



MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF APPLIED SCIENCES

UNIVERSITY ORDINARY EXAMINATION

2017/2018 ACADEMIC YEAR

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF EDUCATION SCIENCE**

ABT 100 – GENERAL BOTANY

DURATION: 2 HOURS

DATE: 15TH DECEMBER, 2017

TIME: 2.00 – 4.00 P.M.

Instructions to Candidates:

1. Answer **Question 1** 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 ONE - COMPULSORY

QUESTION ONE

- (a) Outline the characteristic features of prokaryotes and eukaryotes (5 marks)
- (b) Classify living organisms according to Whittaker (5 marks)
- (c) i) State two distinguishing characteristics of cyanophyta (2 marks)
ii) State the reproduction types in the cyanophyta (3 marks)
- (d) State five economic importance of bacteria (5 marks)
- (e) Describe the structure of a named Euglenophyta (5 marks)
- (f) Describe the process of food acquisition in basidiomycetes (2 marks)
- (g) Explain the mechanism of reproduction in ascomycetes (3 marks)

SECTION TWO – ANSWER ANY TWO QUESTIONS

QUESTION TWO

Discuss alternation of generation in pteridophytes (20 marks)

QUESTION THREE

- (a) Compare and contrast main characteristics of any two of any of the following families:
 - i) Poaceae
 - ii) Solanaceae (14 marks)
- (b) Discuss the economic importance of the families (6 marks)

QUESTION FOUR

Discuss the evolutionary relationships between gymnosperms and angiosperms (20 marks)