THE UNITED REPUBLIC OF TANZANIA NATIONAL EXAMINATION COUNCIL DIPLOMA IN SECONDARY EDUCATION EXAMINATION

733/2B

BIOLOGY 2B (ACTUAL PRACTICAL B)

Time: 3 Hour. Wednesday 14/05/2008 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 **P** to expose the digestive system.
- (a) (i) Draw and label a diagram showing at least seven parts of the digestive system.
 - (ii) Show the direction of food flow using arrows.
- (b) (i) Name the organ responsible for enzyme production.
 - (ii) Identify the part where nutrient absorption takes place.
 - (iii) State the organ that stores bile.
- (c) (i) Mention three precautions taken during dissection.
 - (ii) What is the significance of using pins while displaying internal parts?
- 2. You are given specimen U for a catalase experiment.
- (a) (i) Grind half of U and leave the other half whole.
 - (ii) Add 2 ml of 2% hydrogen peroxide into both and observe.
 - (iii) Test the evolved gas using a glowing splint.
- (b) (i) State the purpose of this experiment.
 - (ii) Which test tube serves as control? Explain.
 - (iii) What did you observe in each test tube and why?
- (c) (i) Name the enzyme responsible for the reaction.
 - (ii) Write the chemical equation for the reaction.
 - (iii) Identify the gas evolved and explain its significance in biology.
- 3. Observe specimens A, B and C.
- (a) (i) State five features common in A and B.
 - (ii) List two distinguishing features of specimen C.
- (b) (i) Mention two economic roles of specimen A.
 - (ii) In what class is specimen A placed? Give three reasons.
- (c) (i) Draw specimen B and label five external parts.
 - (ii) What adaptation allows B to survive in its environment?