

# **EXAMINATIONS COUNCIL OF ESWATINI**

Eswatini Prevocational Certificate of Secondary Education

# Food and Textiles Technology (6926) Examination Report for 2023

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## EPCSE FOOD AND TEXTILES TECHNOLOGY (5926) Paper 2

## **General Comments**

Fifteen (15) centres registered for EPCSE Food and Textile Technology (5926/02), with a total enrolment of 64 candidates in 2023. This indicates an increase of 62% more candidates to the previous year's enrolment (2022) of 37 candidates. The general performance decreased compared to last year's.

Questions 1(b); 2(b) and 4(a) proved to be easy for most candidates, questions 1(c); 2(d); 2(e); 2(f); 4(d) and 6(c) proved to be difficult thus affecting the overall performance. Most candidates had a challenge with giving explanations for their answers. Teachers are advised to teach learners early how to attempt questions that require description or discussion. Candidates also failed to display understanding when responding to questions that required them to evaluate. For example, when responding to the question on the evaluation of a well-made lapped zipper and well-made patch pocket, candidates could not do a proper analysis or develop their answers with reasoning, they listed the steps of attaching a lapped zipper and steps of attaching a patch pocket. Failure to do a proper evaluation resulted in most candidates scoring low marks on such questions. Teachers are therefore encouraged to guide learners on how to attempt such questions.

## Section A

## **Question 1**

## (a) <u>State the importance of iron in the human body.</u>

Most candidates attempted this question well, but few candidates wrote that iron provides/gives red bool cells, and marks were not awarded for such answers.

## The expected answer was:

Iron is needed for:

- the formation of red blood cells (haemoglobin) in the blood.
- transporting oxygen in the blood and around the body

## (b) <u>State the functions of fats in the body.</u>

This question was fairly done except that some of the candidates overlooked "functions of fats in the body" and included functions of fats in the cooking of food e.g. fat gives flavour and marks were not awarded for such answers. No mark was awarded for giving 'fats provide energy,' as this was included in the stem of the question.

## Expected answers were:

- Provide a source of fat-soluble vitamins.
- Food rich in fat provides a feeling of satiety.
- Fat forms part of the structure of cells.
- Fat is stored under the skin / Insulates the body against the cold.
- Protects vital organs (e.g. kidneys).

#### (c) State the symptoms of a deficiency in vitamin E

This was a challenging question for most candidates as they could not state the symptoms of a deficiency in vitamin E. Most candidates wrote scurvy, pellagra or very rare and marks were not awarded.

#### The expected answers were:

- Nerve and muscle damage that results in the loss of feeling in the arms and legs,
- Muscle weakness,
- Weakened immune system.
- Vision problems

#### (d) How to maintain freshness in bread

Most candidates fairly attempted this question. Some candidates stated that bread must be kept in the refrigerator and were not awarded marks.

#### The expected answer was:

- Bread should be stored in a covered container or bread bin.
- Wrapped in a plastic bag to prevent drying.
- Wrap in a moisture-proof bag and freeze.

## (e) Explain the effects of oxidation on fruits and vegetables.

Most candidates failed to explain the effects of oxidation on fruits and vegetables. Most candidates gave an incomplete answer, they wrote that it turns fruits and vegetables brown and did not write 'due to enzymic browning" hence full marks were not awarded.

#### The expected answer was:

Oxidation causes fruits and vegetables to turn brown due to enzymatic browning.

## (f) Describe steaming as a method of cooking.

This question was well attempted. Some candidates even mentioned that steaming can be direct and indirect.

## The expected answer was:

In steaming the food is cooked by the steam from boiling water, the food does not come into direct contact with the water, use a tight-fitting lid to prevent steam from escaping.

## (g) Importance of labelling food preserves.

Most candidates attempted this question well. Some candidates stated the type of labelling on food preserves without explaining its importance. Answers that lacked the explanation part were not awarded full marks.

## Expected answers were:

- **Storage conditions required** to maintain the freshness and safety of food.
- "Date of preservation" useful to estimate the expiry date when the product needs to be used.
- **Name of preserve** for easy identification in case of colour loss.
- **Producer's contact details** for use by customers if interested in the product to enable customers to contact producers if they wish to complain about the product.

## (h) <u>Causes of faults in pastry making</u>

Most candidates were able to explain the causes of a hard or tough pastry but could not explain the causes of sogginess in pastry. This resulted in the loss of marks.

## Expected answers were:

## (i) Causes of sogginess in pastry

- Steam is not allowed to escape.
- Insufficient baking time
- Low temperature
- Wet fruit/overfilling fruit
- Too moist filling

## (ii) Causes of a hard or tough pastry

- Overcooking
- Over handling
- Wrong proportions of ingredients
- Too much flour is used in rolling.

