

**CHRISTIAN SOCIAL SERVICES COMMISSION (CSSC)  
NORTHERN ZONE JOINT EXAMINATION SYNDICATE (NZ-JES)**



**FORM SIX PRE -NATIONAL EXAMINATION 2026**

**133/3A**

**BIOLOGY 3A  
(ACTUAL PRACTICAL A )**

**Time: 3:20 Hours**

**Friday, 27<sup>th</sup> February 2026 a.m**

---

**Instructions**

1. This paper consists of **three (3)** questions.
2. Answer **all** questions.
3. Question **one (1)** carries **20 marks** the rest **carries 15** marks each.
4. **All** drawings should be done using pencil and **all** writing should be in blue / black pen.
5. Cellular phones are **not** allowed in examination room.
6. Write your **examination number** in each page of your answer booklet(s).

1. You have been provided with specimen **A1** dissect the specimen **A1** in a usual way to fully display the visceral general and pinout the alimentary canal to your right-hand side.
  - (a) Draw a neat well labelled diagram of your dissection  
**LEAVE YOUR DISSECTION PROPERLY DISPLAYED FOR ASSESSMENT**
  - (b) (i) Identify the sex of the specimen **A1**. Give two external features to support your answer  
 (ii) Write the role of any **five** parts labelled in (a) above  
 (iii) Why blood hemolymph is not as red as in human  
 (iv) Specimen **A1** eats own species, what name is given to this species  
 (v) Explain in short, the process of blood circulation in specimen **A1**
  
2. You have been provided with three test tubes, label them as test tube **1, 2** and **3**. Prepare a solution from specimen **Z** by adding 15ml of water and label it as solution **Z**.  
 Procedures
  - (a) Poor **3ml** of solution **Z** in a test tube **1**, and **3** drops of iodine solution, heat gently to boiling point and record your:
    - (i) Observation
    - (ii) What does this suggest?
  - (b) Poor **3ml** of solution **Z** in a test tube **2**, add **3ml** of benedicts solution, heat gently to boiling point and record your:
    - (i) Observation
    - (ii) What does this suggest?
  - (c) Poor **3ml** of solution **Z** in test tube **3**, add **2ml** of dilute NaOH followed by three drops of 1% copper (II) sulphate and shake gently after each drop. Record your:
    - (i) Observation.
    - (ii) What does this suggest?
  - (d) Name the food substance (s) present in solution **Z**.
    - (i) Name the type of bond present in the food substance (s) identified in solution **Z** which holds up its constituents (monomers).
    - (ii) Draw the structure of the monomers of the food substance present in solution **Z**
    - (iii) Is the food substance present in solution **z** stored or not stored in the human body?  
 Explain what happens when in excess.
    - (iv) What is the name of the biochemical test for the food substance present in solution **Z**?
    - (v) State the basis of the test for the food substance present in solution **Z**.
  
3. You have been provided with specimens, **W1, W2, W3, W4, W5, W6 and W7**
  - (i) Identify the specimens **W1, W2, W3, W4, W5, W6 and W7** by their common names.
  - (ii) Name the features do all the specimens **W1, W2, W3, W4, W5, W6** have in common.
  - (iii) Construct a simple numbered key that would separate specimens **W1, W2, W3, W4, W5** and **W6**.
  - (iv) State the distinctive features of the division in which specimen **W7** belong.
  - (v) Explain giving reasons why specimen **W7** is said to be an amphibian of the plant world  
 specimen **W5** contain spiracle, antennae and tympanum for its adaptation to the surrounding environment. In tabular form name the organs in mammals with similar functions as that organ mention in specimen.

