

**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, 07th October 2011 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 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. The solution prepared contained various food substances.

- (a) Use the chemicals and reagents provided to identify the food substances present in solution S₁. Tabulate your work as shown in the following Table:

FOOD TESTED	PROCEDURE	OBSERVATION	INFERENCE

- (b) State the function in the human body of each food identified in 1(a) above.
- (c) Name two enzymes necessary for digestion of food substance(s) identified in (a) above.
- (d) To each type of food identified above, name at least one source in which the food has been extracted.

2. Study specimen A, B and C then:

- (a) Write the common names of specimen A, B and C.
- (b) Classify specimen A and B to the phylum level.
- (c) State the habitat and one economic importance of specimen A.
- (d) Outline four economic importance of specimen B.
- (e) Use the scalpel provided to cut specimen C longitudinally into two equal halves. Then, draw a neat, well labelled diagram of a specimen.
- (f) Name the division of specimen C.
- (g) State the observable features you can use to place the specimen into its respective phylum/division.