



EXAMINATIONS COUNCIL OF ESWATINI
Junior Certificate Examinations

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JUNIOR CERTIFICATE EXAMINATION

CONSUMER SCIENCE PAPER 2

540/02

MARK SCHEME

MAXIMUM MARK 100

SECTION A

(a) Definition of terms:

i) Dish: is a specific food preparation / a distinct food or variety of food ready to eat or to be served [2]

ii) Starvation: Starvation is a severe deficiency in caloric energy intake, below the level needed to maintain an organism's life, can result in death due to no or little food. (A well explained point) [2]

(b) (i) Vitamin which assists in the absorption of Iron

Vitamin C [1]

(ii) Natural source of vitamin D

Sunshine [1]

(c) Keeping water safe for drinking.

- add tiny amounts of bleach/ chlorine to water
 - boil water and leave to cool down overnight in a covered container
 - Install a filter unto a household tap
- (Any three) [3]

(d) Ways to control food poisoning

- Always keep food covered-to avoid flies and other pests/bacteria in air
- Do not use cracked or chipped equipment- may harbour dirt
- Never use the same chopping board for cutting cooked and raw meat- cross contamination.
- Thoroughly cook meat, chicken and fish- so as to destroy toxins
- Dispose of stale food- may be eaten and cause infections
- Never lick your fingers while preparing food. Instead use a spoon to taste wash it after use- bacteria in mouth

(Any two) [4]

(e) Describe the dietary needs for a pregnant woman in relation to the following nutrients:

i) Protein:

- needs for the development of the foetus
- Maintenance and buildup of body tissues/ growth especially teenage mothers **(Any one correct point) [1]**

ii) Calcium:

- development of bones and teeth of the mother and fetus
- to prevent dental caries from the mother **(Any one correct point) [1]**

iii) Iron:-

- formation of blood for the fetus and the mother
- for the baby for have enough iron stored for six months after birth. **(Any one correct point) [1]**

(f) Rules when preparing salads:

- use fruits and vegetables that are crisp, firm and fresh
- green leafy vegetables should be green, crisp and firm
- salads should be easy to serve and eat
- should have variety in colours, flavours and textures **[4]**

(g) Advantages of a gas stove.

- the flame may be regulated to give any degree of heat
- no special saucepan required
- gas stoves heat quickly and are easy to use
- they are easy to clean and cheaper
- they do not overheat the kitchen
- cylinders of gas may be used where no permanent electricity is available

(Any two) [2]

(h) Answer True (T) for correct statement and False (F) for incorrect statement

i) Houseflies are attracted by cracked furniture in the house.....**F**

ii) Cockroaches breed in warm places and moist crevices in walls.....**T**

iii) Rats enter the house through the window and door only.....**T [3]**

[25 marks]

QUESTION 2

(a) Equivalents weights:

Homely	Metric
2 dstsp	20 ml
3C	750ml
1l	1000ml
4 tsp	20ml

[4]

(b) Functions of dietary fibre in a meal.

- fibre provides bulk in the digestive tract.
- it assists in the elimination of waste products from the body and prevents constipation.
- fibre helps to prevents weight gain thus preventing heart diseases, colon cancer, hemorrhoid, etc.

(Any two)

[2]

(c) Explain one function and one source of each of the following groups in the food pyramid:

i) Cereals and alternative

function:

- Supply energy to the body
- Provide fibre which prevents constipation

example: bread, rice, oats, pasta, sorghum, potatoes, cassava.

(Any correct function and example)

[2]

ii) Proteins dairy proteins

function:

- for building strong bones and teeth,

example: milk, cheese, yoghurt, cream.

(Any correct function and example)

[2]

(d) Nutrition and nutrients

- **Nutrition:** is the study of food and nutrients and how the body digests and absorbs food.

- **Nutrients:** are chemical substances that make up food. [2]

(e) Using fruits and vegetables to conserve their nutrients during cooking

- Do not soak vegetables or fruits in water as some soluble nutrients especially Vitamin C, will be lost-instead wash them under cold running water.

-peel fruits and vegetables thinly, do not peel young carrots and potatoes just scrub them thoroughly

-do not cut vegetables into very small pieces- as this will increase oxidation

-prepare them just before cooking- to prevent the destruction of vitamins by enzymes and oxidation.

(Any two well explained points) [4]

(f) Differences between yeast and baking powder.

Yeast

- a living organism
- produces CO₂ by fermentation
- needs moisture, warmth and
- slow action

Baking powder

- a mixture of an acid and alkali
- produces CO₂ by neutralisation
- only needs moisture to produce
- fast action

(Any two) [4]

(g) Conditions for cleaning windows

- avoid rainy days as raining water makes streaks on the glass window panes.

