



**EXAMINATIONS COUNCIL OF ESWATINI**  
**Junior Certificate Examinations**

**CONFIDENTIAL**  
*November 2020*

***Confidential***

***MARK SCHEME***

**CONSUMER SCIENCE PAPER 2**

***{540/02}***

***MARKS: 100***

**QUESTION 1****(a) Definition**

- (i) **Meal pattern** - set of food components, food items and minimum quantities required for breakfast, lunch or supper for a specific age group [1]
- (ii) **Obesity**- excessive body weight/ weighing more than the required weight for height/ results from taking more calories than the body requires [1]

**(b) Reasons for following nutrients to the various groups:**

| <b>Nutrient</b>      | <b>Family member</b> | <b>Reason</b>   |
|----------------------|----------------------|---|
| (i) Complete protein | Invalid              | To maintain and repair worn out cells   |
| (ii) Iron            | Teenage girl         | To prevent anaemia, for blood formation to replace blood lost during menstruation |
| (iii) Sodium         | Manual worker        | To replace salts lost through sweating  |

[3]

**(c) Causes of the following diet related disorders**

- (i) **Enlargement of thyroid gland** - lack of iodine
- (ii) **Wounds fail to heal properly** – lack of vitamin C/ lack of protective foods mainly fruits and vegetables. [2]

**(d) Methods of tenderising meat at home**

- Mincing / beating with a meat hammer
- Marinating with spices and vinegar
- Cutting fibres across

[3]

**(e) Freshness of fish**

- bright prominent eyes (large eyes)/ not sunken
- fresh fishy smell/odour
- plentiful scales
- firm stiff tail/flesh

**(Any three)****[3]****(f) Reasons for Large holes in bread**

- **insufficient kneading**- to breakdown the large particles
- **over proving**- produce large uniform carbon dioxide particles
- **oven temperature not hot enough for first 10 minutes** –yeast was not killed during baking, thus fermentation continued.

**(Any two)****[4]****(g) Freshness in root vegetables**

- no sprouting; without eyes
- fresh skins
- **firm**

**(Any two)****[2]****(h) Reasons for controlling the following pests**

- **Housefly**: to avoid depositing germs into food/people
- **Bed bugs**: to avoid feeding on human blood

**[1]****[1]****(i) How to care of cast iron pot**

- keep clean and dry – otherwise it will rust
- handle **carefully**- as it will break if dropped
- never heat saucepan without water in it- has a rusting effect
- rub with fat or oil if is to be stored for sometime

**[4]****[25 marks]**

**QUESTION 2****(a) Nutrients required to correct the following:**

**(i) Enlargement of the thyroid glands** – provide food with iodine

**(ii) Wounds fail to heal properly** – provide food with vitamin C [2]

**(b) Fat soluble vitamins found in green leafy vegetables**

- Vitamin A, E and K (Any two) [2]

**(c) Healthy guidelines for people with hypertension**

- eat less or no salt
- eat less or no fatty foods
- eat less or no sugary foods
- eat fresh fruits and vegetables (Any two) [2]

**(d) Causes of a close, heavy texture in cakes**

- to cool an oven
- insufficient cooking
- Insufficient raising agent used
- Insufficient liquid/ Too stiff a mixture
- wrong proportion of flour to fat (too much flour) (Any two) [2]

**(e) Factors for serving toddlers**

- Serve balanced meals
- Serve small portions
- Colourful meals
- Easy to digest meal (avoid fatty foods)
- Avoid sweet food to avoid a sweet tooth (Any two) [2]

**(f) Distinguish between fermentation and neutralization**

**Fermentation** - is the process whereby the yeast plant is mixed with sugar to expand while

**Neutralization** - is a chemical reaction which takes place when an acid and an alkali are combined. [2]

**(g) Ways of incorporating air into flour mixture**

- **Sifting** dry ingredients - so air can be incorporated in-between the flour
  - **Creaming** fat and sugar - air is tangled in creamed mixture
  - **Whisking** egg and sugar together - air is tangled in the egg white
  - **Rubbing fat** into flour - air is incorporated between flour particles as the flour is raised above the bowl
  - **Folding and rolling** pastry - air is trapped between the layers
- [Any two] [4]**

**(h) Reasons for techniques in food preparation:**

- (i) **Drying potato chips before frying** - to avoid **spluttering** of fat  
- to avoid frying wet food
- (ii) **Adding milk gradually and stirring when making a sauce** - to prevent lumps
- (iii) **Baking blind when preparing a flan** - to cook pastry before adding filling, avoid overcooking filling / **undercooking pastry** [3]

