# 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: 2004

### **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)**

- 1. (a) Differentiate between chronic and transitory food insecurity.
  - (b) Give four causes of food insecurity in sub-Saharan Africa.
- 2. (a) Explain three methods of controlling rodents.
  - (b) State one advantage of each method mentioned in (a).
  - (c) Suggest one modern method for rodent control in grain storage.
- 3. (a) Explain three food toxins that interfere with mineral bioavailability.
  - (b) Mention two antivitamins present in traditional foods.
- 4. (a) Define energy expenditure.
  - (b) Name the three components of total energy expenditure.
  - (c) Briefly explain the significance of physical activity in energy expenditure.
- 5. (a) Explain the importance of yeast in bread making.
  - (b) Describe two chemical raising agents used in baking.
  - (c) Suggest two storage measures for chemical raising agents.

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

- 6. Explain conditions under which human poisoning can occur during pesticide application and outline safety measures.
- 7. Discuss the features of an ideal diet for elderly people in order to meet their nutritional needs.
- 8. "Handling procedures in food processing convert food into consumable form." Discuss this statement with examples.
- 9. Describe the nutritional role of proteins, carbohydrates, and fats in maintaining human health.
- 10. Explain the government strategies that can be adopted to strengthen food security at national and household level.