



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY**

**SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE  
(BIOLOGICAL SCIENCES)**

**2<sup>ND</sup> YEAR 1<sup>ST</sup> SEMESTER 2016/2017 ACADEMIC YEAR**

**MAIN CAMPUS - REGULAR**

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**COURSE CODE: SBI 3225**

**COURSE TITLE: GYMNOSPERM AND ANGIOSPERM TAXONOMY**

**EXAM VENUE: LAB 15**

**STREAM: (BIO)**

**DATE: 20/04/16**

**EXAM SESSION: 9.00 – 11.00 AM**

**TIME: 2 HOURS**

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**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**
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**SECTION A: ANSWER ALL QUESTIONS (30 MARKS)**

1. Citing one example, define the term “Flora” (3marks)
2. List any THREE major categories in the hierarchy of plant classification and indicate their name endings  

<u>Category or rank</u>	<u>Name -ending</u>	
a. ....	.....	(1mark)
b. ....	.....	(1mark)
c. ....	.....	(1mark)
3. Define character as used in plant classification (3marks)
4. List any three Conserved Family names and the accepted corresponding alternate names (3marks)
5. Name the families that the following plants belong to:  

<u>Plant</u>	<u>Family</u>	
a. <i>Brassica oleracea</i>	.....	(1 mark)
b. <i>Psidium guajava</i>	.....	(1mark)
c. <i>Saccharum officinarum.</i>	.....	(1mark)
6. List any three distinguishing features of gymnosperms from angiosperms (3marks)
7. Give any TWO characteristic features and examples of the Anacardiaceae (3marks)
8. State what you understand by
  - a. taxonomy (1.5marks)
  - b. Identification (1.5marks)
9. State any three ways by which Cycadales are of economic importance (3marks)
10. List THREE diagnostic features of Monocots (3marks)

**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)