

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

155/1

FOOD AND HUMAN NUTRITION 1

(For Both School and Private Candidates)

Time: 3 Hours

Year: 2021

Instructions

1. This paper consists of sections **A** and **B**.
2. Answer **all** questions in section **A** and only **Three (3)** questions from section **B**.
3. Cellular phones and any unauthorised materials are **not** allowed in the examination room.
4. Write your **examination Number** on every page of your answer booklet(s).

maktaba.tetea.org



SECTION A (60 Marks)

Answer all questions in this section.

1. (a) Briefly explain the principles involved in
 - (i) vacuum packing
 - (ii) freezing methods of food preservation.(b) Briefly explain the effects of dehydration on food nutrients.
2. (a) Explain briefly the problems associated with the use of pesticides
(b) Give the practices that should be used to avoid the problems associated with the use of pesticides.
3. (a) Identify the potential users of Tanzania Food Composition Tables.
(b) Give the procedure of calculating the nutritive value of a meal recipe by using a food composition table.
4. (a) Identify the factors that determine the quantity of protein an individual requires for structural and regulatory functions and for energy.
(b) Argue against the statement "excessive intake of protein is beneficial to health".
5. (a) Give the reason as to why spinach is not considered as a good source of calcium and sodium inspite of containing a reasonable amount of those minerals.
(b) Give the biological effects of
 - (i) glucosinolates
 - (ii) saponins natural toxicants.(c) Give the reasons for a very small amount of natural toxicants found in most foods not necessarily create a hazard in the body.
6. (a) Account for the factors that influence meal planning in a commercial catering institution.
(a) Give the measures of improving the nutritive value of foods served so as to meet the nutritional needs of the customers.

SECTION B (40 Marks)

Answer only two questions from this section.

7. Suggest the methods of preventing food grain deterioration by insect pests.
8. (a) Describe the roles of yeast fermentation in bread making process.
(b) Give the factors which affect the rate of yeast fermentation during bread making.

9. (a) Describe the major groups of factors which cause low food crop production
(b) Suggest the ways of improving food crop production.