE TEST

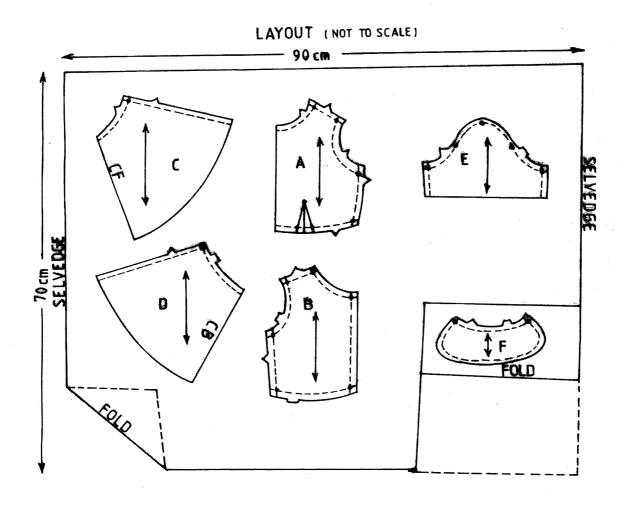
Using the materials provided, cut out and make the **LEFT SIDE** of the girl's dress to show the following processes:

- (a) making of the dart at the front bodice;
- (b) making of a shoulder seam using a double stitched seam;
- (c) making of the side seam on bodice and skirt using an open seam;
- (d) attaching of the bodice pieces to the skirt pieces using a plain seam and neatening *half* of the back seam using loop stitches.;
- (e) preparation of the collar.;
- (f) attaching of the collar using a crossway strip;
- (g) making of an underarm seam using an open seam;
- (h) preparation and attachment of the sleeve. Do not trim or neaten the seam allowance.

OMIT

The management of the lower hem of the skirt and the sleeve.





4.6.3 Home Science Paper 3 (441/3)

THE TEST

You intend to throw a party for your mother on her 50th birthday.

Using all the ingredients listed below, prepare, cook and present a suitable two dish meal for her and her two friends.

Include a stimulating drink.

Ingredients:

- salt
- beef/chicken
- fat/oil
- garlic
- rice
- onions
- ginger
- pilau mix
- milk
- sugar
- tea leaves
- peas/french beans
- carrots.

PLANNING SESSION - 30 minutes

For each task listed below, use separate pieces of paper and make duplicate copies using carbon paper then proceed as follows:

- 1. Identify the dishes and write down the recipes;
- 2. Write down your order of work;
- 3. Make a list of the foodstuff and equipment you will require.

5.6 HOME SCIENCE (441)

5.6.1 Home Science Paper 1 (441/1)

SECTION A



- 1. Functions of vitamin A in the body:
 - regulates growth especially that of children
 - maintains heathy skin
 - protects the body from infections
 - necessary for good vision.
 - prevents night blindness
 - promotes healthy mucus membrane

any $2 \times 1 = 2$ marks

- 2. Symptoms of Goitre:
 - irritability
 - tiredness/fatigue
 - weight loss/wasted
 - change of eating habits.
 - swelling of the neck/thyroid gland
 - hoarse voice
 - difficult in swallowing

 $2 \times 1 = 2 \text{ marks}$

- 3. Precautions to take when handling calabashes:
 - avoid banging or hitting with heavy objects
 - do not expose to naked flame
 - always store in a cool, dry place.
 - avoid scrubbing the inside
 - avoid soaking/steeping

any $2 \times 1 = 2 \text{ marks}$

4. Reasons for using dried fruits in cake making:

To;

- enrich
- preserve
- add flavour
- improve texture
- improve appearance

 $2 \times 1 = 2 \text{ marks}$

- 5. Difference between shallow and deep fat frying
 - shallow frying is cooking food in a small amount of hot fat while
 - Deep fat frying is cooking food by complete immersion in hot fat/oil.

