## 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.