

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

733/1

BIOLOGY 1

Time: 3 Hour.

Friday 11/05/2012 a.m

Instructions

1. This paper has Section A, B and C.
2. Answer **all** questions from Section A and **two (2)** questions from Section B and C each.
3. Section A and B carry 30 marks each and Section C carries 40 marks.
4. Mobile phones are not allowed inside the examination room.
5. Write your Examination Number on every page of your answer booklet.

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SECTION A (30 Marks)

Answer all questions in this section.

1. State four characteristics of living organisms that distinguish them from non-living things.
2. Mention four functions of the human skeletal system.
3. Give four reasons why cell division is important to living organisms.
4. Outline four features used to classify vertebrates.
5. State four laboratory rules that should be observed when handling glassware.
6. Briefly explain four factors that affect enzyme activity.
7. Mention four elements commonly found in biological molecules.
8. Outline four strategies used to prevent sexually transmitted infections (STIs).
9. List four teaching aids a teacher can use when teaching reproduction in flowering plants.
10. Mention four characteristics of a well-formulated learning objective.

SECTION B: (30 Marks)

Answer any two questions.

11. Explain five roles of the liver in maintaining body homeostasis.
12. Describe the structure of a typical plant cell and explain the function of each organelle.
13. Discuss the nitrogen cycle and its importance to living organisms.
14. Describe five differences between aerobic and anaerobic respiration and state their importance.

SECTION C: (30 Marks)

Answer any two questions.

15. Outline six teaching strategies you would use to enhance participation during a Biology lesson on blood circulation.
16. Explain six components of a Biology lesson plan and their importance in lesson delivery.
17. Describe six assessment techniques used by Biology teachers to evaluate student understanding.
18. Discuss six ways in which a teacher can integrate ICT tools in teaching Biology at the secondary level.