THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL

DIPLOMA IN SECONDARY EDUCATION EXAMINATION

733/2A **BIOLOGY 2A**

(ACTUAL PRACTICAL A)

Time: 3 Hour. **Tuesday 15/05/2012 a.m**

Instructions

1. This paper has three papers.
2. Answer **all** questions.
3. Question **1** contains 30 marks while question 2 and 3 have 10 marks each.
4. Mobile phones are not allowed inside the examination room.
5. Write your Examination Number on every page of your answer booklet.

1. Dissect specimen **Z** to expose reproductive and excretory systems.

(a) Draw a well-labelled diagram showing two parts from each of the two systems.

(b) State the function of each reproductive part drawn.

(c) What is the sex of specimen Z? Give three justifications.

(d) Observe the threadlike structures present and state why they are numerous.

2. Use solution **M** and reagents provided to perform food tests.

(a) Carry out food tests on solution M and fill the table below:

Food Test	Procedure	Observation	Inference

(b) State three biological roles of food substances identified.

(c) (i) Name one enzyme responsible for digestion of the food identified.

(ii) State the end products of digestion.

3. Observe specimens **U** (Palm plant), **N** (Fish scale), and **R** (Groundnut seedling).

(a) Give two observable features used to classify specimen U into its kingdom.

(b) Give three adaptive features of specimen U for dry conditions.

(c) (i) Name the organism where specimen N originated.

(ii) State two functions of N to the organism.

(d) What features are used to place specimen R into its class? State three.