THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
DIPLOMA IN SECONDARY EDUCATION EXAMINATION

733/2A

BIOLOGY 2A
(ACTUAL PRACTICAL A)

Time: 3 Hours **Thursday, 19th May 2011 a.m.**

INSTRUCTIONS

1. This paper consists of **three (3)** questions.
2. Answer **all** questions.
3. Question number 1 carries 40 marks and the rest carry 30 marks each.
4. Cellular phones are **not** allowed in the examination room.
5. Write your **Examination Number** on every page of your answer booklet(s).

This paper consists of 2 printed pages

1 **You have been provided with specimen M. Dissect the specimen in the usual way to display the alimentary canal to the left of the specimen.**

(a) **Draw a large neat labelled diagram of the dissection.**

(b) **Briefly describe the adaptation of the structures associated with the following roles in specimen M:**

(i) Absorption of digested food.
(ii) Absorption of water.

(c) Classify **M** to the class level.

2. Solution **Z** is a mixture of different food substances.

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

FOOD TESTED	PROCEDURE	OBSERVATION	INFERENCE

(b) For each food substance identified in 2(a) above;
(i) Name the end product after digestion
(ii) Name the enzymes responsible for its digestion.

(c) Describe two roles played by each identified food substance in human body.

(d) Excess of one of the identified food substance in the body is changed into urea which is then excreted by the kidneys. Name and explain the process involved in the changes.

3. You have been provided with specimens S_1, S_2, S_3, S_4, S_5 and S_6.

(a) Using a hand lens, carefully study the specimens and:

(i) Identify each specimen by its common name.
(ii) Classify S_1, S_3, S_5, and S_6 to class level.
(iii) State two economic importances of specimen S_2.

(b) State two differences between S_4 and S_5.