



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS 2017/2018 ACADEMIC YEAR FIRST YEAR SECOND SEMESTER EXAMINATION

SCHOOL OF SCIENCE & INFORMATION SCIENCES THE DEGREE OF BACHELOR OF SCIENCE

**COURSE CODE: AHP 1204
COURSE TITLE: BOTANY**

DATE: 30TH APRIL, 2018

TIME: 0830 - 1030HRS

INSTRUCTIONS TO CANDIDATES

- (a) Select ONLY TEN Questions (7 marks each)
- (b) Illustrate your answers with well labeled diagrams where appropriate

ANSWER ANY TEN QUESTIONS (7 MARKS EACH)

1. a) Describe the functions of peroxisomes in cells. **(3marks)**
b) Outline any four roles of the vacuole in plant cells. **(4marks)**
2. Briefly explain the four main aspects that plant taxonomy deals with. **(7marks)**
3. Enumerate any seven importance of studying botany. **(7marks)**
4. Briefly describe any four illegitimate names rejected in nomenclature of plants. **(7marks)**
5. a) Distinguish between the two polymers of starch. **(4marks)**
b) What are secondary metabolites in plants? Give an example **(3marks)**
6. a) Briefly explain the activities in each of the three phases of growth in plants. **(3marks)**
b) Distinguish between the two photosystems used in trapping of light in photosynthesis. **(4marks)**
7. a) What is a tautonym? Give an example **(2marks)**
b) State any five importances of herbaria. **(5marks)**
8. a) State any three objectives of nomenclature. **(3marks)**
b) Briefly describe the structures used in intracellular communication. **(4marks)**
9. Briefly describe plastids as found in plant cells. **(7marks)**
10. a) State the three important developments that have made seed producing plants more successful. **(3marks)**
b) Outline four economic importances of angiosperms **(4marks)**
11. Briefly describe the different types of parenchyma in plants. **(7marks)**
12. a) What is a meristem? **(2marks)**
b) State any five characteristics of meristematic cells. **(5marks)**
13. a) Explain the flow of energy in the ecosystem based on the two laws of thermodynamics **(3marks)**
b) State any four factors that limit the size a population in an undisturbed ecosystem. **(4marks)**
14. Describe alternation of generations in plants. **(7marks)**
15. a) What is a biome? **(2marks)**
b) Briefly describe the Mediterranean scrub forest vegetation. **(5marks)**

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