

EXAMINATIONS COUNCIL OF ESWATINI

EPCSE

EXAMINATION REPORT

FOR

FOOD AND TEXTILES TECHNOLOGY (5926)

YEAR

2022

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EPCSE FOOD AND TEXTILES TECHNOLOGY (5926)
Paper 2

General Comments

Nine (9) centres registered for EPCSE Food and Textile Technology (5926/02), with a total enrolment of 37 candidates in 2022. This indicates a decrease of 46% less candidates to previous year's enrolment (2021) of 69 candidates. The general performance also decreased compared to last year's, the highest candidate scored 61% while the lowest candidate scored 13% in 2022. In 2021 the highest candidate scored 65 % and the lowest scored 20%.

Questions 1(d) and (f); 2(c) and (f); 3(a) and (d); 6(b) proved to be easy for most candidates, **questions 2 (e) and (h); 3(e); 5(d) and (e); 6(d)** 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 descriptions 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 faced hip pocket, candidates could not do a proper analysis or develop their answers with reasoning. Teachers are therefore encouraged to train learners on how to attempt such questions.

Section A

Question 1

(a) **One function of sodium chloride in the body.**

Generally, not well answered.

Expected response: Sodium chloride is required to maintain the correct concentration of body fluids in the body.

(b) **One function of thiamine.**

Well answered, except that some of the candidates stated that thiamine provides energy.

Expected responses:

Helps release energy from carbohydrates.
Helps the body to grow.
Helps nerves to function properly.

(c) **Three functions of fat.**

Fairly well answered.

Expected responses were:

- Provides concentrated source of energy
- Provide a source of fat soluble vitamins
- Provide a reserve of energy
- Provides texture and flavour
- Food rich in fat provides a feeling of satiety

- Fat forms part of the structure of cells
- Fat is stored under the skin

- Protects vital organs (e.g. kidneys)
- Insulates the body/against the cold

(d)(i) Description of the stewing method

Most candidates had a challenge in describing the stewing method of cooking. Most candidates only stated that it is a moist method leaving out the 'slow' part. Most could not state the type of heat used which is convection method.

The expected answer was

'slow moist method of cooking food using convection heat in a covered pan at a low temperature for a long time.

(ii) Advantages of stewing

The advantages of stewing were stated well by most candidates, except a few who stated that it is a fast method yet it is not.

The expected answers were:

- Tenderises tougher / cheaper cuts of meat.
- Nutrient loss is kept to a minimum as the liquid can be served with the meal.
- Flavour is retained as liquid/gravy served with the meal.
- Whole meal can be served in one container saving time and cleaning up.
- Large variety of stews and casseroles can be prepared OR a variety of meats can be used in stews and casseroles.
- Economical method as many vegetables/pulses can be added, therefore the meal will go further.
- easy to prepare as the food will cook on its own over a low simmering heat.

(e) Advantages of incorporating convenience foods into family meals.

Most candidates were able to state the advantages of incorporating convenience foods in family meals.

The expected answers were:

- Use both fresh and convenient foods in proportions that suit the individual family in terms of money, time, likes and skill e.g. ice cream plus fresh fruit salad
- To improve colour e.g. use of convenient foods to garnish
- To give / add variety e.g. fresh fruits and tinned fruits
- To add flavour e.g. adding sauces to fresh foods
- To provide a complete meal
- Saves preparation time
- Provides dishes/meals that do not require complex skills
- Uses less kitchen equipment
- Uses foods in season with convenience food e.g. cabbage with tinned peas

(f) Points to consider when catering for a children's birthday party.

Points to consider when catering for a child's party were too general and not specific to the question.

Expected answers were:

- Money available - within budget
- Time available - for preparation and serving
- Needs of individuals - nutritional, likes, ease of eating, variety, colour
- Time of the year- use products that are in season for economy
- Skill of the cook - must be relevant to planned menu

- Numbers attending/portions
- Safety considerations/age appropriate e.g. cocktail sticks/knives
- Equipment available e.g. cooker, microwave,

(g) Three pieces of equipment used for cake decoration.

Most candidates misunderstood the question on cake decoration equipment with cake decorating ingredients.

Expected answers were:

Icing gun/piping bag; a set of nozzles; icing/biscuit cutter; icing board; spatula/scrapper; moulds; cake decorating turntable; wooden spoon; measuring spoons, cups, scale; mixer

Question 2

(a) Define the term 'multisize' as used in commercial patterns.

Question was generally well answered.

Expected response:

A pattern with many sizes

(a) Three guidelines for appropriate care of pinking shears.

Fairly well answered.

Expected responses were:

keep it in its sheath when not in use; use only for intended purpose; keep in a dry place; avoid dropping it; occasionally apply a drop of oil on its hinges; regularly clean with a soft dry cloth.