Well differentiated = 2 marks

- 6. Methods of removing dust from surface in a home:
 - sweeping
 - dusting

- brushing
- suction
- dispersal

 $2 \times 1 = 2 \text{ marks}$

7. Advantages in using loose covers in the home.

They:

- ease maintenance of the article
- enhance beauty/decoration
- protect the article.

any $2 \times 1 = 2 \text{ marks}$

- 8. Ways of disposing refuse economically:
 - using as animal feed
 - converting to manure
 - recycling.

any $2 \times 1 = 2$ marks

- 9. Definition of Good Grooming
 - taking care of oneself so that one looks neat, clean and generally attractive in appearance.

 well defined 1 mark
- 10. Ways in which medicine can be abused:
 - taking someone else's medicine in belief that your illnesses are similar
 - taking medicine without a doctors prescription
 - using medicine for reasons other than treatment.
 - using expired or poorly stored medicine
 - not completing the recommended dose

any $2 \times 1 = 2 \text{ marks}$

- 11. Benefits of manipulative play. It:
 - enables children to exercise their limbs/their muscles/strength
 - enables children to enjoy play
 - teaches size, colours, volume and shapes
 - improves co-ordination.

any $2 \times 1 = 2$ marks

- 12. Problems that may occur on the feet as a result of wearing tight fitting shoes include:
 - corns
 - blisters
 - in grown toe nails
 - bent toes/incorrectly arranged toes
 - bunions
 - poor blood circulation

any $2 \times 1 = 2$ marks

- 13. Difference between goods and services
 - Goods are tangible items such as food, tools and clothes which can be bought or sold while
 - services are work rendered at a fee such as cleaning, medical, catering and teaching.

Well differentiated = 2 marks

- 14. Vegetable stains commonly occurring in homes, are:
 - banana sap
 - grass stain
 - fruit juice stain.
 - coffee
 - tea

any $2 \times \frac{1}{2} = 1 \text{ mark}$

15. Reasons for starching articles.

To:

- restore body and feel of the article
- improve appearance
- give article glossy surface (crease resistant)
- make them dirt resistant
- making them crease resistant

any $2 \times 1 = 2 \text{ marks}$

- 16. Precautions to take when laundering viscose rayon:
 - do not rub or twist
 - dry under the shade/away from sunlight
 - dry evenly
 - use a warm iron
 - iron when damp.
 - use kneading and squeezing method

any $2 \times 1 = 2$ marks

- 17. Examples of inconspicuous seams are:
 - plain
 - French seam.
 - Open seam

 $2 \times 1 = 2 \text{ marks}$

18. Functions of openings on a garment.

They:

- allow putting on and taking off the garment
- decorate the garment
- introduce a style feature.

any $2 \times 1 = 2 \text{ marks}$

- 19. Advantages of using tacking stitches. They:
 - give direction/guidance for permanent stitching
 - hold two or more pieces of fabric in place before permanent stitching
 - allow for fitting and adjusting a garment before permanent stitching.

any $2 \times 1 = 2 \text{ marks}$

- 20. Difference between trimmings and trimming in clothing construction.
 - Trimmings are sewing notions used for decorating garments such as laces and bias binding while
 - Trimming is the action of cutting off excessive fabric on seams or edges of fabric.

Award 2 marks for correct differentiation.

21. Completing the table on classification of fibres

Fibre	Class
Viscose rayon	Regenerated fibres (½ mark)
Elastofiber	Synthetic (½ mark)
Polyester	Synthetic (½ mark)
Asbestos	Mineral (½ mark)

 $4 \times \frac{1}{2} \text{ mark} = 2 \text{ marks}$

SECTION B (20 marks)

- 22. (a) The procedure to make muddy contaminated water safe for drinking:
 - leave the water to stand $(\frac{1}{2})$ for sometime $(\frac{1}{2})$ for mud to settle at the bottom of the container and then decant (1)
 - filter (½) using a filter paper/home filter/clean cloth (½)
 - boil (1) the water. Put the boiled water in a clean (½) container
 - cover (½) with clean (½) lid/cover (½)

Total marks = 6 marks

- (b) The procedure of thorough cleaning plastic chairs:
 - Collect equipment and materials (½)
 - dust the chairs with a dry cloth (½) remove mud with a blunt stick or wet cloth (½)
 - clean with warm soapy water (½) using a soft cloth/sisal fibres/sponge (½) from top to bottom/underneath/back (½)
 - rinse (½) using warm (½) water
 - final (½) rinse with cold (½) water
 - remove excessive water (½) using a clean cloth/turn/tilt chair upside down so that water can drain off (½)
 - buff with a clean (½) dry (½) non fluffy (½) cloth
 - clean equipment, dry and store (½)

