THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL

DIPLOMA IN SECONDARY EDUCATION EXAMINATION

733/2A **BIOLOGY 2A**

(ACTUAL PRACTICAL A)

Time: 3 Hour. **Tuesday 14/05/2002 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 provided specimen P (a female rabbit) in the usual way to expose the digestive system.

   (a) Draw a labelled diagram of the dissected specimen P showing six digestive organs.

   (b) Identify two precautions taken when cutting the abdominal skin.

   (c) State the roles of the caecum and large intestine in digestion.

2. You are provided with solution A. Carry out a biochemical food test:

   (a) Use appropriate reagents to test for food contents in solution A. Record results in this table:

Food Tested	Procedure	Observation	Inference

   (b) Mention the importance of the food substances identified in human diet.

   (c) Explain the necessity of applying heat during the test for reducing sugar.

3. Observe specimens R, S and T. Then answer:

   (a) List two visible features placing specimen R in its correct kingdom.

   (b) Describe three adaptations of specimen T to arid conditions.

   (c) How does specimen S differ from specimen R in leaf venation and stem type?

   (d) Suggest three economic uses of specimen T.