-avoid cleaning on dusty days as it can render cleaning ineffective.

- do not clean on very cold days, the glass window may crack when warm water used for cleaning into contact with the very cold glass pane

- avoid cleaning when the sun shines directly onto the window pane, the glass smears or streaks.

(Any three) [3]

(h) Difference between recycling goods and re-using goods

Recycling goods: is taking waste and turning it into new useful item. Use vegetables peel as animal feed.

Re-using: is taking waste and use it for another purpose. e.g. margarine tub container used as a soap dish.

[2]

[25 marks]

QUESTION 3

(a) Complete the table below

Nutrient	Deficiency disease	One function
(i) Iron	Anaemia	Formation of red blood cells (hemoglobin) which carry oxygen throughout the body
(ii) iodine	Goitre	-for the proper functioning of the thyroid gland

[4]

(b) Points to consider when planning meals for elderly people

- Food should be easy to digest and served in small amounts.
- Avoid highly spiced or heavy fried food.
- Soft foods are preferred, since as they age their teeth weaken or loosen.
- They need a balanced diet, but may not be able to eat as much as younger people.
- Include food rich in calcium for strong bones and teeth and enough dietary fibre for fruits and vegetables to regulate the bowels.
- Include vitamin B complex for nerve functions, Vitamin C to fight infections.

(Any three)

[3]

(c) i) Reasons for coating food before frying

- to reduce oil absorption during deep frying/ prevents it from absorbing too much fat
- prevent the food from breaking up
- preserves the shape & texture of the food
- it seals in juices & flavour of the food

(Any two)

[2]

ii) Why are fried foods not suitable for children?

- The fats in the fried food makes it difficult to digest, yet children require food that is easy to digest
- Fats in the food cause obesity- a health risk to a growing child

(Any two)

[2]

(d) Cost effective reasons for preserving food.

- To make the food last longer
- Prevent wastage of food
- For availability even when out of season
- Food cheaper when in season

(Any two)

[2]

(e) Explanation on how food is preserved using methods

(i) Drying: when drying water or moisture is removed from the food through evaporation.

-Water or moisture is needed for the growth and reproduction of micro-organisms.

- However, if water is removed from food by evaporation, the concentration of sugar and salts is increased in the food, thus depriving micro-organisms of action.

(Any two well explained points)

[3]

(ii) Freezing: temperatures are much lower in a Freezer. This arrest the micro-organisms, making them inactive and unable to multiply. Therefore, food keeps longer without decaying

(Any three points)

[3]

(f) Cleaning of wooden chopping board.

- Dust well.

-Wet lightly with warm water, clean a portion at a time by scrubbing along the grain of the wood using a soft cloth.

- Rinse with clean warm water to remove soap, wipe with clean salty water to harden the wood.- dry well and leave to dry under shade.

(Any three logical steps)

[3]

(g) Reasons of the following in the cleaning of kitchen equipment

- (i) **Oiling a three legged pot before storage:** so that it does not rust
- (ii) **Wash plastic in warm soapy water:** so that it does not lose shape
- (iii) **Rinsing drinking glasses in water with vinegar:** to prevent staining

(Three correct reasons) [3]

[25 marks]

[Total marks for Section A: 50]

SECTION B

Question 4

(a) Name of the pocket found on most front of man's pants. [1]

Faced hip pocket

(b) The two ways that can dispose fullness in boys' pants.

Single pointed darts, knife pleats, casing [2]

(c) Two ways of finishing a neckline.

Binding/crossway strip
Facing / crossway facing
Collar [2]

(d) Reasons for starching

- Keep cotton and linen looking crisp and fresh.
- Make the surface of the fabric smooth and shiny.
- Helps to repel dirt.
- Prevent stain from being absorbed into the fabric.
- Makes ironing easier
- Improves appearance

(Any three points) [3]

(e) Three methods that can be used to transfer pattern markings.

- **Tailor's chalk** – remove pattern piece and draw on the fabric with the tailors chalk the markings shown on the pattern piece. Each fabric piece is drawn separately.
- **Dressmaker's carbon paper and tracing wheel** – fold the carbon paper such that it face outwards slip it in between two layers of fabric. Run tracing wheel over pattern piece to transfer markings on the fabric in a form of dotted rows.
- **Tailors tacking** – pattern markings are transferred on both side of each piece of fabric are marked at once and the threads can be easily be removed.

(Three well explained points)

[6]

(f) Groups of care labels.

Washing, bleaching, drying, dry cleaning, ironing,

(Any three)

[3]

(g) The reasons for using the following laundry agents.

- i) **Bleach**-brightens discoloured whites clothes and to remove stains.
- ii) **Fabric softener**-added to the last rinsing water to make clothes soft and relaxes the fibres in the fabric-prevents static electricity.

