

**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

Thursday, 10th May 2018 a.m

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).

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ACSEE-0518

SECTION A (40 Marks)

Answer **ALL** questions in this section.

Each question carries **eight (8)** marks.

1. (a) Differentiate between saturated fats and unsaturated fats.
(b) Identify the three major groups of carbohydrates basing on their chemical structures and give one example in each group.
2. Explain briefly four factors which affect Basal Metabolic Rates.
3. (a) Define the term food security.
(b) Identify three essential requirements of household food security.
(c) Describe briefly four factors that influence the availability of sufficient food to all household members.
4. Describe briefly the importance of the followings in bread making.
 - (a) wheat flour
 - (b) fresh yeast
 - (c) warm liquid
 - (d) table salt
5. Describe briefly eight factors which influence the choice of food we eat.

SECTION B (60 Marks)

Answer only **three** questions from this question.

Each question carries **Twenty (20)** Marks.

6. “Air and carbon dioxide gas are leavening agents that should be introduced into the flour mixture before baking”. Elaborate this statement by describing:
 - (a) five ways of introducing air into a flour mixture;
 - (b) three chemical ways of introducing carbon dioxide gas into the flour mixture
 - (c) one biological way of introducing carbon dioxide gas into the flour mixture.
7. Describe six natural compounds used to protect food grains against pest infestations and state the effect of each compound to the food grain pests.

8. “The quality of a milled product is determined by the characteristics of the milled seeds”. Support this statement by explaining
- (a) six factors to consider before milling grains.
 - (b) the four steps of wet milling process.
9. Support the statement, “The handling procedures in food processing convert the food into consumable form”, by
- (a) describing the three stages of handling food in food processing
 - (b) six effects of drying food grains on their quality.
10. Describe six categories of the primary causes of food losses.