JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE WITH IT.

2ND YEAR 1ST SEMESTER 2016/2017 ACADEMIC YEAR

MAIN CAMPUS - REGULAR

COURSE CODE: SBT 201

COURSE TITLE: GYMNOSPERM AND ANGIOSPERM TAXONOMY

EXAM VENUE: LAB 15 **STREAM: (BED SCIENCES)**

DATE: 20/04/16 **EXAM SESSION: 9.00 – 11.00 AM**

TIME: 2 HOURS

Instructions:

1. **Answer ALL questions in Section A and Any two questions in Section B**
2. **Candidates are advised not to write on question paper**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A: ANSWER ALL QUESTIONS (30 MARKS)

1. Citing an example, define "Flora" (3 marks)

2. List any THREE major categories in the hierarchy of plant classification and indicate their name endings

	Category or rank	Name -ending	
a.	……	……..	(1 mark)
b.	……	……	(1 mark)
c.	…….	……..	(1 mark)

3. Define character as used in plant classification (3 marks)
4. List any three Conserved Family names and the accepted corresponding alternate names (3 mark
5. Name the families to which the following plants belong to:

	Plant	Family	
a.	*Brassica oleracea*	……	(1 mark)
b.	*Psidium guajava*	……..	(1 mark)
c.	*Saccharum officinarum.*	…….	(1 mark)

6. List any three features which can be used to distinguish gymnosperms from angiosperms. (3 marks)
7. Give any TWO characteristic features and examples of the Anacardiaceae (3 marks)
8. State what you understand by the following terms:
   a. taxonomy (1.5marks)
   b. Identification (1.5marks)
9. State any three ways in which Cycadales are of economic importance. (3 marks)
10. List three diagnostic features of Monocots (3 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

11. Describe the Asteraceae and, state with examples, its economic significance. (20 marks)
12. Discuss the role of fossil angiosperms in taxonomy. (20 marks)
13. Outline the development of modern taxonomy from the "Ancient Classification" phase to the "Post Linnean Natural Systems". (20 marks)
14. Discuss pre-zygotic isolation mechanisms in Angiosperms. (20 marks)