

THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATION COUNCIL OF TANZANIA
FORM TWO SECONDARY EDUCATION EXAMINATION, 2010

050

HOME ECONOMICS

Time: 2:30 Hours.

ANSWER

Year: 2010

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).

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QUESTION NUMBER	SCORE	EXAMINER'S INITIALS
1		
2		
3		
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10		
TOTAL		
CHECKER'S INITIALS		

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SECTION A (15 MARKS)

Answer all questions in this section

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

i) The best way to store leftover cooked rice to prevent food poisoning is to:

- A. Leave it on the table overnight
- B. Store it in an airtight container in the fridge
- C. Keep it in a warm oven
- D. Wrap it in a cloth and keep in the cupboard

Correct answer: B. Store it in an airtight container in the fridge.

Reason: Storing cooked rice in the fridge slows bacterial growth, especially *Bacillus cereus*, which can multiply quickly at room temperature.

ii) Which fibre is obtained from the flax plant?

- A. Cotton
- B. Linen
- C. Silk
- D. Nylon

Correct answer: B. Linen.

Reason: Linen is produced from the stalk of the flax plant and is valued for its strength and durability.

iii) The process of soaking beans before cooking mainly helps to:

- A. Improve flavour
- B. Reduce cooking time
- C. Make them heavier
- D. Change their colour

Correct answer: B. Reduce cooking time.

Reason: Soaking beans softens them, making them cook faster and use less fuel.

iv) Which cleaning agent is most suitable for removing grease from kitchen walls?

- A. Vinegar solution

- B. Soap solution
- C. Cold water
- D. Baking soda paste

Correct answer: B. Soap solution.

Reason: Soap emulsifies grease, allowing it to mix with water and be washed away easily.

v) A stitch used to neaten raw fabric edges is called:

- A. Tacking stitch
- B. Overcasting stitch
- C. Backstitch
- D. Hemming stitch

Correct answer: B. Overcasting stitch.

Reason: Overcasting stitch wraps thread over raw edges to prevent fraying and keep the fabric neat.

vi) Which nutrient mainly helps to repair worn-out tissues in the body?

- A. Carbohydrates
- B. Vitamins
- C. Proteins
- D. Fats

Correct answer: C. Proteins.

Reason: Proteins are the building blocks of body tissues, aiding in growth and repair.

vii) A good floor covering in a kitchen should be:

- A. Absorbent and smooth
- B. Rough and porous
- C. Durable and easy to clean
- D. Shiny and slippery

Correct answer: C. Durable and easy to clean.

Reason: Kitchen floors must withstand heavy use and be cleaned quickly to maintain hygiene.

viii) Which method of cooking involves immersing food completely in hot fat?

- A. Stewing
- B. Deep frying
- C. Roasting
- D. Boiling

Correct answer: B. Deep frying.

Reason: Deep frying submerges food in hot oil to cook it quickly and evenly.

ix) The safest way to lift a heavy box from the floor is to:

- A. Keep legs straight and bend from the waist
- B. Bend knees and keep back straight
- C. Bend sideways to reach the box
- D. Pull it across the floor

Correct answer: B. Bend knees and keep back straight.

Reason: This method reduces strain on the back and uses leg muscles for lifting.

x) The main reason for using fabric softeners when washing clothes is to:

- A. Brighten the colour
- B. Reduce stiffness and make fabric pleasant to touch
- C. Remove stubborn stains
- D. Make clothes dry faster

Correct answer: B. Reduce stiffness and make fabric pleasant to touch.

Reason: Fabric softeners coat fibres to make them smoother, softer, and more comfortable.

