



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

**MAIN EXAMINATIONS
MAIN CAMPUS**

FIRST YEAR SECOND SEMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN BIOLOGY / BIOTECHNOLOGY /
BIOCHEMISTRY / NATURAL RESOURCES MANAGEMENT**

COURSE CODE: SBN 121

**COURSE TITLE: PLANT DEVELOPMENT AND
MORPHOGENESIS**

DATE: TUESDAY, 26TH APRIL 2022 TIME: 3:00 – 5:00 P.M.

INSTRUCTIONS TO CANDIDATES

Answer ALL questions in section A and ANY TWO selected from section B
TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over. 

SBN 121: PLANT DEVELOPMENT AND MORPHOGENESIS

SECTION A (SHORT ANSWER QUESTIONS, 40 MARKS)

1. Explain the concept of plant growth. (5 marks)
2. Distinguish peri-clinal and anti-clinal cell division patterns. (5 marks)
3. Identify five conditions necessary for seed germination. (5 marks)
4. Distinguish fresh and dry weight measurements. (5 marks)
5. Identify causes of seed dormancy. (5 marks)
6. Distinguish between Differentiation and De-differentiation of plant cells. (5 marks)
7. List any five groups of the plant growth regulators. (5 marks)
8. Distinguish Determinate and In-determinate plant structures. (5 marks)

SECTION B (ESSAY QUESTIONS, 30 MARKS)

9. Describe the various types of plant auxins and their role in plant development. (15 marks)
10. Discuss the application of plant growth and development in plant tissue culture. (15 marks)
11. Discuss alternation of generations in plants. (15 marks)