

**CONFIDENTIAL**

**THE UNITED REPUBLIC OF TANZANIA  
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA  
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION 2023**

**033/2B**

**BIOLOGY 2B  
(ACTUAL PRACTICAL B)**

**03 HOURS PRACTICAL 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 AND APPARATUSES INDICATED IN THESE PRACTICAL ADVANCE INSTRUCTIONS ONLY AND NOT OTHERWISE.

**2.0 LABELLING OF THE SPECIMENS**

- |     |   |   |
|-----|---|---|
| (a) | Rat/mouse/ guinea pig (1 for 4 candidates)----- | A |
| (b) | Grasshopper (1 per candidate)-----              | B |
| (c) | Bird (1 for 4 candidates) -----                 | C |
| (d) | Femur (1 for 4 candidates) -----                | D |
| (e) | Humerus (1 for 4 candidates)-----               | E |
| (f) | Cockroach (1 for 4 candidates) -----            | F |

**3.0 APPARATI**

Provide each candidate with the following:

- (a) 5 watch glasses  
(b) 1 hand lens  
(c) 1 scalpel for 4 candidates

**4.0 NOTE TO EXAMINATIONS SUPERVISORS AND APPOINTED LABORATORY TECHNICIAN/ BIOLOGY TEACHER**

After the arrangement of the laboratory for examination, the Laboratory Technician/ Biology teacher assigned the responsibility to arrange the laboratory must fill in the attached declaration form in page 2. The form indicates the quantity provided to each candidate and the labels used for the specimens and apparati as indicated in the 03 Hours Practical Advance 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.