



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER

**SCHOOL OF PURE, APPLIED AND HEALTH
SCIENCES**

BACHELOR OF EDUCATION (SCIENCE)

COURSE CODE: BOT 1103

**COURSE TITLE: INTRODUCTION TO PLANT
BIOLOGY**

DATE: 8th April 2022

TIME: 1100-1300

INSTRUCTIONS

Answer **ANY TEN** questions.

Illustrate your answers with suitable diagrams and give appropriate examples wherever necessary.

1. Describe the structure and function of the nucleus. **(5mks)**
2. Give the contribution of the following in biology **(5mks)**
 - a) Antony Van Leeuwenhoek (1674) **(1mk)**
 - b) Matthias Schleiden and Theodor Schwann(1839) **(1mk)**
 - c) R.H. Whittaker(1969) **(1mk)**
 - d) Robert Hooke (1665) **(1mk)**
 - e) Joseph Jackson Lister (1830) **(1mk)**
3. Write short notes on meristematic plant tissues. **(5mks)**
4. Give a summary of levels of biological organization. **(5mks)**
5. Describe the stages of cell cycle **(5mks)**
6. With examples give the taxonomic ranks of organisms. **(5mks)**
7. Outline the lytic life cycle of a bacteriophage **(5mks)**
8. Using a well labeled diagram describe a dicot flower. **(5mks)**
9. Discuss means/process of genetic recombination in Bacteria. **(5mks)**
10. State the economic importance of algae. **(5mks)**
11. Highlight features that made the Spermopsida successful on land **(5mks)**
12. Compare and contrast the bryophytes and the pteridophytes. **(5mks)**
13. Describe the fungal body (thallus). **(5mks)**
14. State the role of diffusion in the life of a plant. **(5mks)**
15. Trace the development of the **SIX(6)** kingdom classification system **(5mks)**

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