

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

034/2

AGRICULTURE 2
(PRACTICAL)
(For Both School and Private Candidates)

Time: 2:30 Hours

Year: 2023

Instructions

1. This paper consists of **two (2)** questions.
2. Answer **all** questions.
3. Each question carries **twenty five (25)** marks.
4. All writing must be in **blue** or **black** ink, except drawings which must be in pencil.
5. Communication devices and any unauthorised materials are **not** allowed in the examination room.
6. Write your **Examination Number** on every page of your answer booklet(s).



1. You are provided with parts of goat digestive system labeled **W**, **X**, **Y** and **Z**. Perform the following procedures then answer the questions that follow:

Procedures

- (i) Wear the hand gloves.
- (ii) With the aid of a hand lens and scalpel, carefully observe the inner linings of the labeled parts.

Questions

- (a) Giving the characteristic feature, identify each of the parts **W**, **Y** and **Z**. (3 marks)
 - (b)
 - (i) Why is part **W** known as a hardware stomach? (1 mark)
 - (ii) Apart from its role in part (b) (i), what is the function of part **W**? (1 mark)
 - (iii) Give the adaptation of part **W** to its function in part (b) (ii). (1 mark)
 - (c) Why is part **X** considered to be a true stomach? Give a reason. (1 mark)
 - (d) Examine three functions and three adaptations of part **Y** to its functions. (6 marks)
 - (e) What are the three functions of part **Z**? (3 marks)
 - (f) Briefly explain the process of rumination in animals with the digestive system containing parts **W**, **X**, **Y** and **Z**. (4 marks)
 - (g)
 - (i) Briefly describe the common health problem associated with each of part **W** and **Y**. (3 marks)
 - (ii) How can the health problems in part (g) (i) be prevented? (2 marks)
2. (a) You are provided with the following: 100 cm³ dry sand soil, 500 cm³ measuring cylinder, 100 cm³ beaker and 200 cm³ water. Use them to design and carry out experiment to verify that the soil contains air and write a report for your experiment. (13.5 marks)
- (b) You are provided with specimens **P** and **Q** suspected with plant diseases. Using a hand lens, make careful examination on the specimens then answer the following questions:
- (i) Point out the characteristic symptoms and the disease affecting each of the specimens **P** and **Q**. (4 marks)
 - (ii) What is the causative agent of the disease affecting specimen **P** and **Q**? (0.5 mark)
 - (iii) Suggest three preventive measures for the disease affecting specimen **P** and four for the disease affecting specimen **Q**. (7 marks)