

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

**SCHOOL OF AGRICULTURE**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF SCIENCE (HORTUCLUTRE 2ND YEAR 1ST SEMESTER 2016/2017 ACADEMIC YEAR**

**MAIN CAMPUS REGULAR**

**COURSE CODE: AHT 3215**

**COURSE TITLE: PLANT TAXONOMY AND IDENTIFICATYION**

**EXAM VENUE:LR 15 STREAM: (BSc Hort)**

**DATE:20/4/16 EXAM SESSION: 9.00 – 11.00 AM**

**TIME: 2 HOURS**

**Instructions:**

1. **Answer ALL Questions in Section A and ANY other 2 questions in Section B**
2. **Candidates are advised not to write on the 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 one example, define the term “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

* 1. ………………… …………….. (1mark)
	2. ………………… ……………. (1mark)
	3. …………………. …………….. (1mark)
1. Define character as used in plant classification (3marks)
2. List any three Conserved Family names and the accepted corresponding alternate names.(3marks)
3. Name the families to which the following plants belong to:

Plant Family

* 1. *Brassica oleracea* ………………… (1 mark)
	2. *Psidium guajava* ………………….. (1 mark)
	3. *Saccharum officinarum*. …………………. (1 mark)
1. List any three features which can be used to distinguish gymnosperms from angiosperms . (3 marks)
2. Give any TWO characteristic features and examples of the Anacardiaceae (3 marks)
3. State what you understand by the following terms:
	1. taxonomy (1.5marks)
	2. Identification (1.5marks)
4. State any three ways by which Cycadales are of the economic importance. (3 marks)
5. List THREE diagnostic features of Monocots (3 marks)

**SECTION B: ANSWER ANY TWO QUESTIONS ( 40 MARKS)**

1. Describe the Asteraceae and, state with examples, its economic significance. (20 marks)
2. Discuss the role of fossil angiosperms in taxonomy (20 marks)
3. Outline the development of modern taxonomy from the “Ancient Classification” phase to the “Post Linnean Natural Systems”. (20 marks)
4. Discuss pre-zygotic isolation mechanisms in Angiosperms. (20marks)