

THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA
ADVANCED CERTIFICATE OF SECONDARY EDUCATION
EXAMINATION
134/2
AGRICULTURE 2

(For Both School and Private candidates)

Time: 3 Hours

Year: 2022

Instructions

1. This paper consists of sections **A** and **B** with a total of **ten (10)** questions.
2. Answer **all** questions in section **A**, and **two (2)** questions from section **B**.
3. Section **A** carries **seventy (70)** marks and section **B** carries **thirty (30)** marks
4. Cellular phones and any unauthorized materials are **not** allowed in the examination room.
5. Non-programmable calculators may be used.
6. Write your **Examination Number** on every page of your answer booklet (s)

SECTION A (70 marks)

Answer **all** questions in this section

1. (a) Account for the six significant achievements that have been made by plant breeding in the crop production.
(b) Briefly explain four ways in which the application of plant breeding brings about the undesirable effects a crop plants.
2. (a) Outline six measures that farmer should take to overcome the problem of scours in calves in their farmstead.
(b) Outline four points on how to control Newcastle disease.
3. Explain five points on how the animal breeding can overcome the problem of poor yield and low quality livestock products from local breeds.
4. (a) Use five points to illustrate disagreement with farmers' belief that, using different proper methods to control weeds will one day have their crop farms completely free from weeds
(b) Briefly describe five ways on how weeds cause the decline in the agricultural production.
5. (a) Examine five benefits of applying the rotational grazing in the pastures.
(b) Briefly explain five principles underlying the pasture improvement.
6. (a) Briefly explain four cultural methods to be employed by the farmer to suppress insect pests in the new growing season in the cabbage garden
(b) Suggest five agronomic measures for controlling the maize stalk borer.
7. (a) Suggest a disease which is characterised by the mass of dark brown/ black spores like soot in the flowering parts of sorghum and maize which have intercropped,
(b) Mention six possible cereal crops that can be attacked by the disease suggested in (a).
(c) Identify four measures that would be used to control the disease in the next

crop growing season.

SECTION B (30 Marks)

Answer **two (2)** questions in this section

8. (a) Justify the benefits of practicing sustainable agriculture to both environment and consumers' welfare in Tanzania by giving six points.
(b) Briefly describe four methods of the sustainable agriculture to be practised by farmers in their farms.
9. (a) Give four factors that make fungi to be the most important plant pathogen.
(b) Explain how the following practices help in eradicating diseases:
 - (i) Planting clean seeds
 - (ii) Crop rotation
 - (iii) Burning of crop residues.
- 10.(a) (i) Describe stepwise procedures on how to compute feed ration using the Pearson Square Method.
(ii) Give the necessary circumstances which necessitate farmers to use the Pearson's Square Method.
(b) Calculate the amount of each feedstuff in kilograms to prepare 100 kg of chick mash containing 30% Digestible Crude Protein using the following data:
20% Digestible Crude Protein of maize meal and 50% Digestible Crude Protein of fish meal.