Maximum marks = 8 marks

- (c) The procedure to follow when laundering a coloured cotton handkerchief:
 - wash (½) in warm soapy (½) water using friction method (½)
 - rinse (½) in clean warm water (½)
 - finally rinse in cold (½) water, add vinegar (½)
 - dry in the shade (½)
 - iron while slightly damp (½) using a hot iron (½) Air (½) and fold appropriately (½) maximum marks = 6 marks

SECTION C

- 23. (a) Rules to observe when making short crust pastry:
 - all ingredients must be weighed accurately to come up with a quality product
 - the mixture should be aerated as much as possible to allow proper raising of the product
 - pastry should be kept as cool as possible to avoid the fat melting
 - the pastry should be handled as little as possible to avoid hardening the product

- the pastry should be rolled on a light floured surface to avoid sticking
- pastry should be rolled with light to and fro movement to avoid extracting the trapped air
- the pastry should be baked in a fairly hot oven so that the water is quickly turned to steam to puff up the pastry
- all measured liquids should be added at once to give an even texture.

any $4 \times 2 = 8 \text{ marks}$

- (b) Hygiene practices to observe during food storage:
 - storage equipment such as refrigerators, kitchen stores, must be kept clean at all times to avoid attracting pests and micro-organisms
 - the principal of first in, first out should be practiced when storing foods to prevent food spoilage
 - containers used to hold cooked food should be free from cracks and chips to avoid harbouring micro-organisms
 - dry foods should be stored in well ventilated storage places which are free from pests to avoid spoilage.
 - Food should be covered or wrapped during storage to avoid contamination

any $3 \times 2 = 6 \text{ marks}$

- (c) Points to take into account when buying baking tins to ensure they are of good quality:
 - buy reliable and tested products as these are more likely to be of reasonable standards and good value for money
 - insist on a warranty as this is a good indicator of the quality of the item
 - buy from reliable and established dealers as they are dependable
 - buy renowned brands as they are a symbol of quality.
 - buy rust-free tins to avoid poisoning, discolouration or altering the taste of food
 - buy one that is smoothly finished to avoid injuries and ease of cleaning

any $3 \times 2 = 6 \text{ marks}$

- 24. (a) Steps followed in making pin tucks:
 - mark the position of the tucks
 - fold the fabric appropriately/on straight grain on the RS
 - hold the tucks with temporary stitches close to the fold
 - stitch close to the fold
 - work as above, until all tucks are made
 - remove the temporary stitches and press.

correct sequence $6 \times 1 = 6 \text{ marks}$

- (b) Qualities of a well-made in-seam pocket. the:
 - pocket is inconspicuous on the RS for neat appearance
 - pocket should lie flat to avoid bulkiness
 - pocket should face the RS of the garment for ease of use
 - pocket is reinforced at the mouth to avoid tearing
 - grain of the pocket and that of the garment should be matching to give good drape
 - pocket mouth should be large enough for the hand of the wearer to enter with ease
 - pocket bag should be deep enough to prevent items placed inside from dropping out.

any $4 \times 2 = 8 \text{ marks}$

- (c) Procedure of laundering a polyester pair of trousers:
 - wash in warm detergent water by kneading and squeezing
 - rinse thoroughly in warm water
 - give a final rinse in cold water
 - use fabric conditioner
 - drip dry in the shade
 - press with a warm iron
 - air dry completely
 - store appropriately.

correct sequence $6 \times 1 = 6 \text{ marks}$

- 25. (a) Procedure in daily cleaning of baby's bedroom:
 - strip the bed, air the beddings and wash bedsheets and pillow cases
 - collect the equipment and materials required for cleaning
 - make the bed
 - dust all the surfaces and ornaments
 - sweep/mop the floor
 - tidy, arrange the room and clean the equipment used, dry and store.

correct sequence $6 \times 1 = 6 \text{ mark}\dot{s}$

- (b) Methods of lighting
 - (i) Study Room:

Direct

- the light source is of the correct intensity as it avoids glare which may strain the eyes
- the light is distributed downwards hence does not cast shadow.
- (ii) Living room:

Decorative

- the light enhances beauty of interesting art objects/pictures, designs
- create/reflects different moods in the home