(Any two correct points)

[2]

(h) How can the following stains be removed:

- i) **Blood stain**-soak in cold, salted water and wash to remove stain. **[3]**
- ii) **Ink**-rub affected area with milk or lemon. Wash, then boil. **[3]**

[Total: 25 marks]

QUESTION 5

(a) Definitions:

Selvedge - finished edge of a fabric, where it is not cut.

[1]

True cross - where warp threads and weft threads are folded at 45° angles/ where fabric is folded diagonally so that the cut edge lies along the selvedge.

[1]

(b) Functions of the sewing machine parts:

- (i) Feed plate:** it covers the feed dog and also has a seam allowance width guide
- (ii) Presser foot:** it holds the fabric in place while sewing
- (iii) Feed dog:** it moves the fabric forward while you sew

(Three well explained uses)

[3]

(c) Functions of interfacing on a garment.

- Give crispness and body to collars, cuffs, waistband, belts or pockets.
- Strengthen fabrics.
- Prevent stretching of parts of a garment that are under strain.
- Help opening to keep their shape.

(Any correct functions)

[3]

(d) Uses of washing soda in laundry.

- breaking down fats during pre-soaking/emulsify grease
- helps dissolve protein stain
- softens hard water
- removes acidic stains

(Any correct uses)

[3]

(e) Reasons for each of the following processes in laundry

- i) **Soaking**-to remove none-greasy dirt, to loosen dirt, to dissolve soluble stains, to soften starch, clothes become wet and are easier to wash or soaking saves washing time.
- ii) **Drying under shade**- to avoid discoloration
- iii) **Ironing**-to remove creases and return the garment to its original appearance.
- iv) **Airing**- to remove all traces of moisture that can caused mildew stains. it is unhealthy to wear damp clothing.

(Any correct reasons)

[4]

(f) Stains removal of:

(i) Chewing gum:

- pick off as much gum as possible
- rub with an ice cube and soap
- treat with a grease solvent

(Three correct steps)

[3]

(ii) Candle wax:

- Scrape off as much wax as possible.
- place stain between absorbent paper or brown paper
- Press with moderate heat hot iron
- Wash.

(Three correct steps)

[3]

(g) The difference between hard water and soft water.

- **Hard water**-natural water that contains mineral elements such as calcium carbonate, magnesium carbonate and does not lather well when used for laundering and will form a scum.
- **Soft water**-pure water and will produce a good lather when soap is added, makes washing easier.

(Correct differences)

[4]

[Total: 25 marks]

Question 6

(a) Definition of a fibre- a smallest unit of a fabric used to manufacture clothes **[2]**

(b) Seam suitable for children's clothes.

i) French seam

[1]

ii) Reason: Strong and durable.

Because it is double stitched/self-neatened

[1]

(c) Qualities of a good seam

- Should be strong and durable.
- Should lie flat and stitching be accurate.
- Have an even seam allowance.

- Be sewn using thread that is the same colour as the fabric. [3]

(d) Points to consider when choosing openings

- they should be long enough to be functional
- must be well sewn and neatly finished
- must be suitably located and long enough to allow dressing and undressing
- should be easy to fasten and unfasten
- openings that overlap must fasten right over left for girls and left over right for boys
- both sides of the opening must be equal length and sewn at the end to keep the opening in position
- they should provide enough under wrap to prevent gaping
- fasteners should be sewn on double fabric
- they must be placed in a seam or in a slash that is cut on the straight grain
- they must be strong, flat and neat
- they must maintain their position when the garment is worn

(Select any two) [2]

(e) Reasons for each of the following when laundering a woollen item.

- Measuring the length and width of the garment**- in order to stretch it to the right size while drying
- Use knead and squeeze method when washing** – to prevent stretching.
- Dry flat under shade** – to maintain correct size of the item.
- Press with a cool iron** – to avoid shrinking of wool

[4]

(f) Fasteners suitable for children clothes.

Velcro, hook and eye, press studs, buttons and buttonholes

[3]

(g) Properties of linen that makes it suitable for dish towels.

- It is durable and strong.
- It absorbs moisture easily.
- Does not soil easily.
- Can withstand high heat
- Not affected by moulds and alkalines

(Any two)

[2]

(h) Care label symbols found on white cotton shirt

	Hand washing only
	Bleach
	Tumble dry
	Ironing (hot iron)
	Hand washing only
	hand wash in hot water (60 degrees)
	hand wash in warm water (40 degrees)

(Any two named and well-drawn) [4]

(i) Shoe polish stain removal

- Rub the stain with lard
- Wash with warm soapy water

[3]

[Total: 25 marks]

