



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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University Examinations 2022/2023

FOURTH YEAR FIRST SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATION FOR
THE DEGREE OF BACHELOR OF SCIENCE IN BIOCHEMISTRY

THIRD YEAR FIRST SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATION FOR
THE DEGREE OF BACHELOR OF SCIENCE IN BIOCHEMISTRY

SBA 3300: TAXONOMY OF HIGHER PLANTS

DATE: AUGUST 2023

TIME: 2 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- Outline the requirement during the designation of plant nomenclatural “type”
(6 marks)
 - Taxonomy students cannot agree on the identity of two plant specimens on whether they belong to Poaceae or Cyperaceae. What characteristics should they consider in order to differentiate the two specimens
(4 marks)
 - Outline the advantages of using scientific name over common names in plant taxonomy
(4 marks)
 - Describe the conditions that would demand changing of taxon name
(2 marks)
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MUST is ISO 9001:2015 and



ISO/IEC 27001:2013 CERTIFIED

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- e) Using illustrations, describe three types of indeterminate inflorescence occurring in plants (6 marks)
- f) Outline the distinguishing characteristics of family Rubiaceae (4 marks)
- g) Explain the key strategies for asexual reproduction occurring in plants (4 marks)

QUESTION TWO (20 MARKS)

- a) Discuss the key differences between Phenetic and Phylogenetic approaches to plant taxonomy (10 marks)
- b) Discuss plant families as sources of food for both human and life stock (10 marks)

QUESTION THREE (20 MARKS)

Discuss stem characteristics that are important in plant taxonomy

QUESTION FOUR (20 MARKS)

Discuss the characteristics of the family Fabaceae