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	List B

i) A type of sugar found in milk	A. Starch
ii) Temporary stitch for holding fabric layers	B. Reverse stitch
iii) Method of preserving vegetables without chemicals	C. Lactose
iv) Heat transfer in grilling	D. Radiation
v) Fibre obtained from the cocoon of a silkworm	E. Basting stitch
	F. Silk
	G. Blanching

Answers:

- i) C. Lactose – Lactose is the natural sugar found in milk, giving it a slightly sweet taste.
- ii) E. Basting stitch – A temporary stitch used to hold fabric layers together before permanent stitching.
- iii) G. Blanching – A method that uses boiling water briefly to preserve vegetables before freezing without adding chemicals.
- iv) D. Radiation – Heat transfer in grilling occurs mainly through infrared radiation from the heat source.
- v) F. Silk – Silk is obtained from the cocoon of a silkworm and is known for its smooth texture.

3. A Form Two student is starting a school garden project to grow vegetables for the Home Economics department.

(a) Explain five advantages of having a school garden.

A school garden provides a constant supply of fresh vegetables, which can improve the nutrition of students and reduce the cost of purchasing vegetables.

It offers a practical learning environment where students can apply the agricultural skills learned in class, making the lessons more meaningful.

The garden helps develop responsibility among students, as they must take care of plants regularly and

follow proper farming practices.

It promotes environmental awareness by teaching students how to care for soil, conserve water, and protect plants from pests.

Income can be generated from the sale of surplus produce, which can be used to support other school activities.

(b) State four factors to consider when selecting a site for a vegetable garden.

The site should have fertile soil to support healthy plant growth and high yields.

It should have good access to water to make irrigation possible and consistent.

The site should receive adequate sunlight, ideally six to eight hours per day, for proper photosynthesis.

It should have good drainage to prevent waterlogging, which can damage plant roots.

(c) Describe three ways of controlling pests organically in the garden.

Handpicking pests from plants can remove harmful insects without the use of chemicals.

Applying organic sprays like neem oil repels insects and prevents infestation without harming the environment.

Introducing beneficial insects such as ladybirds can help control pests like aphids naturally.

4. You are preparing to teach junior students about wise buying.

(a) Explain five factors to consider when making a shopping list for the family.

The family budget must be considered to ensure that purchases are affordable and within financial means.

Nutritional needs of the family should be prioritised to maintain a balanced diet.

Seasonal availability of goods should be considered because seasonal products are often cheaper and fresher.

Quality of items should be assessed to ensure value for money and long-lasting use.

Quantities needed should be determined to avoid wastage and over-purchasing.

(b) Give four disadvantages of impulse buying.

Impulse buying can lead to overspending and strain the family budget.

It may result in purchasing low-quality items because there was no time to compare options.

It often leads to buying items that are not needed, causing clutter in the home.

It can reduce the money available for essential purchases, leading to financial difficulties.

(c) Outline three ways to ensure you get value for money when shopping.

Comparing prices from different sellers helps identify the most affordable option without compromising quality.

Checking product quality and expiry dates ensures you are paying for something that is safe and durable.

Buying from reputable suppliers reduces the risk of fraud and low-quality goods.

5. A family wishes to improve the hygiene of their kitchen.

(a) Explain five practices that promote kitchen hygiene.

Regularly washing utensils immediately after use ensures that food particles do not remain on plates and cooking equipment, preventing the growth of bacteria and the attraction of pests like flies and cockroaches.

Cleaning kitchen surfaces daily, including countertops, cutting boards, and sinks, removes dirt and potential contaminants, reducing the risk of transferring harmful microorganisms to food during preparation.

Storing food in sealed containers keeps it safe from insects, rodents, and airborne contaminants, while also helping to maintain freshness and prevent spoilage.

Disposing of kitchen waste promptly ensures that food scraps and organic matter do not stay long enough to decompose inside the house, which could lead to bad smells and attract pests.

Keeping floors clean and dry prevents the spread of dirt into food preparation areas and also helps reduce the risk of slipping accidents while working in the kitchen.

(b) Describe four effects of poor kitchen hygiene on the family's health.

Poor kitchen hygiene can lead to foodborne illnesses such as cholera, typhoid, and salmonella, which occur when food is contaminated by bacteria or viruses during preparation or storage.

The accumulation of food waste and dirt can attract pests such as rats, cockroaches, and flies, which are known carriers of diseases that can be transmitted to humans through contact with food.

