THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL OF TANZANIA

FORM TWO SECONDARY EDUCATION EXAMINATION, 2006

050 **HOME ECONOMICS**

Time: 2:30 Hours. **ANSWER** **Year: 2006**

Instructions

1. This paper consists of sections **A**, **B** and **C**.
2. Answer **all** questions.
3. Section A carries **40** marks, section B and section C carries 30 marks each.
4. Cellular phones and unauthorized materials are **not allowed** in the examination room.
5. Write your **Examination Number** on every page of your answer booklet(s).

FOR EXAMINER'S USE ONLY		
QUESTION NUMBER	**SCORE**	**EXAMINER'S INITIIALS**
1		
2		
3		
4		
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7		
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9		
10		
TOTAL		
CHECKER'S INITIALS		

1. Choose the correct answer from the given alternatives and write its letter in the box provided.

i) Which of the following is the most effective method of preventing enzymatic browning in sliced apples before serving?

A. Soaking in saltwater

B. Storing in a dark cupboard

C. Covering with a damp cloth

D. Exposing to sunlight

Correct answer: A. Soaking in saltwater

Reason: A mild salt solution slows polyphenol oxidase activity and limits oxygen contact, so browning is delayed.

ii) Which fibre is most prone to shrinking when washed in hot water?

A. Polyester

B. Wool

C. Nylon

D. Acrylic

Correct answer: B. Wool

Reason: Wool scales interlock with heat and agitation, causing felting and shrinkage.

iii) In meal planning for a lactating mother, which nutrient should be given highest priority for milk production?

A. Protein

B. Vitamin C

C. Iron

D. Fibre

Correct answer: A. Protein

Reason: Adequate amino acids are needed to synthesize milk proteins like casein and whey.

iv) Which of the following pests is most likely to contaminate food with Salmonella bacteria?

A. Cockroach

B. Mosquito

C. Housefly

D. Bedbug

Correct answer: C. Housefly

Reason: Houseflies pick up Salmonella on their legs and mouthparts from waste and transfer it to food.

v) Which of the following is an example of conduction in cooking?

A. Heating oil in a frying pan

B. Baking bread in an oven

C. Roasting meat over fire

D. Boiling rice in water

Correct answer: A. Heating oil in a frying pan

Reason: Heat passes by direct contact from the hot metal pan to the oil molecules.

2. Match the items in **List A** with the correct responses in **List B** by writing the letter of the correct response below the corresponding item number in the table provided.

List A:

i) A disease caused by Vitamin A deficiency

ii) A type of weave pattern where each weft thread crosses over and under alternate warp threads

iii) A method of preserving fish using heat and smoke

iv) The tool used to remove lint from fabric

v) A defect in a seam caused by insufficient tension during stitching

List B:

A. Smoking

B. Rickets

C. Smocking

D. Lint roller

E. Night blindness

F. Basket weave

G. Skipped stitches

H. Plain weave

I. Filleting

J. Felting

Correct answers:

i) E. Night blindness

Reason: Vitamin A is necessary for the production of visual pigments in the retina, especially rhodopsin, which enables vision in low-light conditions. A lack of this vitamin results in difficulty seeing in dim light, known as night blindness.

ii) H. Plain weave
Reason: The plain weave is the most basic and strong weaving pattern, where each weft thread passes alternately over and under each warp thread, producing a balanced and durable fabric.

iii) A. Smoking
Reason: Smoking fish involves exposing it to heat and smoke from burning wood, which both dries the fish and deposits preservative compounds like phenols, slowing bacterial growth.

iv) D. Lint roller
Reason: A lint roller is a handheld tool with a sticky surface used to remove lint, dust, and hair from fabrics, keeping garments neat and clean.

v) G. Skipped stitches
Reason: This seam defect occurs when the sewing machine fails to form some stitches due to low thread tension, incorrect needle type, or poor threading, leading to weak points in the seam.

3. Give five scientific reasons why food stored in a refrigerator can still spoil if not handled properly.

If the refrigerator temperature is set above 5°C, bacteria like Listeria and Salmonella can still multiply, leading to spoilage even in cold storage.

Cross-contamination can happen when raw meat or fish is stored above ready-to-eat foods, allowing juices carrying bacteria to drip onto them.

