

**THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
ADVANCED CERTIFICATE OF SECONDARY EDUCATION
EXAMINATION**

155/2

FOOD AND HUMAN NUTRITION 2

(For Both School and Private Candidates)

Time : 3 Hours

ANSWERS

Year : 2010

Instructions

1. This paper consists of sections **A** and **B**.
2. Answer all questions in section **A** and only **two (2)** question from section **B**.
3. Non-programmable calculators may be used.
4. Communication devices and any unauthorised 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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SECTION A (60 Marks)

Answer all questions in this section

1. Explain four reasons why personal hygiene is important in catering establishments.

Personal hygiene prevents the spread of foodborne illnesses. Food handlers with poor hygiene can transmit harmful bacteria to food, putting consumers at risk.

It also maintains customer trust. Customers expect clean food and staff, and poor hygiene damages the reputation of the establishment.

Good hygiene enhances food quality. Clean hands, clothing, and equipment preserve the taste and appearance of meals served.

Lastly, personal hygiene ensures compliance with food safety regulations. Catering businesses that fail to meet hygiene standards face penalties, closures, or loss of licences.

2. Define immunization and differentiate between passive and active immunization, giving two examples for each.

Immunization is the process of protecting the body against infectious diseases by stimulating the immune system through vaccines or antibody transfer.

Active immunization occurs when the body develops its own immunity after exposure to a vaccine or pathogen. Examples include measles vaccination and immunity acquired after recovering from chickenpox.

Passive immunization occurs when ready-made antibodies are introduced into the body, offering immediate but short-term protection. Examples include receiving antivenom after a snake bite and transfer of maternal antibodies to infants through breastfeeding.

3. Identify five challenges in implementing nutrition education programmes in rural communities.

One challenge is illiteracy. Many people in rural areas cannot read or write, which limits the effectiveness of written nutrition materials.

Another challenge is cultural beliefs. Some traditions discourage consumption of certain nutritious foods, creating barriers to adopting new practices.

Infrastructure limitations also hinder progress. Poor roads and communication systems make it difficult to deliver education and resources to remote villages.

Poverty is a major challenge, as even when people understand nutrition advice, they may not afford diverse and nutritious foods.

Finally, shortage of trained personnel reduces the reach of programmes. With few nutritionists available, many communities remain underserved.

4. Describe six characteristics of successful community nutrition programmes.

Successful programmes have clear objectives that are measurable and achievable, guiding implementation towards real impact.

They involve community participation, ensuring local ownership and acceptance of interventions.

They are sustainable, meaning they continue functioning even after external funding or support ends.

They are multi-sectoral, involving cooperation between health, agriculture, and education sectors to address nutrition holistically.

Regular monitoring and evaluation is another characteristic, as it tracks progress and ensures accountability.

Finally, cultural sensitivity is essential. Programmes that respect local traditions and food practices are more effective in gaining acceptance.

5. Mention four foods commonly associated with food poisoning and describe four measures to prevent their contamination.

Poultry is a common cause of food poisoning, often contaminated with Salmonella. Proper cooking ensures bacteria are destroyed.

Seafood, such as shellfish, carries pathogens from polluted waters. Sourcing from safe suppliers reduces risks.

Dairy products can harbour bacteria like Listeria. Pasteurization and refrigeration prevent contamination.

Cooked rice is another food linked to Bacillus cereus poisoning. Storing rice at safe temperatures immediately after cooking reduces bacterial growth.

6. State five benefits of using standard recipes in catering establishments.

Standard recipes ensure consistency in quality and taste, making customers confident they will receive the same dish each time.

They help control costs by specifying exact quantities, reducing wastage of ingredients.

They improve efficiency in the kitchen, as staff follow clear instructions without confusion.

They support training of new staff, providing a guide to maintain uniform standards across the establishment.

Lastly, they aid in accurate portion control, ensuring customers receive fair servings while protecting profitability.

SECTION B (40 Marks)

Answer only two questions from this section

7. Examine the role of dietary surveys in determining the nutritional status of communities, highlighting five strengths and five weaknesses.

Dietary surveys provide data on food consumption patterns, helping identify nutrient deficiencies in a community. This is a major strength as it informs health planning.

They also serve as a baseline for monitoring and evaluating nutrition programmes, making interventions more effective.

Another strength is that surveys can guide policy-making by providing reliable statistics for decision-makers.

They can identify vulnerable groups such as children and pregnant women, allowing targeted interventions.

Finally, dietary surveys support research by providing valuable data for academic and practical studies in nutrition.

However, they have weaknesses such as recall bias, since people may not remember exactly what they ate.

They are also time-consuming and require trained personnel, which increases costs.

Another weakness is cultural influence, as some respondents may provide answers they think are socially acceptable rather than true.

Dietary surveys may also miss seasonal variations in food availability, giving an incomplete picture of diet.

Lastly, they often rely on self-reporting, which can be inaccurate, reducing the reliability of findings.

8. Critically assess the role of government and private sector partnerships in improving food and nutrition policy in Tanzania.

The government plays a leadership role by creating policies and regulations that guide nutrition programmes. This ensures uniform standards across the country.

The private sector contributes resources and innovation. Food industries, for example, support fortification initiatives like adding iron to wheat flour.

Partnerships also expand coverage. While the government may reach rural areas, the private sector reaches urban consumers through retail outlets.

These collaborations enhance monitoring and enforcement. For instance, private laboratories can assist government agencies in testing food quality.

However, challenges exist, such as conflicts of interest when profit-driven companies promote unhealthy products. This requires strict regulation.

Despite challenges, partnerships remain essential because shared responsibility maximizes resources and strengthens nutrition outcomes across the country.

9. “Food handlers are critical in preventing foodborne illnesses.” Support this statement with six arguments.

Food handlers directly influence food safety through their hygiene practices. Clean hands, clothing, and habits prevent contamination.

They are responsible for proper cooking and storage of food, ensuring harmful bacteria are destroyed or inhibited.

Their awareness of cross-contamination risks, such as using separate utensils for raw and cooked foods, prevents spread of pathogens.

Food handlers also play a role in reporting health issues. Sick workers who avoid handling food protect consumers from infections.

They help maintain a clean environment by sanitizing equipment and work areas, which lowers risks of contamination.

Finally, their compliance with training and regulations makes them the first line of defence against outbreaks of foodborne diseases.

10. Discuss six approaches of nutrition education that can be used to influence food choices among youths in developing countries.

One approach is school-based education, where nutrition is included in the curriculum and reinforced through school feeding programmes.

Mass media campaigns are another approach. Using radio, television, and social media helps spread nutrition messages to large youth populations.

Peer education is also effective. Young people are more likely to adopt healthy habits when influenced by their peers.

Community outreach programmes expose youths to nutrition knowledge through demonstrations, workshops, and interactive sessions.

Another approach is experiential learning, where youths engage in activities such as school gardens. This hands-on experience promotes appreciation of healthy foods.

Finally, mobile technology can be used. Nutrition apps and SMS reminders provide youths with instant guidance on healthy eating habits.