(c) Why crossway strip is useful for finishing curves.

Most candidates got this one correct.

Expected response: crossway strip can stretch so can neatly round curves and lay flat.

(d) Ways to straighten an off-grain fabric before layout.

Expected response:

- Pull diagonally opposite corners
- Pull the weft thread until one runs from selvedge to selvedge
- Fold fabric, putting selvedge's together then snip and tear;
- Pressing

(e) The method of sewing a slip hemming.

Candidates could not answer this question correctly. They failed to describe the whole process of sewing the slip hemming which is:

Expected response:

start with a double stitch/knot,
pick up one or two threads of garment fabric,
slide the needle through the folded edge and bring the needle out of the fold
repeat the process, stitches should not be visible, end with a double stitch.

(f) **Two ways of neatening a plain open seam.**

Question was well answer

Expected responses:

- Zig zag
- Edge stitching / clean finishing
- Overlocking
- Blanket
- Overcasting

(g) **Reasons why each of the following is found on the pack of a pattern envelope:**

Candidates did not understand what was required by the question, most gave information found at the back of the envelope instead of stating reasons for the information on the pack of a pattern envelope:

Expected responses:

- (i) **Body Measurements:** To be able to select the correct size; to be able to buy the correct amount of fabric
- (ii) **Notions:** To buy the correct type/ size and amount of items to complete the garment e.g. thread.

(h) **A reason for each sewing machine faults.**

Most candidates could not answer this question correctly, the common answer 'wrong threading' was provided for all the three sewing machine faults, which is not correct for (ii) and (iii).

The expected answers were:

- (i) Upper threads break: Wrong threading; tight upper tension and needle incorrectly threaded.
- (ii) Machine skips stitches: Needle may be incorrectly threaded or inserted; wrong needle size for fabric and damaged needle.
- (iii) Fabric does not move: presser foot up; thread matted in throat plate; feed dog not up; wrong threading

Question 3

(a) **Agents of food spoilage.**

Candidates were able to state the agents of food spoilage.

Expected response:

- Bacteria
- Yeast
- Moulds

(b) Association of vitamin C and iron

Few candidates were able to state the association between vitamin C and Iron, most candidates stated that vitamin C helps in the production of blood which is not correct.

Expected response:

Vitamin C assists the absorption of iron in the small intestine during digestion.

(c) Two reasons for preserving food.

Most candidates were able to state the reasons for preserving food but could not explain the reasons.

Expected responses were:

- To add variety to the food/diet
- add different forms of texture, colour and taste;
- to prevent waste- to store food when plenty or in season;
- to store food for later use- to have food items even if not in season;
- to make new products- food preservation can be a way of processing food e.g. jam making;
- prevents micro-organisms from multiplying
- makes environment not conducive for microbial growth;
- can save time, effort and fuel- as there is less waste in the diet.
- Lasts longer - so do not have to go shopping so frequently

(d) Caramelisation process

Caramelisation process was fairly well explained by most candidates.

Expected responses were:

- The sugar melts and becomes a syrup
- The colour of sugar changes / from white to brown when heated - due to the change in sugar molecules
- The longer the sugar is heated, the deeper the colour of the caramel
- The harder it sets when it is cooled

(e) Importance of following personal hygiene rules.

Most candidates had a challenge discussing the importance of following personal hygiene rules.

Expected response:

Helps prevent food contamination which can result from unwashed hands, uncovered hair, dirty clothes, sneezing or coughing on food; To ensure food safety, microorganisms transferred from human beings to food can result to food borne illness or food poisoning.

Question 4**(a) difference between bread flour and cake flour.**

Most candidates were able to state that bread flour has more gluten than cake flour.

Expected response: more gluten in bread flour than cake flour / cake flour has less gluten than bread flour .

(b) Importance of a food pyramid.

Responses given by most candidates on the importance of a food pyramid were inadequate.

Expected responses were: Guides the preparation of balanced meals; guides on quantities for the different foods.

(c) Nutritional needs of a nursing woman

Most candidates discussed the nutritional needs of a nursing woman fairly well.

Expected response: High biological value protein for the health of the mother during breastfeeding; Extra energy required for production of milk; Calcium and vitamin D for bone formation; Plenty liquids to replace water levels in the body which is lost as the baby suckles; Limited amounts of fat and sugary foods as it is essential she does not put on too much weight; To eat plenty foods that provide fibre such as whole grains, fruits and vegetables to prevent constipation

(d) Discussing drying method of preservation

Discussing the drying method of preservation was a challenge for most candidates. Most of the candidates just stated points which were not developed, substantiated nor explained.

