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: 2008

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).



SECTION A (60 Marks)

Answer all questions in this section

1. Define food contamination and explain four types of contamination that may occur during food

processing.

Food contamination is the presence of harmful substances in food that make it unsafe for consumption.

The first type is biological contamination, caused by bacteria, viruses, or parasites. For example,

Salmonella in undercooked eggs.

The second type is chemical contamination, where cleaning agents or pesticides remain in food.

The third type is physical contamination, involving foreign objects such as glass, hair, or plastic.

The fourth type is cross-contamination, where pathogens from raw foods spread to cooked foods via

utensils or handlers.

2. State four objectives of the National Food and Nutrition Policy and discuss three challenges in

its implementation.

The first objective is to improve food security for all Tanzanians.

The second is to reduce malnutrition and related diseases.

The third is to promote production and consumption of diverse foods.

The fourth is to strengthen institutional frameworks for nutrition.

One challenge is inadequate funding, which limits implementation of planned programmes.

Another challenge is poor coordination between sectors like health, agriculture, and trade.

A third challenge is cultural resistance, where communities fail to adopt new food practices despite education.

3. Identify five key features of an effective nutrition intervention programme.

An effective programme has clear and measurable objectives to guide activities.

It involves community participation, ensuring ownership and sustainability.

It integrates multiple sectors such as health and agriculture for a holistic approach.

It includes monitoring and evaluation to track progress and improve performance.

It is culturally appropriate, respecting local food habits and beliefs.

4. Discuss six criteria that should be considered when establishing a hotel catering service.

The first criterion is location, which should be accessible to customers and close to supply sources.

The second is target market, as services should match the needs and affordability of the intended clients.

The third is quality of staff, since skilled chefs and waiters determine service quality.

The fourth is menu variety, offering balanced and appealing food options.

The fifth is infrastructure, including kitchens, dining areas, and storage facilities.

The sixth is compliance with regulations, ensuring food safety and licensing requirements are met.

5. Outline six consequences of inadequate protein intake in school children.

Children may suffer from stunted growth due to lack of body-building nutrients.

They may experience reduced cognitive performance, affecting learning and memory.

Protein deficiency can weaken the immune system, making children prone to infections.

They may develop kwashiorkor, characterized by oedema and wasting.

It can reduce energy levels, lowering school participation and attendance.

Long-term deficiency may lead to delayed puberty and poor overall development.

6. Define a standard recipe and mention five benefits of using standard recipes in catering establishments.

A standard recipe is a documented method of preparing a dish with specific ingredients, quantities, and steps to ensure consistency.

One benefit is quality consistency, where customers get the same taste each time.

Another benefit is cost control, since standardization prevents overuse of ingredients.

It aids in portion control, ensuring fair service to customers.

It improves staff training, as new employees can easily follow set recipes.

It enhances customer satisfaction by delivering reliable meals consistently.

SECTION B (40 Marks)

Answer only two questions from this section

7. "Food hygiene is a shared responsibility." Critically analyse the role of food handlers, consumers, and regulatory bodies in ensuring food safety, giving two roles for each.

Food handlers must practice good personal hygiene, such as handwashing, and must prevent cross-contamination by separating raw and cooked foods.

Consumers must store food safely at home and check expiry dates before purchase.

Regulatory bodies must enforce food safety laws and conduct regular inspections of food establishments.

8. Discuss six techniques of food promotion that are applicable in modern catering and hospitality industries.

Advertising through media platforms creates awareness about catering services.

Sales promotions such as discounts attract customers during off-peak times.

Menu engineering, highlighting profitable dishes, encourages customer choice.

Use of social media platforms engages younger audiences effectively.

Public relations activities, like sponsoring community events, build goodwill.

Loyalty programmes, such as reward cards, retain repeat customers.

9. Explain how nutrition education can address the problem of undernutrition among adolescent

girls, giving six critical interventions.

Nutrition education can promote balanced diets by teaching girls the importance of diverse foods.

It can emphasize iron-rich foods to prevent anaemia, a common problem in adolescents.

It can encourage proper hygiene to prevent infections that worsen undernutrition.

It can promote awareness of reproductive health, linking nutrition with maternal well-being.

It can build cooking and food preparation skills to improve dietary intake.

It can empower girls with knowledge to advocate for better nutrition in their households.

10. Examine five causes of micronutrient deficiencies in expectant mothers and propose five

practical solutions to overcome them.

One cause is inadequate dietary intake of vitamins and minerals. A solution is diversifying diets with

fruits, vegetables, and fortified foods.

Another cause is poverty, limiting access to nutritious foods. Social support programmes can address

this.

A third cause is cultural practices that restrict pregnant women from eating certain foods. Nutrition

education can help overcome taboos.

A fourth cause is frequent infections that deplete nutrients. Strengthening healthcare services provides

timely treatment.

The fifth cause is multiple pregnancies that increase nutritional demands. Family planning services can

help space pregnancies and reduce risks.