- Conditions not cool enough when preparing pastry.
- Insufficient air introduced.

## Question 2

## (a) <u>State a process in a skirt which requires the use of diagonal tacking.</u>

This question was not well done. Very few candidates were able to state the process in a skirt which requires the use of diagonal tacking.

## Expected answers were:

- Waistband
- Pleats/gathers/disposal of fullness

## Reason

- For holding pleats in position before applying a permanent stitch.

## (b) List points to consider when choosing buttons to be used as a fastening.

This was well done by most candidates. Most candidates scored full marks on this question.

## Expected answers were:

## Consider:

- Type of garment
- Type of fabric
- Colour to match or contrast fabric
- Style/type of button
- Size of button
- Location where the button will be placed.

## (c) <u>State the points on the care of a steam iron.</u>

Most candidates attempted this question well.

## Expected answers were:

- Keep it clean.
- Remove water after use to prevent rusting.
- Use a pressing cloth to protect the fabric from scorching.
- Never iron over pins or buttons or other objects that will scratch the bottom.
- Prevent scorching by setting the iron to the correct temperature for the type of fabric.

## (d) <u>How to take a bust measurement?</u>

Candidates were not able to describe how to take the bust measurement. They wrote that the tape measure should be flat against the figure, measure straight across the back, the tape measure should ride over the shoulder blades at the back but left out that "measure over the fullest part of the bust", which resulted in full marks not being awarded.

## The expected answer was:

The tape measure should be flat against the figure, measure straight across the back, Measure over the fullest part of the bust and the tape measure should ride over the shoulder blades at the back.

## (e) Suggest ways to ensure economy in the use of water during textile production.

This was the most challenging question for the candidates. Candidates misinterpreted the question about the uses of water in textiles, hence their responses were dying, and preshrinking. Marks were not awarded.

## Expected answers were:

- Recycling the water
- Turn off taps after use/ ensure taps are not left dripping.
- Avoid overfilling the washing tub such that water spills over during washing.

## (f) <u>The name of the seam finish shown in the table.</u>

Very few candidates were able to answer this question. Most candidates misinterpreted the question and stated the name of the seam instead of the name of the seam finish i.e. french seam instead of edge stitching, plain seam instead of zigzag/overlocking hence marks were not awarded.

## Expected answers were:

(i) Edge stitching

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## Where used

- Side seams and Centre back of skirts/dresses for medium-weight fabrics
- Pants side seams for medium-weight fabrics.

## (ii) Zig-zag/Overlocking



## Where used

- Side seams and centre back of skirts/dresses
- Pants side seams
- Suitable for firmly woven fabrics

## (g) Fabric characteristics considered when choosing a seam.

This question was fairly answered. A few candidates misinterpreted fabric characteristics to be considered when choosing a seam to points considered when choosing a seam. Marks were not awarded.

## Expected answers were:

## Consider:

- The texture of the fabric
- Visual effects/embellishment
- Stretchiness/elasticity of the fabric
- Thickness of the fabric
- Whether the fabric is fraying or not
- Weight of fabric

## Section B

## **Question 3**

## (a) <u>Functions of shortening in flour mixtures.</u>

This question was fairly done.

## Expected answers were:

- Gives product crumbly/flaky/crispy textures.
- Improves the structure of the dough.
- To give flavour
- To trap in air
- Makes product to be tender.
- Improves the workability of the dough and increases plasticity.

- Coats the grains of the flour
- Give the flour a waterproof coating and prevent gluten from developing.
- To make creams and frostings for desserts, cakes, and pastries.

## (b) <u>To make thick royal icing thin.</u>

This question was not fairly done. Some candidates misinterpreted royal icing for butter icing. Their responses include mixing margarine and icing sugar. Marks were not awarded.

## Expected answers were:

- Add a teaspoon of water at a time/ spray water stirring into the icing until the correct consistency is achieved.
- Add glycerin and stir.
- Add a drop of lemon juice and stir.

## (c) <u>Description of Melting method in cake making.</u>

This question was not well done. Most candidates mentioned melting fats only and omitted 'allow to cool" before folding dry ingredients into the mixture which resulted in full marks not being awarded.

## The expected answer was:

Sift dry ingredients together, melt fat, sugar and syrup or treacle together, allow to cool, beaten eggs added if required, dry ingredients added and fold into the wet mixture, mix all the dry ingredients to a pouring consistency.

## Explain the function of whisked egg whites when making a sponge cake.

Most candidates were able to answer this question.

