

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

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**University Examinations 2014/2015**

FIRST YEAR SUPPLEMENTARY/SPECIAL EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE, BACHELOR OF SCIENCE IN AGRICULTURE AND

 BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

**AAH 3150: AGRICULTURAL PLANT TAXONOMY**

**DATE: JULY 2015 TIME:** $2$**HOURS**

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

**QUESTION ONE – (30 MARKS)**

1. Describe three systems of classifications. (6 Marks)
2. State the problem with each of the following names:
3. amaranthus Abbus (1 Mark)
4. Rosa Carolina villosa (1 Mark)
5. Explain the use of secondary metabolites as a source of taxonomic evidence. Give examples. (4 Marks)
6. State 3 conditions that necessitate botanists to change scientific names. (3 Marks)
7. Explain the meaning of the following names as used in taxonomy: (3 Marks)
8. Taxonomy
9. Classification
10. Phytography
11. Explain 3 objectives of plant taxonomy. (3 Marks)
12. Describe the use of palynology as a source of taxonomic evidence. (3 Marks)
13. State the economic importance of the graminae family giving and example of each. (3 Marks)
14. Illustrate various ovary positions in flowers. (3 Marks)

**QUESTION TWO (20 MARKS)**

Describe the formation of specific epithets. (20 Marks)

**QUESTION THREE (20 MARKS)**

Discuss the principles of nomenclature. (20 Marks)

**QUESTION FOUR (20 MARKS)**

Describe the diagnostic features of:

1. Family Asteraceae (12 Marks)
2. Family lamiaceae (8 Marks)