

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

**733/1**

**BIOLOGY 1**

**Time: 3 Hours**

**Year: 2023**

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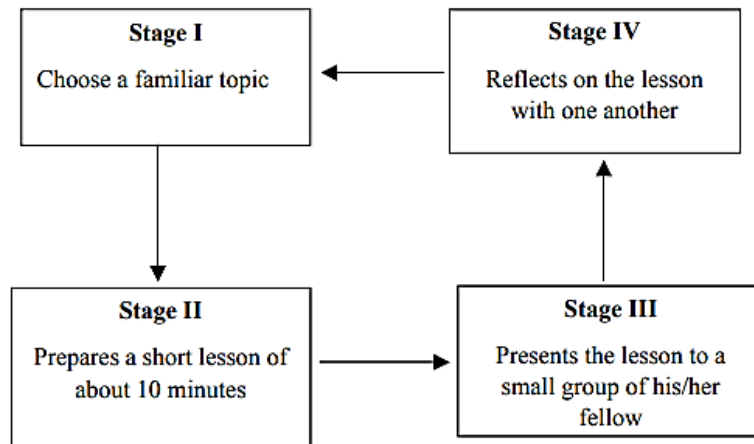
**Instructions**

1. This paper consists of sections **A** and **B** with a total of **fourteen (14)** questions.
2. Answer **all** questions.
3. Section **A** carries **forty (40)** marks , and section **B** carry **sixty (60)** marks.
4. Cellular phones and any unauthorized materials are not allowed in the examination room.
5. Write your **Examination Number** on every page of your answer booklet (s).

## **SECTION A (40 Marks)**

Answer **all** questions in this section

1. Classify the following organisms from phylum/division to class level;
  - (a) Moss
  - (b) Crab,
  - (c) Water lily
  - (d) Amoeba
2. Validate the statement by giving two points that cells of cold-blooded animals have high proportion of unsaturated fatty acids than those of warm-blooded animals.
3. Give four possible factors that affect Basal Metabolic Rate (BMR).
4. Explain the need for producers, consumers, detritivores and decomposers in the biotic component of an ecosystem.
5. Explain the importance of providing care and support to people living with HIV/AIDS infections.
6. Explain four necessities of teacher's guide to student teachers during Block Teaching Practice (BTP).
7. Explain strategies to be used to promote students' active participation in learning.
8. Explain ways used to facilitate practical session on dissection of a cockroach in a school where there are no laboratory facilities.
9. Explain four limitations of using real objects as best media in actual biology classroom.
10. Observe the figure and answer the questions that follow:



### Questions

- (a) Which concept in teaching does the figure represent?
- (b) Identify two curriculum materials required for the student teacher to carry out in stage II.
- (c) How important are the activities at stage IV to the student teacher? Give two points.

### SECTION B (60 Marks)

Answer **all** questions from this section

- 11. Explain in six points the contribution of Biotechnology towards industrial economic development in Tanzania.
- 12. Justify six aspects showing beneficial and detrimental economic importance of bacteria to human and other organisms.
- 13. Develop six safety precaution measures that a student should follow to reduce accidents during practical session on food test.
- 14. Prepare an observation checklist with seven points to observe during assessment of the biology practical, which require the students to dissect a cockroach and display its digestive system.