



UNIVERSITY EXAMINATIONS

SECOND SEMESTER 2023/2024 ACADEMIC YEAR

**THIRD YEAR EXAMINATION FOR THE DEGREES OF
BACHELOR OF SCIENCE**

BOTA 322: PLANT ECOLOGY

STREAM: BEd (Science), BSc (General)

TIME: 2 HRS

DAY: WEDNESDAY[8.30A.M – 10.30A.M] DATE: 17/04/2024

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.

INSTRUCTION: Answer **All** Questions in Section A, and only **TWO** questions in Section B

SECTION A: ALL QUESTIONS (40 MARKS)

QUESTION ONE

- a) Explain a terrestrial ecosystem? **(3 Marks)**
- b) Describe factors that determine the type of terrestrial ecosystems found in a particular place? **(4 Marks)**

QUESTION TWO

Distinguish between Tundra and desert ecosystems **(4 Marks)**

QUESTION THREE

Outline five functions of an ecosystem **(5 Marks)**

QUESTION FOUR

Describe the structure of temperate grasslands **(6 Marks)**

QUESTION FIVE

Outline the information provided during Plant community descriptions **(4 Marks)**

QUESTION SIX

- a) State the premise of Raunkiaer's (1934) system of life form classification **(1 Mark)**
- b) Discuss the aerophytes life form **(6 Marks)**

QUESTION SEVEN

- a) What is an ecological succession? **(1 Mark)**
- b) Describe the phases involved in an ecological succession according to Clements **(6 Marks)**



SECTION B: ANSWER ANY TWO QUESTIONS (30 MARKS)

QUESTION EIGHT

Describe the Tiger bush vegetation pattern, its formation and development

(15 Marks)

QUESTION NINE

Discuss the characteristics of the following East African vegetation:

a) Equatorial forest

(11 Marks)

b) Mountain/Montane

(4 Marks)

QUESTION TEN

a) Describe an example of secondary succession by stages

(10 Marks)

b) Explain any five characteristics of a climax community

(5 Marks)

