

**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES**  
**DEPARTMENT OF BIOLOGICAL SCIENCES**  
**SPECIAL EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE IN**  
**BIOLOGICAL SCIENCES**  
**REGULAR**

**COURSE CODE:** SBT 103  
**COURSE TITLE:** INTRODUCTORY PLANT SYSTEMATICS  
**EXAM VENUE:** **STREAM: (BSc. Bio)**  
**DATE:** **EXAM SESSION:**  
**TIME: 2 HOURS**

**Instructions**

- 1. Answer ALL questions in Section A and ANY TWO questions in Section B**

**SECTION A: Short Answer Questions (30 Marks)**

1. Define biosystematics (3 marks)
2. Give any TWO characteristic features and examples of the Solanaceae (3 marks)
3. State THREE functions of herbaria (3 marks)
4. Explain State what you understand by the term 'liquid preservation' of herbarium specimens (3 marks)
5. State three problems faced in modern systematic studies (3 marks)
6. Illustrate three types of compound leaves known to you (3 marks)
7. Using illustrations, distinguish between pistillate and staminate flower (3 marks)
8. Briefly explain why insectivorous plants may be regarded as indicator plants (3 marks)
9. State why Latin language was preferred in nomenclature (3 marks)
10. Citing an example, define 'phyllotaxy' (3 marks)

**SECTION B: Essay Questions (40 Marks)**

11. Discuss major morphological structures used in classification (20 marks)
12. Discuss characters and sources of taxonomic characters (20 marks)
13. Discuss general and special purpose classifications (20 marks)
14. Describe the Tomato family and, state with examples, its economic significance (20 marks)