Expected possible responses were: Drying is where by moisture is removed from food, to eliminate microorganisms which might lead to food spoilage; Hot and warm temperatures remove the moisture- sun/shade; Shelf life of food is improved: Suitable methods of fruits, vegetable, meat and fish; Easy to store as little space is used; Some colour, texture, nutritional content of food may be affected/Vitamin C may be lost/ some dried vegetables and fruits may be tougher; Blanching may be necessary to maintain Colour.

Question 5**(a) Points to consider when choosing a seam**

Most candidates were able to state points to consider when choosing a seam.

The expected response:

- Garment type
- Fabric type
- Shape of seam

(b) Example of a regenerated fibre.

Example of a regenerated fibre. Some candidates gave wool, polyester and line as examples. **The expected response:** Viscose, Rayon

(c) **A well-sewn double pointed dart.**

Describing a well sewn double pointed dart, most candidates had an idea of how a double pointed dart should be.

Expected response:

Correct width;

Tapered on both ends Well reinforced;

Well pressed towards the centre;

For medium to heavy fabric cut open and neatened;

Tapered ends similar in shape/point gradient:

Knot both ends if using fine fabric/ backstitch if using medium to thick fabric;

Well sewn double pointed dart.

(d) **Garments suitable for attaching a zipper using:**

Expected response:

(i) **Lapped method.** Most candidates responded well to this question.

(ii) **Fly method.** Some candidates could not give the correct response.

Expected response: jeans/shorts

(e) **Evaluate a well-constructed faced hip pocket.**

This was one of the difficult questions, some candidates did not seem to have an idea of what a faced hip pocket is, others were writing about an in seam pocket.

The expected answers include:

Interfaced inside the opening edge;

Pocket facing well machine stitches;

Inside seam trimmed and graded;

Curved areas notched and pressed flat;

Facing under stitched to keep it from rolling to the right side;

Facing turned to the inside along the seam line and well pressed;

Seams well neatened.

Question 6

(a) **Properties of polyester.**

Most candidates gave correct answers to this question.

The expected answers include:

- Strong and durable
- Does not crease easily
- Does not shrink
- Not absorbent
- Poor conductor of heat
- Easy to dye

- Easily washable
- Quick drying
- Mildew resistant
- Abrasion resistant
- Resistant to most chemicals
- Resistant to stretching/shrinking

(b) **A fastener suitable for a school shirt.**

Most candidates were able to answer this question correctly, only a few candidates gave an incomplete answer, they wrote a button and left out the button hole.

The expected answers;

- Button and button hole
- Studs
- Toggles
- Snap fasteners
- Poppers

(c) **Steps to follow when attaching a gathered set in sleeve.**

Most candidates knew the answer but failed to present the steps in a reasonable order, they also had a challenge with use of appropriate technical terms such as notches, under arm seam etc.

The expected answer was as follows:

With right side of garment and sleeves together, match notches, under arm seams and raw edges; distribute gathers evenly on the sleeve head; pin on fitting line ensuring side seams are pressed open; Tack and machine stitch on fitting line; neaten the armhole seam; remove tacking and press

(d) **Evaluate the suitability of using woollen fibres for winter garments.**

This was another question which gave most of the candidates a challenge. Candidates failed to show a thorough understanding and ability to evaluate the suitability of woollen fibres for winter garments.

Expected response: Wool fibre is a poor conductor of heat and therefore the fabric made from the fibre are considered most suitable as winter wear; Wool fibres can be knitted, knits have a bulk structure which traps air for insulation; Crimp structure in woollen fibres makes wool to a greater bulk than most textiles and they hold air which causes the fabric to retain heat; The hairy structure of woollen fibres traps air, retaining warmth to a wearer; Highly breathable fibre.

EPCSE FOOD AND TEXTILES TECHNOLOGY (5926)
Paper 3 - Practicals

General comments

This paper was done by 39 candidates and there was a huge drop in the number of candidates in the schools that did the subject. Only nine out of fifteen schools enrolled for the subject this year. The performance of the candidates was generally better compared to the previous year. There was also a great improvement in the packaging of the individual candidates' work.

STAGE 1

PROPOSAL: The writing and presentation of the proposal showed an improvement from the previous year although there were a few centres that still showed the same level as the previous year especially when it comes to writing the problem statement.

Background introduction and information: Most candidates tried to come out with clear background information on the food items and fabric to be used and provided references. A few candidates went to an extent of providing the nutritional needs of the teenagers on the food project. They also touched on the unpopularity of the use of traditional fabric in preschool children's clothing and how that affects the culture. However, a few candidates did not have any references in their background information. Most candidates stated the purpose of the project well on both the food and textile projects.

Problem Statement: There were a few candidates who came up with a clear problem statement for their projects. Mostly these candidates identified the problem of the non-use of the traditional fabric for preschool clothing and stated how its use will be of an advantage to them as entrepreneurs.