**(i) Functions of parts of a sink**

**Tap** – This draws water from the pipe into the house

**Plug** – This stops water from running down the drain when washing or rinsing utensils

- Allows water down the drain after washing [2]

**(j) Differentiate between roughening and warping of wood.**

**Roughening** – when wood loses its **smoothness**

**Warping** – when wood bends and loose **it's** shape

[2]

[25 marks]

### QUESTION 3

**(a) Dietary need-** refers to intake of sufficient quantities of foods from each food group, according to someone's age and lifestyle

[1]

**(b) Nutrients from offals**

- Fat
- Iron
- Vitamin A and B
- Complete protein

(Any three)

[3]

**(c) State two ways of heat-treating milk.**

- Pasteurization
- Sterilization
- Homogenization
- Ultra heat treatment (UHT)

(Any two)

[2]

**(d) Two symptoms caused by lack of chlorine in the body**

- Appetite loss
- Dehydration
- Tiredness
- Badly formed teeth

(Any two)

[2]

**(e) Select the dish to match courses:**

**Main course:** mutton curry,

**Dessert:** fruit salad

**Accompaniment:** Green salad/roasted peanuts

[3]

**(f) Rules for good table decorations**

- Can be a flower arrangement, bowl fruit or ornament
- Not high arrangement- leads to difficult communication
- Fresh flowers with a sweet smell- avoid an unpleasant smell

- Use dried winter flowers, ribbons and grasses
- Clean and well laundered table clothes
- Table clothes must suit occasion – hang evenly
- Chairs to be decorated with chair covers and ties
- Use table runners to bring out color
- Good clean underplate **(Any three)** **[3]**

**(g) Brine solution method to test eggs for freshness**

**Brine solution method:**

- Dissolve 2 T of salt in 2 cups water- put in egg, sinking means freshness, floating means staleness.
- [2]**

**(h) Reasons for observing the following rules in pastry making:**

**(i) Rolling lightly – to avoid squeezing out air** **[1]**

**(ii) Relaxing the pastry – to rest gluten/ to soften gluten and improve its quality** **[1]**

**(i) Two ways to prevent flees in the home.**

- Scrub floors well
- Spray with appropriate insecticide
- Wash pets with insecticides regularly
- Keep home hygienic **(Any two)** **[2]**

**(j) Cleaning a wood/coal stove**

- protect the area around the stove with newspaper remove ash and all movable parts
- scrape off soot beneath the movable parts and dispose ash
- replace parts, dust using a cloth
- apply polish and leave to dry
- clean other parts according to type
- remove polish and shine the surface

**(Points should be in order)** **[5]**

## SECTION B

## QUESTION 4

(a) **Yarn** – when two or more fibres (threads) are twisted together to form a continuous strand [1]

(b) **Types of pockets**

**Girl's Tunic** - patch pocket / in seam pocket

**A boy's school shirt** - patch pocket [2]

(c) **Article made using Knitting abbreviation** P2 tog – purl two together  
- **Knitted articles**, e.g. (Woolen jersey/ boots/scarves, etc) [1]

(d) **Properties of wool**

- Poor conductor of heat/ **warm to wear**

- Soft, comfortable to wear

- Absorbent

- Durable

- Inflamable (Any three) [3]

(e) **Matching type of a needle with its use**

**Darning** Long and suitable for darning

Sharps Long for all purpose sewing

Crewels Medium length for embroidery

Between Short for general sewing [3]



**(f) Difference between shaped facing and crossway facing**

**Shaped facing** - consist of several sections of pattern edge to be neatened / cut on same grain edge to be neatened

**Crossway facing** - a narrow strip of light weight fabric cut on the bias / true cross [2]

**(g) Suitable washing method for**

**(i) Blazer** - Dry Clean / Sponge and Press

**(ii) Napkin** - Hand wash using Friction [2]

**(h) Three reasons for softening hard water**

- It wastes soap as more soap is needed to clean garments
- It takes time for **lather** to form and instead scum is formed
- Energy is wasted resulting from too much rubbing when washing clothes
- Garments are worn out sooner, caused by excessive rubbing

**(Any three) [3]**

**(i) Method of removing an ink stain from a bag made of linen.**

Soak and wash with lemon juice or with milk [2]

