

**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION AND VOCATIONAL TRAINING
FORM TWO SECONDARY EDUCATION EXAMINATION,**

051**FOOD AND NUTRITION****Time: 2:30 Hours****ANSWERS****Year: 2005****INSTRUCTIONS**

1. This paper consists of sections **A, B** and **C**.
2. Answer **ALL** questions from sections A and B,
and only **ONE** from section C.
3. **ALL** answers must be written in the spaces provided.
4. Write your examination number at the top right corner of every page.
5. **ALL** writing must be in blue or black ink **EXCEPT**
diagrams which must be in pencil.
6. Cell-phones are not allowed in the examination room.

FOR EXAMINER'S USE ONLY		
QUESTION NUMBER	SCORE	INITIALS OF EXAMINER
1		
2		
3		
4		
5		
6		
7		
8		
9		
TOTAL		

SECTION A

1. For each of the following items (i) - (x), choose the correct answer and write its letter in the box provided.

(i) The nutrient essential for blood clotting is

- A. Vitamin A
- B. Vitamin K
- C. Vitamin C
- D. Vitamin D

B

Reason: Vitamin K is essential for the synthesis of clotting factors in the liver, which are necessary for blood coagulation. Deficiency can lead to excessive bleeding.

(ii) The stage of life before adolescence is

- A. Infancy
- B. Childhood
- C. Adulthood
- D. Old age

B

Reason: Childhood is the developmental stage that follows infancy (birth to about 2 years) and precedes adolescence (typically starting around puberty, ages 10–19).

(iii) The best part of fish for steaming is

- A. Fatty cuts
- B. Tender fillets
- C. Tough cuts
- D. Bones

B

Reason: Tender fillets are ideal for steaming because they cook quickly and evenly in moist heat, retaining their delicate texture and flavor without becoming tough.

(iv) Waste from cleaning agents is classified as

- A. Organic refuse
- B. Liquid refuse
- C. Chemical waste
- D. Dry refuse

C

Reason: Cleaning agents contain chemicals that can be harmful to the environment, classifying their waste as chemical waste, which requires special disposal methods.

(v) The main function of fats in the body is

- A. Building muscles
- B. Providing energy

- C. Strengthening bones
- D. Improving vision

B

Reason: Fats are a concentrated source of energy, providing 9 calories per gram, and serve as a reserve energy source, insulation, and organ protection.

(vi) Good oral hygiene helps prevent

- A. Scurvy
- B. Tooth decay
- C. Rickets
- D. Beriberi

B

Reason: Good oral hygiene, such as brushing and flossing, removes plaque and bacteria, preventing tooth decay (cavities) caused by sugar and acid exposure.

(vii) The laundry process that enhances fabric appearance is

- A. Bleaching
- B. Ironing
- C. Soaking
- D. Blueing

B

Reason: Ironing smooths out wrinkles and creases, improving the visual appearance of fabrics by giving them a crisp, neat look.

(viii) First Aid includes all EXCEPT

- A. Checking the scene for safety
- B. Administering full medical treatment
- C. Providing temporary relief
- D. Preventing further harm

B

Reason: First Aid involves immediate, temporary care to stabilize a person until professional help arrives. Full medical treatment requires trained healthcare providers.

(ix) Using bleach on coloured clothes can cause

- A. Brightening
- B. Fading
- C. Strengthening
- D. Softening

B

Reason: Bleach is a strong oxidizing agent that can strip color from dyed fabrics, causing fading or discoloration when used on colored clothes.

(x) The disease caused by iodine deficiency is

- A. Goitre

- B. Scurvy
- C. Rickets
- D. Pellagra

A

Reason: Iodine deficiency impairs thyroid hormone production, leading to goitre, characterized by an enlarged thyroid gland due to compensatory growth.

2. Write TRUE if the statement is correct and FALSE if the statement is not correct in the space provided.

- (i) Breast milk meets all infant nutritional needs for six months. **TRUE**
- (ii) Poor ventilation can cause respiratory issues. **TRUE**
- (iii) Immunization is optional for healthy children. **FALSE**
- (iv) Boiling is a dry heat cooking method. **FALSE**
- (v) Kindness and cooperation are bad behaviours. **FALSE**
- (vi) Lack of protein can cause stunted growth. **TRUE**
- (vii) Hard water reduces soap lather. **TRUE**
- (viii) Dusting should follow mopping in cleaning. **FALSE**
- (ix) A landlord owns the rented property. **TRUE**
- (x) Nausea is a common pregnancy symptom. **TRUE**

3. (a) Give the meaning of:

(i) Public Health

The science and practice of protecting and improving community health through organized efforts like disease prevention and health promotion.

(ii) Child Health Services

Healthcare services aimed at promoting the physical, mental, and social well-being of children, including vaccinations and growth monitoring.

(b) List four child health services in communities.

- (i) Immunization programs
- (ii) Growth monitoring
- (iii) Nutritional counseling
- (iv) Health screenings

(c) State three ways families can ensure safe drinking water.

- (i) Boiling water before use
- (ii) Using water filters
- (iii) Storing water in clean containers

4. (a) Give three causes of rickets.

- (i) Vitamin D deficiency
- (ii) Lack of sunlight exposure
- (iii) Poor dietary calcium intake

(b) List three symptoms of rickets.

