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

134/2 AGRICULTURE 2

(For Both School and Private Candidates)

Time: 3 Hours Year: 2002

Instructions

- 1. This paper consists of sections ten (10) questions in sections A and B.
- 2. Answer five (5) questions choosing at least two (2) questions from each section.
- 3. Each question carries twenty (20) marks.
- 4. Cellular phones are **not** allowed in the examination room.
- 5. Write your **Examination Number** on every page of your answer booklet(s).



SECTION A

CROP SCIENCE AND PRODUCTION

Answer at least two (2) questions from this section.

1. Describe the process of developing a new crop variety through hybridization, highlighting the key steps involved.
2. Explain the importance of each of the following in plant pathology:
(a) Pathogen
(b) Inoculum
(c) Vector
(d) Epiphytotic
(e) Symptom
3. Discuss the economic importance of three common fungal diseases in cereals, including their symptoms and control measures.
4. Explain the purpose of applying each of the following in pesticide formulations:
(a) Surfactants
(b) Emulsifiers
(c) Diluents
(d) Adjuvants
(e) Stickers

5. Differentiate between complete metamorphosis and incomplete metamorphosis in insect pests, giving

two examples for each.

SECTION B

LIVESTOCK SCIENCE AND PRODUCTION

Answer at least two (2) questions from this section.

- 6. Explain the term balanced ration and state five factors to consider when formulating a balanced ration for high-yielding dairy cows.
- 7. Briefly describe the roles of four macro-minerals in an animal's body.
- 8. Discuss three nutritional disorders in livestock, including their causes, symptoms, and prevention.
- 9. Explain the importance of forage preservation and briefly describe two methods of making hay.
- 10. Differentiate between rotational grazing and continuous grazing, stating three advantages and three disadvantages for each.