

**CONFIDENTIAL**

**THE UNITED REPUBLIC OF TANZANIA  
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA  
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION 2020**

033/2B

**BIOLOGY 2B  
PRACTICAL B**

**24 HOURS ADVANCE INSTRUCTIONS**

**1.0 IMPORTANT**

- 1.1 GREAT CARE MUST BE TAKEN **NOT** TO DIVULGE THESE INSTRUCTIONS TO BOTH CANDIDATES AND UNAUTHORIZED PERSONS EITHER DIRECTLY OR INDIRECTLY.
- 1.2 MAKE SURE THAT THE CANDIDATES ARE PROVIDED WITH THE SPECIMENS, CHEMICALS AND APPARATUSES INDICATED IN THESE ADVANCE INSTRUCTIONS ONLY AND **NOT** OTHERWISE.

**2.0 PREPARATION OF SPECIMENS**

- (a) Prepare two (2) watch glasses for each candidate and label them as **A** and **C**. Put 5 g of sugar on the watch glass **A** and 5 g of table salt on the watch glass **C**. Provide each candidate with the two samples.
- (b) For matured coconut fruits, shake them while holding it near the ear to make sure that each coconut contains a liquid that produce sound on hearing. Provide each candidate with one coconut fruit.
- (c) Use the knife to make a cross section of the lemon fruit. Provide each candidate with one half of the lemon fruit.

**3.0 LABELLING OF SPECIMENS**

- |  |          |
|--|----------|
| (a) Sugar (5 g per candidate)-----                     | <b>A</b> |
| (b) Lemon fruit ( $\frac{1}{2}$ per candidate)-----    | <b>B</b> |
| (c) Table salt (5 g per candidates) -----              | <b>C</b> |
| (d) Coconut fruit (1 per candidate)-----               | <b>D</b> |
| (e) Tick (1 can be shared by 4 candidates)-----        | <b>Q</b> |
| (f) Beetle (1 can be shared by 4 candidates) -----     | <b>R</b> |
| (g) Sisal leaf (1 can be shared by 4 candidates) ----- | <b>S</b> |
| (h) Bee (1 can be shared by 4 candidates) -----        | <b>T</b> |



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### **4.0 APPARATUSES**

Provide candidates with:

- (a) Hand lens----- 1 piece per candidate.
- (b) Medium size plain mirror----- 1 piece per candidate.

### **5.0 NOTE TO EXAMINATIONS SUPERVISOR AND TECHNICIAN/HEAD OF BIOLOGY DEPARTMENT**

The Head of Biology Department/ Biology Teacher must fill in the attached declaration form in page 3 to indicate the quantity provided, and the labels used for specimens, chemicals and apparatuses as indicated in the 24 Hours Instructions. The form must be filled at the beginning of each session of the examination and submitted to the council enclosed together with the candidates' scripts in the last envelope of the final session.