

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

Monday, October 19th 2009 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 electronic calculators are **not** allowed in the examination room.
5. Write your **Examination Number** on every page of your answer booklet(s).

This paper consists of 3 printed pages.

1. You are provided with the specimens D₁, D₂, D₃, D₄, D₅, D₆ and D₇. Study them carefully and then answer the question that follow.
 - (a)
 - (i) Identify each of the specimens D₁, D₂, D₃, D₄ and D₅. (2.5 marks)
 - (ii) Classify the specimens D₁, D₂, D₃, D₄ and D₅ into their respective classes basing on botanical characteristics and their uses. (2.5 marks)
 - (iii) Name one main pest attacking each of the specimens D₁, D₂, D₃, D₄ and D₅. (2.5 marks)
 - (iv) Give one (1) control measure for each of the pests named in (a) (iii) above. (2.5 marks)
 - (v) State the mode of propagation for each of the specimens D₁, D₂, D₃ and D₅. (4 marks)
 - (b) Refer to specimen D₆ and D₇.
 - (i) Identify them by their scientific and common names. (2 marks)
 - (ii) Give the general name for specimens D₆ and D₇. (2 marks)
 - (iii) State four (4) harmful effects of specimens D₆ and D₇ to crop plants. (4 marks)
 - (iv) Explain one method you would take to control each of the specimens D₆ and D₇ in a field of coffee. (3 marks)
2. (a) You are provided with specimens E₁, E₂, E₃, E₄, E₅ and E₆. Observe them carefully and then answer the questions that follow.
 - (i) Identify each of the specimens E₁, E₂ and E₆. (3 marks)
 - (ii) Give classes of animals which possess specimens E₁ and E₂ in their alimentary canal. (2 marks)
 - (iii) State the function of each of specimens E₁ and E₂ in animals. (2 marks)
 - (iv) How is the specimen E₁ adapted to the function it performs? (2 marks)

- (b) Refer to specimen E₃, E₄, E₅ and E₆.
- Identify each of the specimens E₃, E₄ and E₅. (3 marks)
 - What is the function of each of the specimen E₅ and E₆ in livestock management? (3 marks)
 - Name the diseases which are cured by using each of the specimens E₃ and E₄. (2 marks)
 - What is the causative agent of a disease cured by E₃? (2 marks)
 - List other three (3) diseases which are transmitted by the same vector as the one which is caused by the agent named in (b) (iv) above. (3 marks)
 - Explain three (3) advantages of the practice done using specimen E₆ in dairy cattle management. (3 marks)
3. You are provided with the specimen F₁, F₂, F₃, F₄, F₅, F₆ and F₇. Observe them carefully and then answer the questions that follow.
- Identify each of the specimens F₁, F₂, F₃, F₄ and F₅. (5 marks)
 - Which specimens among the specimens F₁, F₂, F₃, F₄ and F₅ are used in surveying? (2 marks)
 - Which specimens are used in wood work? (2 marks)
 - Explain briefly the specific function(s) of each of the specimens F₁, F₂, F₃, F₄ and F₅. (5 marks)
 - Refer to specimens F₆ and F₇.
 - Identify each specimen. (2 marks)
 - Which specimen contains more plant nutrients? (2 marks)
 - State three (3) properties of specimen F₇. (3 marks)
 - Which specimen is the best for crop production? Give three (3) reasons. (4 marks)