

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

033/2C

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

Time: 2:30 Hours

Monday, 18th 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 A which contains various food substances.

- (a) Use the chemicals and reagents provided to identify the food substances present in solution A. Tabulate your work as shown in the following Table:

Food Tested	Procedure	Observations	Inference

- (b) State the function of each food substance identified in 1(a).
- (c) To each food substance identified 1(a), name at least two sources in which it has been extracted.
- (d) One of the food substances identified in 1(a) is very important for child development.
- (i) Mention one disease which can develop when the diet provided to a child lacks that food substance.
- (ii) State the symptoms of a disease mentioned in (d)(i).

2. You have been provided with specimens **B₁**, **B₂** and **B₃**.

- (a) Using a hand lens, study the specimens carefully and;
- (i) Identify each specimen by its common name.
- (ii) Name the Kingdom and Phylum/Division in which each specimen **B₁**, **B₂** and **B₃** belongs.
- (iii) State four advantages of specimen **B₃**.
- (iv) Draw a well labeled diagram of specimen **B₃**.
- (b) Study carefully specimen **B₁** and **B₂** then:
- (i) State four observable differences between **B₁** and **B₂**.
- (ii) State the habitats of specimen **B₁**, **B₂** and **B₃**.