

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

033/2A

BIOLOGY 2A
(ACTUAL PRACTICAL A)
(For Both School and Private Candidates)

Time: 2:30 Hours

Friday, 08th November 2013 a.m.

Instructions

1. This paper consists of **two (2)** questions. Answer **all** the questions.
2. Each question carries **25** marks.
3. Except for diagrams which must be drawn in pencil, all writings should be in blue or black ink.
4. Calculators and cellular phones are **not** allowed in the examination room.
5. Write your **Examination Number** on every page of your answer booklet(s).



1. You have been provided with solution **B**.

- (a) Identify the food substances present in solution **B** by using the reagents provided. Tabulate your work as shown in the following Table:

Food tested	Procedure	Observation	Inference

- (b) For each food substance identified in 1(a);
(i) Name two common sources.
(ii) State their role in the body of human being.
- (c) The digestion of one of the identified food substance in 1(a) starts in the mouth.
(i) Name this food substance.
(ii) Identify the enzyme responsible for its digestion in the mouth.
- (d) The digestive system of human being has several parts.
(i) Name the part of digestive system in which most of digestion and absorption of food takes place.
(ii) Explain how the named part in (d) (i) is adapted for absorption of digested food substances.

2. You have been provided with specimens **S₁**, **S₂**, **S₃** and **S₄**.

- (a) Use the hand lens to observe these specimens then:
(i) Identify specimen **S₁**, **S₂**, **S₃** and **S₄** by their common names.
(ii) Classify specimen **S₁**, **S₂** and **S₃** to Class level.
- (b) Study specimen **S₃** carefully then answer the following questions:
(i) Draw a neat, large and well labeled diagram of specimen **S₃**.
(ii) State the habitat of specimen **S₃**.
(iii) In what ways is specimen **S₃** important to a farmer?
- (c) State two advantages of specimen **S₁**.
- (d) State four advantages of specimen **S₄**.
- (e) Give reason why specimen **S₄** was formally placed in the Kingdom Plantae?