THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL

DIPLOMA IN SECONDARY EDUCATION EXAMINATION

733/2A **BIOLOGY 2A**

(ACTUAL PRACTICAL A)

Time: 3 Hour. **Tuesday, 16 May 2017 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 the specimen labelled **J** to display the digestive and reproductive systems.

(a) Draw a well-labelled diagram showing six parts of the digestive system and two parts of the reproductive system.

(b) Name three major parts forming the alimentary canal in specimen J.

(c) State three functions of the reproductive organs observed in specimen J.

2. You are provided with specimen **M1** and **M2**. Perform the following steps:

(i) Cut M1 into two halves.

(ii) Drop iodine solution on one half and observe after five minutes.

(iii) On the other half, add Benedict's solution and observe after heating.

(iv) For M2, rub it on paper, heat, and observe the result.

Questions:

(a) Record the observations from all three tests.

(b) Identify the food substances present in M1 and M2.

(c) State the enzymes responsible for digesting the identified food substances and their end products.

(d) Give three functions of the food substance from M2 to desert animals.

3**.** Observe specimens **F**, **G**, **H**, and **I**.

(a) List four observable differences between specimens F and G.

(b) Give three similarities between specimens H and I.

(c) Draw specimen G and label five parts.