**(f) Three points on the care of plastic laundry basins**

- Remember to add cold water first then hot water until the required temperature is obtained- to maintain
- Do not leave plastic equipment standing in the sun or near heat as it may soften and lose its shape
- Do not use coarse abrasives which will scratch the surface when cleaning
- To remove scum, wash in warm water with bleach
- wash and dry thoroughly before storing. **(Any three) [3]**

**[25 marks]**

**QUESTION 5**

(a) Define the following terms:

(i) **Warp threads** - thread running along the length of fabric/lengthwise

- threads crossing the weft threads at right angles

- threads parallel to the selvege [2]

(ii) **Weaving** - a way of manufacture of fabrics wherein the yarn crosses over each other in right angles /interlacing [2]

(b) List two ways of finishing hem edges

- Edge stitched hem

- Hemming stitch

- Crossway binding

- Herringbone stitch

- Slip hemming stitch

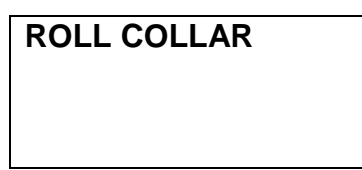
(Any two) [2]

(c) State a hand stitch used for each of the processes below:

(i) **Sewing interfacing onto a facing** – basting/tacking

(iii) **Neatening raw seam edges** – blanket stitch/ over casting [2]

(d) Refer to the diagrams below to answer the questions that follow: collar diag.



(i) Names of the different types of collars in the diagrams (A) – (C) above.

A. Flat

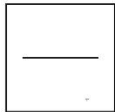
B. Roll

C. Stand

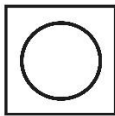
[3]

**(ii) Two reasons why are collars important in garments**

- Give shapes to garments
- Neaten raw edges /Avoid fraying of these
- Decorative finish on garments
- Enhance style/ acts as a style feature
- They flatter the face

**(Any two)****[2]****(e) Differentiate between a Set - in and Magyar sleeve****Set in sleeve** – cut separately to bodice**Magyar** – cut in one piece with the bodice**[2]****(g) Drying symbols to show the following: INSERT SYMBOLS**

Dry flat



Do not tumble dry

**[2]****(g) Uses of laundry agents:**

**(i) Fabric softener**- to give fabrics a refreshing smell/ prevents static electricity on garments

**(ii) Soap** - removes grease (dirt)/ brightens clothes/ softens hard water **[2]**

**(h) Reasons for using starch in clothes.**

- Improve their appearance
- Give a smooth and glossy finish
- Make them resistant to moisture
- Stiffen fabric
- Increase resistance to dust **and dirt**
- Keep cotton and linen crisp and fresh
- Add weight to a garment and give it shape
- Iron is made easier / hot iron glides easily on the fabric

**(Any two)****[2]**

**(i) Describe the cleaning of an iron.**

- Rub the iron with a soapy cloth or with chalk while it still warm
- rub it with a clean cloth to remove the chalk and soap

[2]

[25 marks]

**QUESTION 6****(a) Name two embroidery stitches used for borders and outlining shapes.**

- satin
- stem

[2]

**(b) Which part of a sewing machine does each of the following:****(i) Adjust the length of stitches-** stitch length regulator**(ii) Adjust the tightness of stitches -** tension screw / disc

[2]

**(c) State three guidelines for choosing or sewing zippers.**

- the size
- purpose, functional or decorative
- type of fabric used

[3]

**(d) Identify four characteristics of a good hem**

- It hangs evenly and gracefully
- Its width is suitable for the type of fabric and style of the garment
- It is not bulky
- It is uniform in width and is secure
- It is not visible, unless it is decorative

[4]

**(e) List four rules for taking body measurements to achieve a good fit in a garment.**

- take on foundation garments
- tie a string on the waist
- stand upright
- ask someone to take assist you
- bust measurement on fullest part of the bust
- consider the style feature

[4]

**(f) List three examples of pressing equipment**

- pressing clothes
- iron
- ironing board
- Sleeve board
- bowl

[3]

**(g) Give a reason for each of the following steps in laundry.**

**(i)** Blueing- whitens cotton garments

**(ii)** Airing- to dry clothes

**(iii)** Folding- for storage purposes

[3]

**(h) The procedure for laundering a woollen garment after the darning stage/preparation of clothes before doing laundry**

- Mend tears and darn any holes as they become larger during washing
- Make sure all pockets are empty and shake clothing to remove dirt or items such as sharp objects
- Close fasteners such as zippers as they may not close smoothly after washing
- Remove any stains before washing or as soon as they occur and before they have time to set

[4]

[25 marks]