

**CONFIDENTIAL**

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

033/2A

**BIOLOGY 2A  
PRACTICAL A**

**24 HOURS ADVANCE INSTRUCTIONS**

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**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 dry watch glasses for each candidate and label one as sample **A** and the other as sample **B**.
- (b) Use a beam balance to measure 2 g of sand and put it on the watch glass **A**, and again measure 2 g of wheat flour and put it on the watch glass **B**. Provide each candidate with sample **A** and **B**.

**3.0 LABELLING OF THE SPECIMENS**

- |  |          |
|--|----------|
| (a) Sand (2 g per candidate) .....               | <b>A</b> |
| (b) Wheat flour (2 g per candidate) .....        | <b>B</b> |
| (c) Mushroom (1 per candidate) .....             | <b>P</b> |
| (d) Bean seedling (1 per candidate) .....        | <b>Q</b> |
| (e) Crab (1 can be shared by 4 candidates) ..... | <b>R</b> |

**4.0 CHEMICALS**

Prepare a sealed bottle with 100 ml of methylated spirit and then provide in such a way that can be shared by 4 candidates.



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### 5.0 OTHER REQUIREMENTS

Provide each candidate with the following:

- (a) Cotton wool ----- 1 piece per candidate
- (b) Tooth pick----- 3 pieces per candidate

### 6.0 NOTE TO EXAMINATIONS SUPERVISORS AND 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.