Bad odours caused by rotting food and unwashed utensils can make the kitchen unpleasant to use and can discourage proper meal preparation, leading to poor dietary habits.

Cross-contamination between raw and cooked foods can result in the spread of harmful microorganisms, especially if utensils or surfaces are not cleaned properly after handling raw meat, fish, or poultry.

(c) State three features of a good kitchen storage area.

A good kitchen storage area should have proper ventilation to prevent moisture build-up and mould growth, ensuring that dry foods remain in good condition for longer periods.

Shelves and cupboards should be sturdy, smooth, and easy to clean so that dust, spills, and pests can be managed effectively.

Storage spaces should be arranged in an organised manner, allowing older items to be used before newer ones, thereby reducing the risk of food wastage through expiration.

6. You are guiding a learner on laundry work.

(a) Explain five rules for washing coloured clothes to maintain their appearance.

Coloured clothes should always be separated from white garments before washing to prevent colour transfer, which could stain and damage lighter fabrics.

Cold water should be used when washing coloured clothes because it helps to preserve the dye in the fabric and reduces the likelihood of fading over time.

Turning garments inside out before washing minimises friction between fabrics, which can help to protect the outer layer from fading and wearing out.

Using mild detergents designed for coloured fabrics prevents harsh chemical reactions that could strip away the colour or damage the fibres.

Clothes should be dried in shaded areas rather than direct sunlight, as excessive sunlight can cause dyes to fade quickly, making the clothes look old before their time.

(b) Give four reasons for ironing clothes after washing.

Ironing removes wrinkles and creases from clothes, giving them a neat and tidy appearance, which enhances personal presentation.

The heat from ironing helps to kill any remaining germs or parasites that may have survived the washing process, making clothes safer to wear.

Ironing improves the texture of fabrics, making them feel smooth and comfortable against the skin, which increases the overall wearing experience.

It helps garments to maintain their original shape, especially for structured clothing like uniforms and suits, which need a crisp finish.

(c) State three dangers of using excessive heat when ironing.

Excessive heat can scorch or burn the fabric, leaving permanent marks that may ruin the garment entirely.

High heat can cause the colours of fabrics, especially delicate materials, to fade unevenly, reducing the garment's attractiveness.

Continuous ironing at very high temperatures weakens fabric fibres, making them more prone to tearing and reducing the lifespan of the clothing.

7. A community nutritionist is teaching about food groups.

(a) Explain five functions of proteins in the body.

Proteins are essential for building and repairing tissues in the body, including muscles, skin, hair, and internal organs, making them vital for growth and maintenance.

They are necessary for the production of enzymes and hormones, which control and regulate various processes in the body such as digestion, metabolism, and reproduction.

Proteins form antibodies, which are part of the immune system and help the body fight against infections and diseases effectively.

They help to maintain the body's fluid balance by controlling the movement of water in and out of cells, which is crucial for normal body function.

When carbohydrate and fat reserves are low, proteins can be broken down and used as an alternative energy source to sustain bodily activities.

(b) Give four effects of protein deficiency.

Protein deficiency in children can lead to stunted growth and poor physical development because the body lacks the necessary building materials for cells and tissues.

A lack of protein weakens the immune system, making the body more vulnerable to illnesses and prolonging recovery times from infections.

The body may start breaking down its own muscle tissue to meet protein needs, leading to muscle wasting, weakness, and fatigue.

Severe protein deficiency can cause kwashiorkor, a condition characterised by swelling in various parts of the body, skin problems, and overall poor health.

(c) State three animal sources of protein.

Meat such as beef, goat, and chicken provides complete proteins with all essential amino acids needed by the body.

Eggs are an excellent source of high-quality protein that is easy to digest and contains additional nutrients like vitamins and minerals.

Milk and dairy products such as yoghurt and cheese supply both protein and calcium, supporting muscle development and bone health.

8. You are to train young people about personal safety in the home.

(a) Explain five measures to prevent accidents in the kitchen.

Keeping knives sharp and storing them safely in a designated rack or drawer helps prevent accidental cuts and ensures safe handling during food preparation.