## The expected answer was:

Egg white protein can stretch as it is whisked or beaten allowing the sponge cake to rise. Trapped air adds lightness to the sponge cake. Eggs also help the mixture to set and add colour. Beaten egg whites contribute to the structure of the cake.

## (b) <u>Food hygiene measures to be observed in a braai business.</u>

Candidates scored low marks on this question. They listed personal hygiene rules instead of discussing food hygiene and reasons why food hygiene is observed and the result of not observing food hygiene.

## The expected answer was:

- From stocking ensure chicken is bought from suitable storage.
- Under conducive temperatures that inhibit bacterial growth
- Transport facilities must also be clean and at a suitable temperature. Defrosting must be appropriate.
- Thaw once do not re-freeze to avoid contamination. Food handling must be minimal.
- Wash hands after handling raw meat to avoid cross-contamination. Preferably plastic hand gloves must be used when mixing the meat with the marinade.
- Avoid cross-contamination by using separate utensils for cooked and raw meat.
- Keep raw meat and cooked meat separately during preparation and serving.
- Ensure the meat is thoroughly cooked.
- Ensure clean packaging materials for serving.
- Hair must be covered.
- Appropriate protective clothing e.g. apron
- Sneezing must be avoided during the preparation/serving of food.
- Cover cuts.
- Keep all working surfaces/utensils clean/bacterial spray.
- Careful disposing of waste materials/bins covered/empty and wash regularly.

Candidates had to discuss at most two food hygiene rules regarding a braai business.

## Question 4

## (a) <u>Symptoms of food poisoning.</u>

This was well done by most candidates.

## Expected answers were:

- Vomiting
- Diarrhea
- Fever
- Stomach cramps.
- Headache
- Feeling sick
- High/low body temperature
- Weakness and lack of energy

## (b) <u>Functions of a flavouring agent in cakes.</u>

Most candidates answered this question.

## Expected answers were:

- Give flavour/enhance aroma.
- Improve taste.

## (c) Faults in cake making and causes.

Faults in cake making were identified by most candidates except for (iii) where most candidates referred to the fault as holes/pores/blisters in the cake instead of an uneven cake texture. Marks were not awarded.

## Expected answers were:

(i) Cake peaks and cracks/breaks

## <u>Causes</u>

- The cake mixture is too stiff.
- Too much oven top heat
- The oven temperature was too high.
- Too much mixture was used for the size of the tin.
- Too much-raising agent

(ii) Cake hollowed/sags in centre/sunken top.

## Causes

- Too much liquid used.
- Too much leavening
- Low oven temperature
- The oven opens before the cake sets.
- Too much sugar
- Too much fat

(iii) Uneven cake texture

## Causes

- Insufficient mixing
- Overmixing
- Too much-raising agent
- Incorrect size of tin
- Cool oven

# (d) <u>Discuss the use of plastic as a food packaging material and suggest appropriate methods</u> of disposing it after use.

This question was poorly done. Candidates could not discuss the use of plastic as a food packaging material and suggest appropriate methods of disposing it after use. Marks were not awarded. Candidates were expected to write about the advantages and disadvantages of using plastic as a food packaging material and methods of disposing it after use.

## Expected answers were:

## Advantages

- Durability and strength
- Light in weight
- Easy to transport.
- Affordable and versatile (Cheap)
- Air-tight and water-resistant
- Can be made into different shapes to accommodate the product.
- Does not absorb smells.
- Do not become soggy.
- Printable good for advertising purposes
- Resistant to acids

## Disadvantages

- Environmental impact
- Health risk (Contain chemicals which can leach into food)
- Non-biodegradable and pollution
- Limited recycling capabilities

## Disposal

- Landfills/recycling

A mark would be awarded for using appropriate terms.

## **Question 5**

## (a) <u>Reason for using hemming on a child's dress.</u>

Most candidates answered the question. A few candidates mistook hemming for a hem and gave reasons for a hem e.g. decorative. Marks were not awarded.

#### **Expected answers were:**

- Durability
- Withstand frequent laundering.
- Prevents fraying.
- Enables lengthening as the child grows.
- Neaten the edge.

#### (b) <u>Type of scissor</u>

Few candidates were able to name the scissors. Some candidates could not identify the scissors, they wrote embroidery scissors and dressmaker's shears. Marks were not awarded for such responses.

#### The expected answer was:

- Buttonhole scissors.

Use

- For cutting/opening buttonholes.

## (c) <u>Qualities of well-made gathers</u>

Most candidates were able to answer this question.

