THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL

DIPLOMA IN SECONDARY EDUCATION EXAMINATION

733/2B **BIOLOGY 2B**

(ACTUAL PRACTICAL B)

Time: 3 Hour. **Wednesday 17/05/2006 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 **K** (Rat or Guinea pig) to expose the digestive system.

(a) (i) Draw a labelled diagram showing six digestive system parts.

(ii) Mark the positions of the liver, small intestine, and caecum.

(b) (i) Identify the structure responsible for enzyme secretion.

(ii) Name the part where bile is stored.

(iii) Which organ connects the mouth to the stomach?

(c) (i) Is the gall bladder visible?

(ii) What is the function of bile?

2. You are given specimen **N** for enzymatic testing using hydrogen peroxide.

(a) (i) Grind one part and keep the other part whole.

(ii) Add 2 ml hydrogen peroxide to both parts in test tubes A and B.

(b) (i) State the purpose of this experiment.

(ii) Identify the control tube.

(iii) What difference was observed? Why?

(c) (i) Name the gas released.

(ii) Write a balanced chemical equation for the reaction.

(iii) What conclusion can be drawn from this experiment?

3. Observe specimens **O**, **P** and **Q**.

(a) (i) Why is P placed in class Insecta? Give three reasons.

(ii) What economic benefit is derived from specimen P?

(b) (i) Give three differences between P and Q.

(ii) Draw specimen O and label three parts.

(iii) Name the kingdom of specimen O.