Semi-direct

- light is distributed evenly in all directions
- less intense, therefore suitable for general activities
- intensity of light can be controlled such as by use of adjustable pendent (which can be lowered or raised).

identification $1 \times 2 = 2$ marks

reason $2 \times 2 = 4 \text{ marks}$

Total = 6 marks

- (c) Practices necessary for maintaining healthy teeth:
 - visit the dentist for dental check up to ensure any problem is taken care of promptly
 - discourage the use of sharp objects to remove food from in-between the teeth to avoid damaging the gums
 - brush the teeth regularly preferably at night before going to bed and in the morning to avoid build up of plaque
 - eat a balanced diet with plenty of calcium and phosphorous to promote growth of well formed strong teeth
 - avoid eating sweet things after cleaning teeth and especially before going to bed to prevent decay/weakening of the teeth
 - eat hard foods occasionally to exercise your jaws and to strengthen your teeth.
 - floss the teeth regularly to keep away food particles.

any $4 \times 2 = 8$ marks

5.6.2 Home Science Paper 2 (441/2)

	ACTIVITY	Score	Maximum score
1.	PRESENTATION		
(a)	Work well pressed (1) and folded (½)	11/2	
(b)	Label (½) firmly stitched (1) without concealing details (½) and on a single fabric (½)	2½	61/2
(c)	Pins/needles (½) and unnecessary tacking threads (½) and loose threads (½) removed	1½	
(d)	Made up for the LEFT side	. 1	
2.	CUTTING OUT		
(a)	All eight pieces (½ x 8) cut out	4	
(b)	Smooth cutting of the C.F of bodice (1) and cut on straight grain to within 3 mm (1)	2	
(c)	Smooth cutting of the C.B of bodice (1) and cut on straight grain to within 3 mm (1)	2	15
(d)	Smooth cutting of C.F of skirt	1	
(e)	Smooth cutting of C.B of skirt	. 1	
(f)	Smooth cutting of the dress lower edge front (1) and back(1)	2	
(g)	Smooth cutting of the sleeve edge	1	,
(h)	Crossway strip cut on true bias	1	
(i)	Dress skirt cut on true bias front (½) and back (½)	1	
3.	DART	·	
(a)	Straight stitchery (1) of dart and tapering to nothing (½)	11/2	
(b)	Stitchery fastened at the point .	1/2	
(c)	Correct length of the dart 7.5 cm to within 2 mm (7.3 cm - 7.7 cm)	1	6
(d)	Correct width of dart 1.5 cm to within 2 mm (1.3 cm - 1.7 cm)	1	
(e)	Pressed towards C.B	1	,
(f)	Flatness of dart on W.S (½) and R.S (½)	1	
4.	SHOULDER SEAM - DOUBLE STITCHED (If not double stitched award zero (0))		
(a)	First row of stitchery made with straight stitches	1	
(b)	Raw edges well tucked under	1	
(c)	Second line of stitchery made with straight stitches	1	
(d)	Evenness of seam (1) and correct size 0.6 cm to within 2 mm (1) (0.4 cm - 0.8 cm)	2	8
(e)	Flatness of seam on R.S (1) and on W. S (1)	2	:
(f)	Fell facing back of dress	1	