#### Expected answers were:

- Uniform
- Well distributed
- Pressed flat in the seam allowance.
- Even smooth in appearance
- Hang straight.
- Gathering stitch removed

## (d) <u>The difference between a raglan sleeve and a set-in sleeve</u>

Few candidates were able to tell the difference between a raglan sleeve and a set-in sleeve. Some candidates described the set-in sleeve only thus full marks were not awarded.

## The expected answer was:

A ragian sleeve is attached to the garment by diagonal seams that extend from the underarm to the neckline whilst a set-in sleeve is attached to the garment by a seam that goes around the armhole.

## (e) Evaluate a well-made lapped zipper.

Some candidates were able to evaluate a well-made zipper. Some candidates listed the steps of attaching a lapped zipper which resulted in the loss of marks.

## The expected answer was:

- Flat when closed and neat in appearance
- The zipper should lie smoothly without stretching or puckering the fabric.
- Have smooth even stitches, evenly spaced from the placket edge.
- Stitch across the bottom opening 1/8 inch beyond the zipper stop.
- Have thread ends secured and hidden in folds of fabric so that they will not be caught in the zipper teeth.
- Be a weight compatible with the fabric (light with light, heavy with heavy)
- Match fabric designs, such as stripes and plaids when the zipper is closed.

## Question 6

## (a) Explain the use of the following:

## (i) <u>Wool for a winter jacket</u>

Some candidates did well on this question while some did not as they cited wool as a good conductor of heat, which resulted in loss of marks.

## The expected answer was:

Wool is a poor conductor of heat and is therefore warm in winter. The fibres trap a lot of air, which does not conduct the heat away.

## (ii) French seam on toddler's garment

Most candidates cited "strong to withstand tear" and did not mention double stitched. Full marks were not awarded.

## The expected answer was:

The French seam is double-stitched, and it is strong enough to withstand tear.

## (b) How to enlarge the width of a set-in sleeve

Most candidates were not able to explain how to enlarge the width of a set-in sleeve pattern. Full marks were awarded if the candidate explained the process of pattern adjustment. Most candidates showed a limited understanding of pattern adjustment. Low marks were awarded. **The expected answer was:** 

Cut through the pattern at the required position and then insert a piece of contrasting paper to get the correct width. Pin in place and re-draw the lines of the outer edges so that there is a continuous line on all edges. Correct grainline since a sleeve forms a whole pattern. Total measurements required for adjustments must be used.

## (c) Evaluating a well-made patch pocket.

This question was poorly done. The candidates listed the steps of attaching a patch pocket instead of evaluating a well-made patch pocket. Marks were not awarded.

## The expected answer was:

- Corners well snipped, and notched to reduce bulk and make the pocket flat and smooth
- Pockets should be neatly attached to the garment with straight stitching straight, and even edges well-pressed.
- Upper corners are reinforced and securely attached to the garment for durability.
- Paired pockets must be the same size and shape.
- The correct size for the garment
- Location well located- at a level comfortable for the hand to reach. If decorative it should be placed where more suitable
- Square corners mitered; round corners symmetrical.
- Well-edge stitched (0.5 cm) and appropriate width of the hem.
- The pocket should suit the style of the garment e.g. can be used on blouses, shirts, and skirts.
- Pockets must be large enough to allow the hand in unless they are for decorative features only.

## EPCSE FOOD AND TEXTILES TECHNOLOGY (5926) Paper 3

#### **General comments on Proposals**

The number of candidates who sat for this paper increased this year compared to the previous year. The general performance was also better than the previous year as more candidates scored better marks even on the proposal. Packaging of the projects was done well, and all necessary items were provided from the centres.

## **STAGE 1 PROPOSAL**

## **INTRODUCTION – background information**

Most candidates presented good background information on both the Food and Textiles proposals. Candidates were able to present information on the main points for example on the Food Technology introduction; most candidates were able to present background information on the nutritional needs of teenagers with references. A few candidates presented information on the meals in a day and gave specific information on the lunch. A few candidates presented information on important things for teenage birthday parties. Very few candidates gave information on the courses of meals. Almost all candidates stated the importance of the cake at birthday parties. On the Textiles proposal, most candidates presented good background information on the day of the African child, design, and Traditional material. A few candidates presented information on embellishment, yet it was expected that they write about this.

## **PROBLEM STATEMENT**

Most candidates were able to come out with a well-reasoned problem statement and supported it well on both the Food and Textiles Proposals. This part of the proposal showed an improvement compared to the previous year hence most candidates did score well in this part.

## JUSTIFICATION

Most candidates did well on this part of the proposal as they were able to justify their reasons for undertaking the projects in both the Food and Textiles proposals.

