

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

**033/2B**

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

***Time: 2:30 Hours***

***Thursday, 13<sup>th</sup> October 2011 a.m***

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**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 pen.
4. Calculators are **not** allowed in the examination room.
5. Cellular phones are **not** allowed in the examination room.
6. Write your **Examination Number** on every page of your answer booklet(s).

1. Solution **D** contains different food substances;

- (a) Using the chemicals and reagents provided, carry out food test to identify the food substance present in solution **D**. Tabulate your work as shown in the following Table:

FOOD TESTED	PROCEDURE	OBSERVATION	INFERENCE

- (b) For each food substance identified in 1(a) above, name the end product after digestion.
- (c) From the food substances identified in 1(a) above, which one must be excreted out of the body by the kidney when it is in excess?
- (d) Briefly explain what would happen when excess food named above is allowed to accumulate in the body.

2. You have been provided with specimens **G<sub>1</sub>**, **G<sub>2</sub>**, **G<sub>3</sub>**, **G<sub>4</sub>**, and **G<sub>5</sub>**.

- (a) Using a hand lens, carefully study the specimens then:
- Identify each specimen by its common name.
  - Classify **G<sub>1</sub>** and **G<sub>5</sub>** to class level.
  - State two economic importance of specimen **G<sub>2</sub>**.
  - Draw a well labeled diagram of specimen **G<sub>2</sub>**.
- (b) (i) State two differences between **G<sub>4</sub>** and **G<sub>5</sub>**.
- (ii) State two similarities between specimen **G<sub>4</sub>** and **G<sub>5</sub>**.