- (i) Bowed legs
- (ii) Soft skull bones
- (iii) Delayed growth

(c) (i) State three prevention strategies.

Ensure adequate Vitamin D intake

Promote safe sun exposure

Provide calcium-rich foods

(ii) Give three treatment methods.

- Vitamin D supplements
- Calcium supplements
- Increased sunlight exposure

5. (a) Outline six steps in laundering silk garments.

- (i) Sort by color and fabric
- (ii) Check care labels
- (iii) Hand wash with mild detergent
- (iv) Rinse gently in cold water
- (v) Air dry away from sunlight
- (vi) Iron on low heat if needed

(b) For white cotton laundry:

(i) **Bleaching:**

- Removes stains
- Restores whiteness

(ii) **Ironing:**

- Smooths wrinkles
- Enhances appearance

- (c) List two factors in treating stains on synthetic fabrics.
- (i) Type of stain
 - (ii) Fabric sensitivity
6. (a) Give four reasons for maintaining kitchen hygiene.
- (i) Prevents foodborne illnesses
 - (ii) Ensures safe food preparation
 - (iii) Reduces pest infestation
 - (iv) Promotes healthy environment
- (b) Outline five considerations when choosing kitchen utensils.
- (i) Material durability
 - (ii) Ease of cleaning
 - (iii) Heat resistance
 - (iv) Size and functionality
 - (v) Cost-effectiveness
- (c) State four suitable methods for cooking root vegetables.
- (i) Boiling
 - (ii) Roasting
 - (iii) Steaming
 - (iv) Mashing
7. (a) List three nutrients essential for elderly individuals.
- (i) Calcium
 - (ii) Vitamin D
 - (iii) Protein
- (b) Explain four ways to minimize food waste during preparation.
- Plan meals in advance
 - Use leftovers creatively
 - Store food properly
 - Portion ingredients accurately
8. (a) Identify four methods of food storage in the home.
- (i) Refrigeration
 - (ii) Freezing
 - (iii) Dry storage
 - (iv) Canning
- (b) Explain four effects of improper food storage.
- Food spoilage
 - Nutrient loss

- Bacterial contamination
- Increased food waste

9. Discuss six factors affecting food security in Tanzanian communities.

One factor affecting food security in Tanzanian communities is unpredictable weather conditions. Prolonged droughts, floods, and irregular rainfall patterns caused by climate change reduce agricultural productivity, leading to food shortages.

A second factor is poor agricultural practices. Many farmers rely on traditional tools, low-yield seeds, and lack access to modern farming techniques, limiting their ability to produce sufficient food for their families and the market.

Third, population growth places pressure on available land, water, and food resources. As the population increases, more food is required, yet land for farming becomes scarce, contributing to food insecurity.

Fourth, poverty affects people's ability to purchase food or invest in agricultural inputs like fertilizers, pesticides, and irrigation equipment, which limits both food production and accessibility.

Fifth, post-harvest losses due to poor storage, transportation, and preservation methods result in significant food wastage, reducing the overall food supply available for consumption and sale.

Sixth, political and economic instability can disrupt food production, distribution, and pricing. When market systems are poorly regulated or affected by conflicts, food availability and affordability in communities decline, causing insecurity.

10. Explain seven ways to prevent accidents in the kitchen during food preparation.

One way to prevent kitchen accidents is keeping the floor dry and clean at all times. Spilled water, oil, or food should be wiped immediately to avoid slipping and falling.

A second way is storing sharp objects like knives and scissors safely in drawers or containers, away from children's reach, to prevent cuts.

Third, using cooking utensils with heat-resistant handles prevents burns while handling hot pots and pans.

Fourth, wearing appropriate clothing like fitting sleeves and avoiding loose garments reduces the risk of clothing catching fire or getting caught in appliances.

Fifth, ensuring all electrical appliances are in good condition and switching them off when not in use helps prevent electric shocks and fires.

Sixth, maintaining proper ventilation while cooking prevents suffocation or dizziness caused by smoke, heat, or gas leaks.

Seventh, arranging kitchen tools and equipment in an organized way reduces the risk of falling objects and makes movement safer and more efficient while cooking.

11. Describe six benefits of proper hydration and four challenges in ensuring adequate water intake.

One benefit of proper hydration is regulating body temperature. Water helps control heat through sweating and breathing, preventing overheating, especially in hot environments.

A second benefit is aiding digestion. Water assists in breaking down food, absorbing nutrients, and eliminating waste through urine and bowel movements.

Third, proper hydration improves physical performance. It lubricates joints, keeps muscles energized, and prevents fatigue during physical activities.

Fourth, it promotes healthy skin. Adequate water intake keeps the skin moist, smooth, and free from dryness and cracking.

Fifth, hydration boosts mental concentration and alertness. Dehydration can cause headaches, tiredness, and difficulty focusing.

Sixth, water helps in the removal of toxins and waste products from the body through urine and sweat, maintaining overall body health.

Challenges in ensuring adequate water intake include

scarcity of clean and safe drinking water in some communities, making it difficult for people to drink enough water daily.

Secondly, ignorance or neglect of the importance of drinking water leads some individuals to prioritize other beverages over water.

Third, busy schedules cause people to forget or ignore their daily water needs.

Lastly, some people avoid drinking water due to health conditions like frequent urination or dislike of plain water taste.