## THE UNITED REPUBLIC OF TANZANIA MINISTRY OF EDUCATION AND VOCATIONAL TRAINING FORM TWO SECONDARY EDUCATION EXAMINATION, 2006

## 951 FOOD AND NUTRITION

Time: 2:30 Hours ANSWERS Year: 2006

## **INSTRUCTIONS**

- 1. This paper consists of sections A, B and C.
- 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.
- 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		
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11		
TOTAL		

- 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 immune function and is found in citrus fruits is
  - A. Vitamin A
  - B. Vitamin B<sub>1</sub>
  - C. Vitamin C
  - D. Vitamin D

 $\mathbf{C}$ 

**Reason:** Vitamin C is crucial for immune system function, aiding in the production of white blood cells and acting as an antioxidant. Citrus fruits like oranges and lemons are rich sources of Vitamin C.

- (ii) The developmental stage characterized by rapid growth is
- A. Infancy
- B. Childhood
- C. Adolescence
- D. Adulthood

 $\mathbf{C}$ 

**Reason:** Adolescence, typically spanning ages 10–19, is marked by rapid physical growth, hormonal changes, and development of secondary sexual characteristics due to puberty.

- (iii) The best part of poultry for frying is
- A. Tough cuts
- B. Tender cuts
- C. Fatty cuts
- D. Bones

B

**Reason:** Tender cuts, such as chicken breast or thigh fillets, are ideal for frying because they cook quickly and remain juicy, ensuring a desirable texture.

- (iv) Waste from food scraps and vegetable peels is classified as
- A. Liquid refuse
- B. Dry refuse
- C. Organic refuse
- D. Chemical waste

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**Reason:** Food scraps and vegetable peels are biodegradable materials, categorized as organic refuse, which can decompose naturally or be composted.

- (v) The primary source of proteins in the diet is
- A. Fruits and vegetables
- B. Grains and cereals
- C. Meat and legumes
- D. Oils and fats

 $\mathbf{C}$ 

**Reason:** Meat (e.g., beef, poultry) and legumes (e.g., beans, lentils) are rich in high-quality proteins, essential for growth, repair, and body functions.

- (vi) Proper dental care involves
- A. Using sugary toothpaste
- B. Brushing once daily
- C. Flossing regularly
- D. Avoiding fluoride

 $\mathbf{C}$ 

**Reason:** Flossing regularly removes food particles and plaque from between teeth, preventing cavities and gum disease, complementing brushing in oral hygiene.

- (vii) The laundry process that removes grease stains is
- A. Blueing
- B. Starching
- C. Pre-soaking
- D. Ironing

 $\mathbf{C}$ 

**Reason:** Pre-soaking with detergent or stain removers helps break down grease stains, loosening them from fabric fibers before washing.

- (viii) First Aid does NOT include
- A. Stabilizing fractures
- B. Performing surgery
- C. Relieving pain
- D. Checking for breathing

B

**Reason:** First Aid provides immediate, temporary care, such as stabilizing injuries or relieving pain, but performing surgery requires professional medical expertise beyond its scope.

- (ix) Using acidic cleaners on copper utensils can
- A. Polish them
- B. Discolour them
- C. Strengthen them
- D. Soften them

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**Reason:** Acidic cleaners, like vinegar or lemon juice, can react with copper, causing oxidation that leads to discoloration or tarnishing of the surface.

- (x) The disease caused by a deficiency of Vitamin B<sub>3</sub> (niacin) is
- A. Scurvy
- B. Pellagra
- C. Rickets
- D. Beriberi

B

**Reason:** Pellagra is caused by a deficiency of niacin (Vitamin B<sub>3</sub>), resulting in symptoms like dermatitis, diarrhea, and dementia, 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) Exclusive breastfeeding is recommended for six months. TRUE
  - (ii) Inhaling toxic fumes can cause poisoning. TRUE
  - (iii) Immunization protects against diseases like measles. TRUE
  - (iv) A pressure cooker is used for roasting. FALSE
  - (v) Respect and honesty are examples of bad behaviour. FALSE
  - (vi) Dietary fibre promotes regular bowel movements. TRUE
  - (vii) Soft water causes soap scum on clothes. FALSE
  - (viii) Sweeping should precede mopping in cleaning. TRUE
  - (ix) A tenant pays rent to a landlord. TRUE
  - (x) Swollen feet are a symptom of pregnancy. TRUE

## **SECTION B (60 Marks)**

- 3. (a) Give the meaning of:
  - (i) Environmental Health

The practice of maintaining a safe and healthy environment to prevent disease and promote well-being.

(ii) Maternal Health Care

Medical and supportive care provided to women during pregnancy, childbirth, and postpartum to ensure their health and that of their infants.