	•	Score	Maximum score
5.	SIDE SEAMS - OPEN SEAM		
	(if not open seam award zero(0))		
	BODICE		
(a)	Joined with straight stitchery	1	
(b)	Raw edges well neatened (1 x 2)	2	
(c)	Evenness of seam allowance	1	
(d)	Correct size of seam allowance 1cm to within 2 mm (0.8 - 1.2cm)	1	
(e)	Seam pressed open and flat at the arm hole (1) and waist (1)	2	-
	SKIRT		
(a)	Joined with straight stitchery	1	13
(b)	Raw edges well neatened (1x2)	2	
(c)	Evenness of seam allowance	1	
(d)	Correct size of seam allowance (1 cm to within 2 mm (0.8 - 1.2 cm)	1	
(e)	Seam pressed open and flat at the waist	1	
6.	WAIST SEAM - PLAIN SEAM		
(a)	Joined with straight stitchery	2	
(b)	Seam evenly trimmed (1) and correct size (1) 1 cm to within 2 mm	_	
` ,	(0,8-1.2 cm)	2	
(c)	Loop stitches (1) made on half back (1)	2	,
(d)	Quality of loop stitches i.e. evenly distributed (½) correct tension (½) even length (½) and worked using single thread (½)	2	10
(a)	Side seams meeting to within 2 mm		
(f)	C.B of bodice and C.B of skirt flash (½)	1	
(1)	C.F of bodice and C.F of skirt flash (½)	1	
7.	COLLAR		
(a)	Smooth stitchery of outer edge of collar (mark by impression)	1	
(b)	Collar seam trimmed (1) and snipped (1)	1 2	
	Well knife-edged collar	1	
(d)		1	•
	Collar attached by sandwiching in the dress and crossway strip	1	
(e)	Quality of attaching stitchery (mark by impression on R.S) Attaching seem trimmed (1) and spinned (1)	1	' !
(f)	Attaching seam trimmed (1) and snipped (1)	2	
(g)	Crossway strip held down with straight stitchery (1) and well tucked under (1)	2	17
(h)	Evenness of the crossway strip	1 .	
(i)	Correct positioning of collar i.e. C.F of collar flash with C.F of bodice (1) and C. B of collar 1.5 cm from cutting edge (1)	2	
(j)	Correct size (1) to within 5mm and correct shape (1) (superimpose pattern)	2	d v

		Score	Maximum score
(k)	Collar lying flat on dress front (1/2) and dress back (1/2)	1.	
(1)	C.F of crossway strip and C.F of bodice flash ($\frac{1}{2}$) and C. B of crossway strip and C.B of bodice flash ($\frac{1}{2}$)	1	
8.	UNDERARM SEAM - OPEN SEAM		
(a)	Joined with straight stitchery	1	i
(b)	Raw edges well neatened (1 x 2)	2	6
(c)	Evenness of seam allowance	1	
(d)	Correct size of seam allowance	1	
	1cm to within 2 mm (0.8 cm - 1.2 cm)		
(e)	Seam pressed open and flat at the armhole	1.	
9.	SLEEVE		
(a)	Good hang	1	
(b)	Gathers (1) evenly distributed (1) at the crown (½)	2½	
(c)	Armhole made with straight stitchery	2	81/2
(d)	Armhole seam neither trimmed (1/2) nor neatened (1/2)	1	
(e)	Correct position i.e front notches (1/2) and back notches (1/2) matching	1	,
(f)	Underarm seam and side seam matching to within 2mm	11	
	TOTAL 90 ÷ 2	45	

5.6.3 Home Science Paper 3 (441/3)

	AREAS OF ASSESSMENT .	MAXIMUM SCORE	ACTUAL SCORE	REMARKS
1.	PLAN			
	Recipes			
	- Availability	$1^{\frac{1}{2}}$	•	
	- Correct quantities	3		
	- Appropriate choice	$1^{\frac{1}{2}}$	*	
	Order of work			
	- Availability	1		
	- Proper sequencing	2		
	List of foodstuffs and equipment			
	- Availability	2	* .	
	- Adequacy	3	·	
	- Appropriateness	2		
	Търгоргия	16		
2.	PREPARATION AND COOKING		<u></u>	
	Correct procedure			
	- Item 1 (main dish)	4		
	- Item 2 (vegetable)			
	- Drink	2 2	, •	
	Methods of cooking (at least two)	2		
	- Quality of results	2		
	- Item 1 (main dish)	2		
	- Item 2 (vegetable)	1	·	, ,
İ	- Drink	1		
-	- Dillik	14		
3.	PRESENTATION	14		·
]	Utensils			
	- Appropriate	2		
	- Clean	$\tilde{2}$		
	- Table lay out	2		
	Centre piece	2	,	
	_	1		
	General impressionHygiene	Γ		
	- Food(1) Kitchen(1) Personal (1)	3		
	- Food(1) Kitchen(1) Fersonal (1)	12		
4.	ECONOMY OF DESCRIBERS	12		
⁴ ·	ECONOMY OF RESOURCES - Water	1		
	- Water - Food	1 1		
	- Fuel	1		
	- Fuei - Materials] . <u>I</u> 1		
		1		
	Clearing up	_		
	- During work	2		
	- After work	2	· · · · · · · · · · · · · · · · · · ·	
		8		
		50 ÷ 2		