Cleaning up spills immediately prevents slippery floors, which could cause falls and serious injuries to anyone in the kitchen.

Turning pot handles inward while cooking ensures that they are not knocked accidentally, which could result in burns from spilled hot liquids.

Avoiding unattended cooking reduces the risk of kitchen fires that may occur if food burns or oil overheats on the stove.

Wearing closed shoes in the kitchen protects the feet from falling sharp objects, hot spills, and broken glass.

(b) Describe four first aid steps for treating minor burns.

Cooling the affected area under running cold water for at least 10 minutes helps to lower the temperature of the burn and reduce pain and swelling.

Removing any tight clothing or jewellery near the burn area prevents them from restricting blood flow in case of swelling.

Covering the burn with a clean, non-fluffy dressing such as sterile gauze protects it from infection and further injury.

Avoiding home remedies such as butter or oil is important because they can trap heat in the skin and make the injury worse.

(c) State three causes of electric shocks in the home.

Using damaged electrical appliances with exposed wires can cause accidental contact with live electricity, leading to shocks.

Overloading sockets with multiple high-powered devices increases the risk of overheating and short circuits, which can result in electrocution.

Touching electrical equipment with wet hands conducts electricity more easily and increases the risk of severe electric shocks.

9. A tailor is selecting fabric for making uniforms.

(a) Explain five factors to consider when choosing fabric for uniforms.

Durability is important because uniforms are worn frequently and need to withstand repeated washing without wearing out quickly.

Comfort is essential so that wearers can move freely and work efficiently without feeling restricted or overheated.

The colour of the fabric should be appropriate for the institution and resistant to fading, to maintain a neat and consistent appearance over time.

Ease of care is important, as uniforms should be easy to wash, dry, and iron without requiring special handling.

The cost of the fabric must be affordable, especially when making large quantities, to ensure it fits within the institution's budget.

(b) Give four advantages of cotton fabric.

Cotton is naturally soft, making it comfortable to wear for long periods.

It is highly absorbent, which helps to keep the body cool and dry in warm weather.

Cotton is strong and durable, withstanding frequent washing and general wear and tear.

It is hypoallergenic, meaning it is gentle on the skin and unlikely to cause allergic reactions.

(c) State three disadvantages of using polyester fabric for uniforms.

Polyester is less breathable than natural fabrics, which can cause discomfort and sweating in hot climates.

It tends to hold onto odours, meaning it can smell unpleasant even after a short period of use.

It is sensitive to high heat and may melt or deform when exposed to a hot iron, making it less practical in certain settings.

10. Discuss five causes of food spoilage and explain how each can be prevented.

Bacterial growth is one of the most common causes of food spoilage, especially in warm and moist conditions. This can be prevented by refrigerating or freezing perishable foods to slow down bacterial activity.

Enzyme activity in fresh produce causes natural ripening, which if uncontrolled, leads to decay. This can be slowed by refrigeration and methods like blanching before freezing.

Mould growth occurs in damp and poorly ventilated storage areas. It can be prevented by ensuring food is completely dried before storage and kept in airtight containers.

Oxidation leads to the deterioration of fats, causing rancidity, and to browning in fruits like apples. Storing such foods in airtight containers and away from light helps reduce oxidation.

Physical damage to food during harvesting, transport, or handling creates entry points for microorganisms, speeding up spoilage. This can be prevented by careful handling and using proper protective packaging.

11. Describe five ways of saving fuel when cooking at home.

Using pressure cookers is efficient because they trap steam and cook food faster, significantly reducing fuel consumption.

Covering pots during cooking retains heat and steam inside, which speeds up cooking time and minimises the amount of fuel used.

Cutting food into smaller pieces before cooking allows heat to penetrate faster, thus reducing cooking time and fuel needs.

Turning off the stove slightly before the food is completely cooked allows residual heat to finish the cooking process, saving fuel.

Cooking in bulk or batch cooking reduces the number of cooking sessions needed, saving both time and fuel over multiple meals.