

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE

BOTA 101/100: GENERAL BOTANY

STREAMS: BSC (BIOL, ENSC, AGECE, HORT, AGRIC, MCRB& BIOTCH, CHEM, WIEM, ECOT) TIME: 2 HOURS

DAY/DATE: WEDNESDAY 16/12/2020

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

- Answer ALL questions in section A and any TWO in section B.

SECTION A (30 MARKS)

1. Describe five branches of botany. (5 marks)
2. Illustrate the structure of a bacterium using a well labelled diagram. (5 marks)
3. Differentiate between natural classification and artificial classification of plants. (3 marks)
4. List the sequence of classification of living organism starting from the largest taxonomic unit to the smallest. ($3\frac{1}{2}$ marks)
5. Identify three characteristics of fungi that are also found in plants. ($1\frac{1}{2}$ marks)
6. What features would you consider when classifying algae? (2 marks)
7. Describe the groups of lichens based on morphology. (3 marks)
8. (a) Describe alteration of generations in relation to the bryophytes. (2 marks)
(b) Describe economic importance of bryophytes. (5 marks)

SECTION B (40 MARKS)

9. (a) Describe the general characteristics of the pteridophytes. (10 marks)

- (b) Describe the features of gymnosperms. (10 marks)
10. (a) Describe the process of double fertilization in plants. (10 marks)
- (b) With appropriate examples discuss the classification of basal angiosperms. (10 marks)
11. (a) Discuss the economic importance of gymnosperms. (10 marks)
- (b) Describe the different ways through which materials are transported in plants. (10 marks)
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