- (b) List four environmental health services in communities.
  - ➤ Waste management
  - ➤ Water purification
  - Vector control
  - > Air quality monitoring

- (c) State three ways families can maintain a clean home environment.
  - ➤ Regular cleaning and dusting
  - Proper waste disposal
  - > Ensuring good ventilation
- 4. (a) Give three causes of obesity.
  - > Excessive calorie intake
  - > Sedentary lifestyle
  - ➤ Genetic predisposition
  - (b) List three symptoms of obesity.
    - > Increased body weight
    - > Fatigue
    - > Joint pain
  - (c) (i) State three prevention strategies.
    - ➤ Balanced diet
    - Regular physical activity
    - Portion control
    - (ii) Give three treatment methods.
      - > Dietary modification
      - > Exercise programs
      - ➤ Medical consultation
- 5. (a) Outline six steps in laundering woolen garments.
  - > Sort by color and fabric
  - > Check care labels
  - ➤ Hand wash with mild detergent
  - ➤ Rinse gently in cold water
  - > Dry flat to maintain shape

- > Store properly to avoid moths
- (b) For white cotton laundry:
  - (i) Soaking:
    - ➤ Loosens dirt
    - > Enhances stain removal
  - (ii) Rinsing:
    - > Removes detergent residue
    - > Prevents fabric damage
- (c) List two factors in treating stains on delicate fabrics.
  - > Stain type
  - > Fabric sensitivity
- 6. (a) Give four reasons for food preservation.
  - i. Extends shelf life
  - ii. Prevents spoilage
  - iii. Maintains nutritional value
  - iv. Ensures food availability
  - (b) Outline five considerations when choosing food preservation methods.
    - i. Type of food
    - ii. Storage duration
    - iii. Available equipment
    - iv. Cost-effectiveness
    - v. Nutrient retention
  - (c) State four suitable methods for cooking legumes.
    - i. Boiling
    - ii. Pressure cooking
    - iii. Soaking and simmering

- iv. Stewing
- 7. (a) List three nutrients essential for children's growth.
  - i. Protein
  - ii. Calcium
  - iii. Vitamin D
  - (b) Explain four ways to ensure food safety during preparation.
    - i. Wash hands and surfaces
    - ii. Cook at proper temperatures
    - iii. Separate raw and cooked foods
    - iv. Store perishables promptly
- 8. (a) Identify four methods of waste disposal in the kitchen.
  - i. Composting
  - ii. Recycling
  - iii. Trash bin collection
  - iv. Incineration
  - (b) Explain four effects of poor kitchen hygiene.
    - i. Foodborne illnesses
    - ii. Pest infestation
    - iii. Bad odors
    - iv. Contaminated food
  - 9. Discuss six socio-cultural factors influencing dietary habits in Tanzania.

One socio-cultural factor influencing dietary habits in Tanzania is traditional beliefs and customs. Certain communities avoid specific foods because they are believed to cause illness, bad luck, or other misfortunes, regardless of their nutritional value.

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A second factor is religion. Religious beliefs influence what, when, and how people eat. For example,

Muslims avoid pork and alcohol, while some Christian and traditional groups have food restrictions

during specific ceremonies or fasting periods.

Third, social status affects dietary habits. People from wealthier families or urban areas often consume

a more diverse diet, including imported or processed foods, while poorer rural communities mainly

depend on locally available staples like maize, cassava, and beans.

Fourth, food taboos in some Tanzanian cultures restrict certain groups from eating specific foods. For

instance, pregnant women may be forbidden from eating eggs, fearing the baby will be bald, or twins

might be prohibited from certain meats.

Fifth, cultural festivals and ceremonies influence diets by promoting the consumption of specific

foods. During weddings, initiation ceremonies, or funerals, particular meals like pilau, roasted meat,

and traditional drinks are commonly prepared.

Sixth, peer influence and modern trends, especially among youth, lead to the adoption of fast foods

and soft drinks, replacing traditional, nutritious meals with unhealthy options that contribute to poor

eating habits.

10. Explain seven causes of food contamination and suggest prevention measures.

One cause of food contamination is poor personal hygiene. Handling food with dirty hands introduces

germs, causing contamination. The prevention measure is washing hands with soap before touching

food.

A second cause is using dirty utensils and surfaces. Germs on unclean knives, plates, or tables can

transfer to food. Cleaning and sterilizing kitchen tools and surfaces before use prevents this.

Third, improper food storage allows bacteria and pests to access food. Storing food in clean, covered

containers and keeping perishables in a refrigerator helps prevent contamination.

Fourth, cooking food inadequately can leave harmful bacteria alive. Cooking food thoroughly at the

recommended temperature destroys these bacteria.

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Fifth, cross-contamination occurs when raw food comes into contact with cooked or ready-to-eat food.

Separating raw and cooked items during preparation and storage prevents this.

Sixth, environmental contamination through dust, flies, and animals introduces dirt and germs into

food. Keeping food covered and preparing it in clean, enclosed areas prevents such contamination.

Seventh, use of contaminated water in food preparation or washing can introduce diseases. Boiling or

treating water before use in food handling is a good prevention measure.

11. Describe six advantages of proper meal planning and four challenges in achieving a balanced diet.

One advantage of proper meal planning is ensuring a balanced diet. It allows families to include all

necessary nutrients like proteins, carbohydrates, vitamins, and minerals in their meals.

A second advantage is saving time and money. Planning meals in advance reduces waste, unnecessary

purchases, and saves time during cooking.

Third, it prevents food shortages. By knowing what food is needed, a household can buy or grow

adequate quantities to meet their needs.

Fourth, meal planning accommodates health conditions. It allows preparation of suitable meals for

people with illnesses like diabetes or high blood pressure.

Fifth, it promotes family unity by ensuring all members' preferences and needs are considered,

reducing complaints and waste.

Sixth, meal planning encourages the use of seasonal and locally available foods, which are often

cheaper and fresher.

Challenges in achieving a balanced diet include poverty, which limits people's ability to buy a variety

of nutritious foods. A second challenge is ignorance, where people lack knowledge about nutrition

and proper meal planning. Third, cultural beliefs and taboos restrict the consumption of certain healthy

foods. Lastly, limited food availability during drought or poor harvest seasons reduces access to

diverse foods needed for a balanced diet.