Justification: Candidates managed to give reasons why they were undertaking the projects. Few candidates did not write the justification for the project.

Methodology: Most of the candidates presented a fairly good proposed plan of action, especially on Food Technology as all of them had the order of work. Some candidates had a plan of action for the Textiles Technology although others only presented a few steps and costs for the garment.

Time Plan: Most candidates presented time plans with unrealistic time frames as some stated that it would take a month to consult the customer. There were very few candidates who had realistic time frames.

References: A good percentage of the candidates provided a well-written list of references except for the few who did not reference well or they provided a list of references that were not quoted in the text.

STAGE 2

Product Development

(a) **Preparation/Layout:** Most candidates used appropriate purchasing units (ml, g, kg, and m) on their ingredients and yardage. The amounts were mostly what was required for the projects. Very few candidates did not use the appropriate units. Most candidates did show how the project will be executed by showing pictures of the layout, cutting and sewing of the Textiles Technology projects. Very few candidates did not have pictures for these projects. For Food Technology a few candidates had pictures of some other variations of foods that can be cooked using different flours. They also like the rest of the candidates had pictures of the finished products.

Pattern/recipe provided: All candidates provided recipes for the dishes they were going to cook. They all had patterns for the traditional dress for the preschool child.

Plan of action: Most candidates provided a plan of action for both projects that indicated the amount of time, methods and temperatures needed to finish the tasks some even indicated dovetailing. However; few candidates stated the equipment to use in executing the plan and why the plan was executed. No candidate stated labour-saving devices although these were used during the implementation of the plan during their food practical. No candidate indicated garnishing and embellishment in the plan of action yet these were done on almost all the projects for both foods and textiles.

(b) Implementation

Time management: Almost all candidates managed the time well as they finished all the tasks on time, and they all selected correct tools to save time. Only very few candidates did not finish the projects on time.

Logical working: Most candidates worked logically and methodically showing good understanding of the methods/ techniques to finish the task. A few students worked in an excellent way demonstrating a high level of understanding of the tasks in all the projects. There was a case of a candidate who used wrong methods for preparing the food project. Almost all candidates did not need assistance and very few needed such.

Techniques demonstrated: Most candidates demonstrated very good techniques in working. Dishes were garnished appropriately by most candidates and most garments were embellished.

Hygiene/safety: Almost all candidates demonstrated high standards of hygiene except for a few cases where hygiene was not followed well as their work area would be messy at times. Candidates mostly washed dishes in between and used clean and correct equipment. They also

covered the uncooked and cooked food. All candidates wore proper covering (aprons and head covers) clothing throughout the practical examination in the food project. All garments were clean, well-ironed and folded neatly.

Resource Management: Candidates used quantities recommended for the dishes. No candidate used leftovers. Waste was minimised by most candidates as no food was thrown into dustbins. However, there were one or two cases where the food was burnt. Stoves were switched off after use thus preventing the waste of fuel.

Appropriate equipment: Candidates used most materials appropriately to do the practical from preparation, cooking and serving the dishes.

(c) Product Realisation/Final Product

Product Standard: Most products (dishes) were of a good standard in terms of flavour, texture and colour. Most candidates used appropriate garnish. Different types of products of the good standard were done by most candidates. Almost all candidates came up with products that served the purpose except for one or two that did not serve the purpose.

Presentation:

Environmental Impact: On average candidates used cling wrap for covering the food and plastic is not environmentally friendly. However, some candidates did not. They used lids for the serving dishes,

STAGE 3

Evaluation of Product (written evidence by candidate)

Pre-set standards: Few candidates made a good attempt on this one as they evaluated their products based on some of the aspects like nutritive value, taste and garnish, fit, embellishment, and colour. However, a lot of candidates would write things like they are not used to the sewing machine instead of evaluating the features of the garment. They would also write about how well their dish was without writing about the colour, texture, size and appropriate appearance. Not even one candidate mentioned anything about how environmentally their projects were. Some candidates had pictures only without any evaluation, yet they were supposed to evaluate their projects and say how they would improve their products to meet the pre-set standards.

Possible modifications: Very few candidates suggested possible modifications to their products as they did mention for example next time they would not over handle the dough for their pie so that it would be crisp. Some just wrote next time they would do better without actually telling what exactly they would do.

Ultimate purpose: Most candidates did write about the product serving the purpose it was meant for. Amongst those, there are some that presented pictures of the finished dishes and also pictures of preschool children wearing the garment to support that their projects did serve the ultimate purpose.

Support and Guidance (teacher): According to the scores presented by teachers, most candidates did not need a lot of guidance from the teachers. There were very few cases that showed that the candidates needed guidance from their teachers.