

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

034/2

**AGRICULTURAL SCIENCE 2
(PRACTICAL)
(For School Candidates Only)**

Time: 2:15 Hours

Tuesday, 18th October 2011 a.m.

Instructions

1. This paper consists of **three (3)** questions.
2. Answer **two (2)** questions.
3. Each question carries 25 marks.
4. Cellular phones and calculators are **not** allowed in the examination room.
5. Write your **Examination Number** on every page of your answer booklet(s).



1. You are provided with specimens A, B, C, D, E, F and G. Observe each of the specimens carefully and then answer the questions that follow.
 - (a)
 - (i) Identify each of the specimens A, B, C, E and F by their common and scientific names. **(10 marks)**
 - (ii) Name one cash crop affected by each of specimens A and B. **(2 marks)**
 - (iii) State one harmful effect of each of specimens A and B to plants they infect. **(2 marks)**
 - (b) Propose three (3) cultural methods that can be used to control specimen A. **(3 marks)**
 - (c)
 - (i) Examine the importance of specimens C and E. **(1 mark)**
 - (ii) Assess the competitive effects of specimen F on crops. **(2 marks)**
 - (d)
 - (i) Identify each of the specimens D and G. **(2 marks)**
 - (ii) Briefly, explain how would you control the condition in G? **(3 marks)**
2. You are provided with specimens H, I, J and K. Study them carefully and then answer the questions that follow.
 - (a)
 - (i) Identify each of the specimens H, I, J and K. **(4 marks)**
 - (ii) State the classes of livestock feeds for each of the specimens H, I, J and K. **(4 marks)**
 - (iii) Give two (2) properties of each class of feed stuff identified in (a) (ii) above. **(4 marks)**
 - (b)
 - (i) State the main nutrient present in each of specimens H, I, J and K and their functions. **(4 marks)**
 - (ii) Comment on the digestibility of each of specimens H and I. Give reasons for your answer. **(2 marks)**
 - (iii) Giving reasons, suggest the types of animals which are suitable to be fed with each of specimens H and I. **(2 marks)**
 - (iv) Name four (4) other ingredients which should be supplemented to specimen I to make it a balanced feed. **(2 marks)**

- (c) Briefly, explain three (3) factors that a farmer should consider when selecting feeds for farm animals. **(3 marks)**

3. You are provided with specimens M, N, O, P, Q, R, S and T. Observe each of the specimens carefully and then answer the questions that follow.

- (a) (i) Identify each of the specimens M, N, O, P, Q, R, S and T. **(8 marks)**
- (ii) Explain briefly the use of each of the specimens M, N, O, P and Q. **(5 marks)**
- (b) (i) Outline six (6) properties of specimen S. **(3 marks)**
- (ii) Give reasons as to why specimen S should be applied ahead of sowing or planting time. **(2 marks)**
- (iii) Giving reasons, briefly explain the suitable methods of application of specimen R to the soil for widely spaced crops. **(2 marks)**
- (c) (i) Briefly, explain three (3) advantages of using specimen T as compared to specimens R and S. **(3 marks)**
- (ii) Suggest the reasons for specimen T having low nutrient content. **(2 marks)**