



UNIVERSITY EXAMINATIONS
SECOND YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF
BACHELOR OF SCIENCE IN LABORATORY TECHNOLOGY
SECOND SEMESTER 2022/2023
(JUNE - SEPTEMBER, 2022)

BSLT 222: ECOLOGY OF FAUNA AND FLORA

STREAM: Y2 S2

TIME: 2 HOURS

DAY: THURSDAY, 12:00 PM – 2:00 PM

DATE: 08/09/2022

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer ALL Questions in section A (Compulsory) and any other TWO***

SECTION A: 40 MARKS

I. Explain the meaning of each of the following using suitable examples where appropriate

- | | |
|----------------------|----------|
| a) Pioneer organisms | (1 mark) |
| b) Climax community | (1 mark) |
| c) Biomagnification | (1 mark) |
| d) Population | (1 mark) |

II. Distinguish between the following ecological terms

- | | |
|-------------------------------------|-----------|
| a) Epifauna and infauna | (2 marks) |
| b) Holoplankton and meroplankton | (2 marks) |
| c) Euphotic and photic zones | (2 marks) |
| d) Primary and secondary succession | (2 marks) |

2. Describe with the aid of labeled diagrams describe the zonation of the sea (6 marks)

3. Give a brief explanation on the mechanisms that drive ecological succession (6 marks)

4. Describe briefly the three types of adaptations (6 marks)

5. Describe the two laws which explain the mechanisms of limiting factors (4 marks)

6. Discuss any six properties of soil as an ecosystem (6 marks)

SECTION B: 30 MARKS

7. Discuss various methods of estimating population (15 marks)
8. Discuss pollution under the following subheadings:
- i) Sources of pollution (5 marks)
 - ii) Effects of pollution to the environment (10 marks)
 - iii) Control mechanisms (5 marks)
9. Discuss the impact of human activities/actions on communities (15 marks)