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

155/1

FOOD AND HUMAN NUTRITION 1

(For Both School and Private Candidates)

Time: 3 Hours Year: 2001

Instructions

- 1. This paper consists of sections **A** and **B**.
- 2. Answer all questions in section A and only three (3) 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 (40 Marks)

Answer all questions in this section.

- 1. (a) Differentiate between saturated and unsaturated fats.
 - (b) Identify the three major groups of carbohydrates and give one example in each.
 - (c) State three functions of dietary fiber in the human body.
- 2. (a) Define food security.
 - (b) Mention three essential requirements of household food security.
 - (c) Analyse the impact of HIV/AIDS on food security in developing countries.
- 3. (a) Explain briefly four factors which influence Basal Metabolic Rate (BMR).
 - (b) Why is BMR usually higher in men than in women?
- 4. (a) Describe the importance of the following in bread making:
 - (i) Wheat flour
 - (ii) Yeast
 - (iii) Salt
 - (iv) Warm water.
 - (b) What would happen if excess yeast is added to bread dough?
- 5. (a) Distinguish between food safety and food quality.
 - (b) Explain the aim of food quality assurance in the food industry.
 - (c) State three reasons for implementing food quality assurance programmes.

SECTION B (60 Marks)

Answer any three questions from this section.

- 6. "Food fortification is an important practice to improve micronutrient intake." Discuss this statement with suitable examples.
- 7. Describe the major causes of food losses in the post-harvest food chain.
- 8. A patient has been diagnosed with diabetes mellitus. Recommend appropriate dietary practices and lifestyle modifications to manage this condition.

9.	Explain traditional and modern methods of food preservation, assessing their effectiveness in
	maintaining food quality.
10.	Governments in developing countries face challenges in ensuring food security. Discuss the strategies
	that can be applied to improve household food security.