If food is stored uncovered, it can absorb odours and flavours from other items, which makes it unpleasant and reduces its quality.

Excess moisture inside the fridge, especially in vegetable drawers, can encourage mould and yeast growth, causing spoilage of fruits and vegetables.

Frequent opening of the fridge door allows warm air to enter, causing temperature fluctuations that promote bacterial growth.

4. Explain five textile care mistakes that can cause premature wear and tear of fabrics.

Washing clothes in excessively hot water can damage delicate fibres, causing them to shrink, lose elasticity, and fade.

Using too much or overly harsh detergent strips fabrics of their natural oils, making them brittle and prone to tearing.

Overloading the washing machine causes garments to rub against each other excessively, leading to pilling and surface wear.

Hanging clothes in direct sunlight for too long fades dyes and weakens fibres due to ultraviolet light exposure.

Ignoring care labels and using the wrong cleaning method for a fabric type, such as dry-clean-only items, results in fabric distortion and damage.

5. Discuss five strategies to control cross-contamination in a busy commercial kitchen.

Separate raw and cooked foods at all times, using designated storage shelves and containers to prevent bacteria transfer.

Use different colour-coded chopping boards and knives for raw meat, vegetables, and cooked food to prevent mixing of harmful microorganisms.

Wash and sanitise all food preparation surfaces regularly, especially between preparing different food types.

Ensure that kitchen staff wash hands thoroughly with soap and water after handling raw foods and before touching cooked foods.

Cover all food containers and store them properly to prevent exposure to airborne bacteria, dust, or pests.

6. Describe five methods of conserving energy when using cooking appliances at home.

Always match the size of the cooking pot to the size of the stove burner to avoid wasting heat around the sides.

Keep lids on pots while cooking to trap heat and cook food faster, which reduces fuel or electricity use.

Switch off cooking appliances like ovens or stoves a few minutes before the food is fully cooked, using the retained heat to finish cooking.

Cook several dishes at the same time when using the oven to make full use of the energy being consumed.

Regularly maintain and clean cooking appliances to ensure they operate efficiently and consume less power.

7. Explain five socio-economic effects of poor waste management in urban areas.

It increases the risk of disease outbreaks like cholera, leading to high healthcare costs for both individuals and government systems.

Poor waste management causes unpleasant odours and unclean surroundings, reducing the attractiveness and value of residential and business areas.

Clogged drainage systems due to littering lead to urban flooding, which damages property and disrupts economic activities.

It discourages tourism and investment when cities are perceived as dirty and poorly maintained.

Time and money are wasted in repeated cleaning efforts and repairs caused by poor waste disposal practices.

8. Give five factors to consider when selecting a cooking method for different foods.

The nutritional value of the food should be maintained; methods like steaming preserve more vitamins than boiling.

The texture and tenderness of the food influence the choice; for example, tough meat may require slow moist cooking.

The desired flavour is important; grilling imparts a smoky flavour, while baking gives a mild, even taste.

The time available for cooking determines the method; pressure cooking is faster than slow simmering.

The type of equipment available at home affects the choice, such as whether there is an oven, steamer, or grill.

9. Evaluate the impact of cultural beliefs and practices on food consumption patterns in families. Provide at least five well-explained points.

Some cultural beliefs encourage the consumption of certain traditional foods, which may limit dietary diversity if other nutritious foods are excluded.

Religious practices like fasting can affect meal frequency and nutrient intake, influencing health and energy levels.

Gender-based food taboos in some cultures may restrict women or children from eating protein-rich foods, leading to malnutrition.

Celebrations and rituals often centre around high-calorie foods, which can contribute to lifestyle diseases when consumed frequently.

Cultural attachment to specific cooking methods may preserve tradition but reduce adoption of healthier preparation techniques.

10. Justify the importance of quality control in the production of household textiles, giving five clear explanations.

Quality control ensures that textiles are durable, reducing the need for frequent replacement and saving consumers money.

It maintains consistent fabric properties like strength, colour fastness, and shrink resistance, which improves customer satisfaction.

High-quality control reduces the risk of defects such as weak seams, uneven dyeing, or faulty weaving, ensuring safety and comfort.

It helps manufacturers maintain their reputation by producing reliable, standardised products.

Quality control prevents wastage of raw materials through early detection of faults, making production more cost-effective.