

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

034/2

AGRICULTURAL SCIENCE 2
PRACTICAL
(For School Candidates Only)

TIME: 2½ Hours

Wednesday morning 24/10/2007

Instructions

1. This paper consists of **three (3)** questions.
2. Answer **two (2)** questions.
3. Each question carries 25 marks.
4. Read the instructions for each question carefully before you start answering it.
5. Cellular phones are **not** allowed in the examination room.
6. Electronic calculators are **not** allowed in the examination room.
7. Write your **Examination Number** on every page of your answer booklet(s).



This paper consists of 3 printed pages.

1. You are provided with specimens S_1 , S_2 , S_3 , E_1 , E_2 , E_3 and E_4 . Observe them carefully and then answer the following questions.
- (a) Identify each of the specimens S_1 , S_2 , S_3 , E_1 , E_2 , E_3 and E_4 . (3½ marks)
 - (b) A soil sample consists of 40% of S_1 , 40% of S_2 and 20% of S_3 . State the name of this soil sample. (2½ marks)
 - (c)
 - (i) Which soil specimen is most difficult to cultivate? (2 marks)
 - (ii) Which soil specimen is highly aerated? (2 marks)
 - (d)
 - (i) State the functions of each of the specimens E_1 , E_2 , E_3 and E_4 . (4 marks)
 - (ii) Why is it not advisable to apply oil on specimen E_4 ? (2 marks)
 - (iii) Name five (5) shapes on which specimen E_4 can be made. (5 marks)
 - (iv) State a good way of storing specimen E_4 in a farm workshop. (2 marks)
 - (v) Name four (4) types of specimen E_4 in terms of roughness. (2 marks)
2. You are provided with specimens C_1 , C_2 , C_3 , C_4 , C_5 and C_6 . Observe them carefully and answer the following questions:
- (a) State the common name and the botanical name of each of the specimens C_1 , C_2 , C_3 and C_6 . (4 marks)
 - (b)
 - (i) State the mode of propagation of specimens C_1 , C_2 and C_5 . (3 marks)
 - (ii) State the best soil type for growing C_2 . (1 mark)
 - (iii) What is the most commonly grown variety of C_2 ? (1 mark)
 - (iv) Name six (6) pests of C_2 . (6 marks)
 - (v) Name the disease that affects C_2 and state the way it can be controlled. (2 marks)
 - (c) Refer to specimen C_3
 - (i) State the most common disease that affects the plants of this specimen. (2 marks)
 - (ii) How is this specimen harvested and processed before it is stored? (2 marks)

- (d) (i) Name the crop which specimen C_4 infects. (1 mark)
- (ii) How is C_4 controlled? (1 mark)
- (e) (i) C_5 appears in various varieties. Name the variety of C_5 given. (1 mark)
- (ii) Name **two (2)** pests of C_1 . (1 mark)
3. You are provided with specimens $L_1, L_2, L_3, L_4, L_5, L_6, L_7$ and L_8 . Observe them carefully and then answer the following questions:
- (a) Identify each of the specimens $L_1, L_2, L_3, L_4, L_5, L_6, L_7$ and L_8 . (4 marks)
- (b) State the functions of: (i) L_1 (2 marks) (ii) L_4 (2 marks)
- (c) State the function of each of the specimens L_5, L_6 and L_7 in the animal body. (9 marks)
- (d) In which specimen is S_8 found? (2 marks)
- (e) (i) Name **four (4)** components present in specimen L_3 . (4 marks)
- (ii) Name **two (2)** components present in L_2 . (2 marks)