

**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION AND VOCATIONAL TRAINING
FORM TWO SECONDARY EDUCATION EXAMINATION, 2010**

051

FOOD AND NUTRITION**Time: 2:30 Hours****ANSWERS****Year: 2010****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 (20 Marks)

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

(i) The nutrient that supports tissue repair is

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

B

Reason: Proteins are essential for building and repairing tissues, as they provide amino acids needed for cell growth and healing.

(ii) The developmental stage before adolescence is

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

B

Reason: Childhood, typically from age 2 to puberty, precedes adolescence, which is the transition to adulthood.

(iii) The part of meat suitable for stewing is

- A. Tender cuts
- B. Tough cuts
- C. Fatty cuts
- D. Boneless cuts

B

Reason: Tough cuts, like chuck or shank, are ideal for stewing, as slow, moist cooking softens connective tissues, making them tender.

(iv) Waste from chemical cleaning agents is classified as

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

C

Reason: Chemical cleaning agents contain harmful substances, making their waste hazardous, requiring special disposal to prevent environmental harm.

(v) The main source of Vitamin C is

- A. Meat and poultry
- B. Dairy products
- C. Citrus fruits
- D. Grains

C

Reason: Citrus fruits, such as oranges and lemons, are rich in Vitamin C, which supports immune function and collagen formation.

(vi) Proper dental hygiene includes avoiding

- A. Fluoride toothpaste
- B. Sugary foods
- C. Regular brushing
- D. Dental check-ups

B

Reason: Sugary foods contribute to tooth decay by feeding harmful bacteria, making their avoidance a key part of dental hygiene.

(vii) The laundry process that removes tough stains is

- A. Blueing
- B. Bleaching
- C. Starching
- D. Drying

B

Reason: Bleaching uses chemical agents to break down and remove tough stains, restoring fabric cleanliness and whiteness.

(viii) First Aid does NOT involve

- A. Controlling bleeding
- B. Performing complex surgeries
- C. Stabilizing injuries
- D. Providing comfort

B

Reason: First Aid provides immediate, temporary care, but complex surgeries require professional medical expertise beyond its scope.

(ix) Using acidic cleaners on stainless steel can cause

- A. Polishing
- B. Corrosion
- C. Strengthening
- D. Softening

B

Reason: Acidic cleaners can react with stainless steel, causing corrosion or pitting, which damages its protective surface layer.

(x) The disease caused by Vitamin B₁ deficiency is

- A. Scurvy
- B. Beriberi
- C. Rickets
- D. Goitre

B

Reason: Vitamin B₁ (thiamine) deficiency causes beriberi, affecting the nervous and cardiovascular systems, often linked to poor diets.

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

- (i) Weaning should begin at six months of age. **TRUE**
- (ii) Poor kitchen hygiene can cause food poisoning. **TRUE**
- (iii) Immunization is only for infants. **FALSE**
- (iv) Grilling is a moist heat cooking method. **FALSE**
- (v) Respectful behavior promotes community harmony. **TRUE**
- (vi) Lack of protein can cause growth retardation. **TRUE**
- (vii) Hard water can cause scaling in utensils. **TRUE**
- (viii) Mopping should be done before dusting. **FALSE**
- (ix) A landlord is responsible for tenant safety. **TRUE**
- (x) Nausea is a common symptom of pregnancy. **TRUE**

3. (a) Give the meaning of:

(i) Public Health

Public health is the science and practice of protecting and improving the health of people and communities through the promotion of healthy lifestyles, prevention of diseases, and control of infections.

(ii) Environmental Health

Environmental health refers to the branch of public health that focuses on the relationships between people and their environment, promoting safe and clean surroundings to prevent diseases and enhance well-being.

(b) Identify four public health services in urban areas.

- (i) Waste collection and disposal services
- (ii) Public sanitation and drainage maintenance
- (iii) Control of disease outbreaks through immunization and treatment
- (iv) Health education and promotion campaigns

(c) State three ways to prevent the spread of infectious diseases.

- (i) Proper disposal of waste and maintaining environmental cleanliness
- (ii) Regular hand washing and practicing good personal hygiene
- (iii) Immunizing individuals against communicable diseases

4. (a) Give three causes of rickets.

- (i) Deficiency of vitamin D in the diet

- (ii) Lack of exposure to sunlight
- (iii) Inadequate intake of calcium and phosphorus

(b) Give three symptoms of rickets.

- (i) Bowed legs and knock knees in children
- (ii) Delayed growth and development
- (iii) Soft and weak bones

(c) (i) Mention three ways of preventing rickets.

