



MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF PURE, HEALTH APPLIED SCIENCES

DEPARTMENT OF PHYSICAL AND BIOLOGICAL

UNIVERSITY ORDINARY EXAMINATION

2020/2021 ACADEMIC YEAR

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR, BACHELOR OF
EDUCATION SCIENCE**

ABT 100– GENERAL BOTANY

DURATION: 2 HOURS

Instructions to candidates:

1. Answer question One and Any Other Two questions.
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (30 MARKS)

- a) Discuss the criteria of modern classification (5marks)
- b) Explain the significance of bacteria (Schizomorpha) in the following: (5marks)
 - i. Fibre retting
 - ii. Biotechnology
 - iii. Food processing
 - iv. Pest control
 - v. Digestion
- c)
 - i) Explain how Cyano bacteria differ from heterotrophic eukaryotes. (2marks)
 - ii) Outline the three forms of Cyanobacteria. (3marks)
- d) Briefly explain the mode of feeding and reproduction in Fungi. (5marks)
- e) Account for the reasons why Dinoflagellates are considered a unique marine taxa. (5marks)
- f) Distinguish cellular molds from plasmodial molds. (5marks)

SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

Discuss herbarium techniques for vascular plants under the following

- a) Collection procedures (5marks)
- b) Labelling (5marks)
- c) Pressing (5marks)
- d) Mounting of specimens (5marks)

QUESTION THREE (20 MARKS)

- a) Describe the life cycle of a named Pteridophyte. (12marks)
- b) Explain the eight economic importance Pteridophytes. (8marks)

QUESTION FOUR (20 MARKS)

- a) Discuss the evolution of Gymnosperms. (12marks)
- b) Discuss the classification of Gymnosperms. (8marks)