## **METHODOLOGY Procedures**

Most candidates did well on the plans of action for both the Food and Textiles proposals as they produced a detailed plan of action and detailed order of work with appropriate methods especially on the Food proposal. Almost all candidates did not mention the appropriate technology to use. Only very few candidates mentioned some technology to use in the Textiles proposal. There are, however; candidates who presented minimal methodology or procedures.

## TIME FRAME

A few candidates came out with realistic time frames on the proposals, especially on the Textiles proposal. Some candidates even stated that it would take them days or a month to shop for the project which was not correct as candidates must shorten the time to a day since they are dealing with a client who does not have much time to wait for the service to be provided.

## REFERENCES

On this part of the proposal, there was a great improvement from the previous year as candidates mostly supported their background information with literature that was well referenced.

## **STAGE 2 PRODUCT DEVELOPMENT**

## (a) **PREPARATION /LAYOUT**

**Shopping list:** Almost all candidates did well on this part of the product development as they all had recipes and shopping lists for the dishes, they prepared in Food Technology and the material they needed for Textiles Technology. They all used appropriate purchasing units except for a few who did not put the units in their Textiles Technology projects.

**Pattern/Recipe provided:** Candidates did well also on this part of the product development as they all provided recipes for the dishes, they chose in Food Technology, and they all had patterns for Textiles Technology. The layout was done well by all candidates as they observed the layout pattern markings and the cutting rules during the cutting. The fabrics chosen were easily available. Very few candidates had one or two ingredients that were not easily available in Food Technology, otherwise, all ingredients were easily available.

**Plan of action:** Most candidates provided a detailed plan of action in the Food Technology with methods used to execute the plan. However, the equipment to be used and reasons for why the plan is executed were not stated yet candidates were supposed to mention these on the plan of action. Labour-saving devices were not mentioned also but were used during the practical examination, especially on Food Technology. Some candidates had pictures only without elaborating on the details of the plan of action based on what was on the pictures. This led to candidates losing marks. Most candidates did not mention the technology used in their Textiles plan of action. There are those few, however, who mentioned it for example: cutting with long even strokes using a dressmaker's shears etc. In Food Technology most if not all candidates did not mention garnishing or decoration in their plan of action, yet their projects were garnished and decorated. The same applied to the Textiles plan of action embellishing was not mentioned by candidates yet almost all projects had embellishment.

## (b) IMPLEMENTATION

**Time Management:** Almost all candidates did most activities on time and used the correct tools to save time. Only a few candidates (one or two) did not finish their projects well in both Food and Textiles Technology.

**Logical working:** Most candidates followed most methods/techniques to finish their projects. They showed an understanding of methods /techniques as they did not need assistance or needed very little assistance. Some candidates worked logically and methodically in a very good way, showing a good understanding of methods/techniques for executing the project.

**Techniques demonstrated**: Most candidates showed some good techniques, and their work was of an acceptable standard in both Food and Textile Technology. There are, however; candidates that showed very good to excellent techniques and produced elegant projects.

**Hygiene/safety:** Most candidates observed good hygiene and safety rules. They maintained clean work areas, washed dishes in between and covered the food.

**Resource Management:** Candidates managed resources well as they used quantities recommended for the projects and minimised waste in both Food and Textiles Technology.

Appropriate Equipment: All candidates used appropriate materials to accomplish the tasks.

## **PRODUCT STANDARD**

(a) Product realisation – final product: Most candidates presented products of a good standard. Their garments were wearable and met a good number of specifications. It is worth mentioning that this year the garments had a lot of processes, for example, disposal of fullness (pleats, gathers), openings (plackets, zippers etc.) cuffs, yokes, neckline finished mostly collars and other processes. Most dishes presented had a good texture and flavour with acceptable garnishing and decoration for the cakes. The products were of acceptable sizes, and they served the purpose. Some products were of an average standard and lacked texture and flavour but were still edible. A few candidates had crumbling cakes.

**Presentation**: The presentation of the products was done well by almost all candidates. Appropriate utensils were used. Garments were embellished and well pressed and folded well. Clean utensils were used, and garments were clean.

Environmental Impact: Most candidates used environmentally friendly materials.

## **STAGE 3 Evaluation of Product**

Candidates were supposed to assess their products according to the pre-set standards in the market, based on fit, embellishment, colour, size, texture and appearance. Very few candidates did this and even had literature on the pre-set standards. A possible modification was also not stated by most candidates, and they kept mentioning that projects were done well. Even when they mentioned that something was not done well, they did mention how they would correct it in the future. Some candidates stated challenges they faced in the schools for evaluation which was not acceptable. This part was generally not performed well by the candidates. Only a few candidates did well on this part of the project, especially in textile technology.