Ensuring children are exposed to enough sunlight

Including vitamin D-rich foods like liver, eggs, and fish in the diet

Providing calcium and phosphorus-rich foods such as milk and green vegetables

(ii) Write three ways of treating rickets.

- Administering vitamin D supplements
- Providing a balanced diet rich in calcium and phosphorus
- Medical treatment and orthopedic care for severe bone deformities

5. (a) Describe six steps of laundering silk garments.

- (i) Sorting silk garments separately from other clothes
- (ii) Using mild detergent or special silk soap
- (iii) Washing gently by hand in lukewarm water
- (iv) Rinsing thoroughly in clean, cool water
- (v) Removing excess water by pressing gently without wringing
- (vi) Drying in a shaded area away from direct sunlight

(b) Write the importance of the following treatments in laundry work for white cottons.

(i) Soaking:

- Helps to loosen dirt and stains before washing
- Softens fabric and reduces effort during washing

(ii) Ironing:

- Removes wrinkles and improves the appearance of the garment
- Helps to kill remaining germs through heat

(c) State two factors to consider when laundering mixed fabrics.

- (i) The colorfastness of each fabric to prevent color transfer
- (ii) The washing and drying requirements for each type of fabric

6. (a) Give four reasons for balanced meal planning.

- (i) To ensure the body gets all essential nutrients in correct amounts
- (ii) To promote proper growth and development
- (iii) To maintain body energy and good health
- (iv) To prevent nutritional deficiency diseases

(b) Outline five factors to consider when preparing meals for children.

- (i) Age of the child and nutritional needs
- (ii) Type and texture of food suitable for the child's digestion
- (iii) The child's health condition and allergies
- (iv) The nutritional value of the food selected
- (v) The child's food preferences and eating habits

(c) State four suitable methods for cooking legumes.

- (i) Boiling
- (ii) Steaming
- (iii) Stewing
- (iv) Pressure cooking

7. Discuss six factors that influence dietary habits in Tanzanian households.

One factor that influences dietary habits is cultural beliefs and traditions. Certain foods are valued, restricted, or preferred based on cultural customs passed down through generations.

A second factor is economic status. Families with higher income can afford a wider variety of nutritious foods, while poorer households rely on cheaper, locally available staples.

Third, food availability affects dietary habits. In rural areas, diets depend heavily on locally grown crops and seasonal foods, while urban areas offer more food variety through markets and supermarkets.

Fourth, education level plays a role. Households with better nutritional knowledge tend to choose healthier, balanced diets, while those with limited education may have poor eating habits.

Fifth, religious practices influence what is consumed and when. Some religions restrict certain foods or dictate fasting periods, which shapes dietary patterns.

Sixth, health conditions and advice from healthcare providers impact dietary habits. Households with members suffering from conditions like diabetes or hypertension adjust their meals to suit medical recommendations.

8. Explain seven ways to maintain hygiene in food storage areas.

One way is to keep food storage areas clean by sweeping and wiping shelves, containers, and storage units regularly to prevent dust and pests.

A second way is to use clean, dry, and covered containers to store dry foodstuffs like rice, maize, and flour, preventing contamination.

Third, food should be arranged systematically, separating raw from cooked or ready-to-eat foods to avoid cross-contamination.

Fourth, perishable items like meat, milk, and vegetables should be stored in a refrigerator or cool area to preserve freshness and prevent spoilage.

Fifth, expired and spoilt foods should be removed immediately to avoid affecting other stored items.

Sixth, ensure proper ventilation in storage areas to prevent dampness and mold growth, which can spoil food.

Seventh, always wash hands before and after handling stored food to maintain personal and food hygiene.

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

One benefit of proper hydration is maintaining the body's temperature through sweating and evaporation.

A second benefit is aiding digestion and absorption of nutrients by facilitating the breakdown of food in the digestive system.

Third, it helps in removing waste products from the body through urine and sweat, maintaining internal cleanliness.

Fourth, proper hydration improves concentration, memory, and general brain function.

Fifth, it keeps the skin healthy and glowing, reducing dryness and irritation.

Sixth, drinking enough water lubricates joints, reducing the risk of stiffness and joint pain.

Four challenges in ensuring adequate water intake in communities include

water scarcity, especially in arid and semi-arid regions where clean water is limited.

A second challenge is poverty, which makes accessing safe bottled or treated water difficult.

Third, poor water infrastructure results in unreliable or unsafe water sources.

Lastly, lack of awareness about the importance of regular water intake leads to negligence in drinking adequate amounts daily.