

**MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS 2016/2017 ACADEMIC YEAR**

**SECOND YEAR FIRST SEMESTER**

**SCHOOL OF TOURISM AND NATURAL RESOURCE MANAGEMENT**

**BACHELOR OF SCIENCE IN ENVIRONMENTAL STUDIES (BIOLOGY AND HEALTH)**

**COURSE CODE: FOR 211**

**COURSE TITLE: PRINCIPLES OF SILVICULTURE**

**AND NURSERY PRACTICE**

**DATE: 13TH JULY, 2017 TIME: 1430 – 1630HRS**

**INSTRUCTIONS TO CANDIDATES**

Answer **ALL** questions in section **A** and any other **THREE** in section **B.**

***This paper consists of 2 printed pages. Please turn over.***

**Section A (Answer all Questions in the Section)**

1. Define forest stand **(1 mark)**

1. Identify the advantages and disadvantages of managing pure species stands **(4 marks)**
2. Explain the five phenological events in plants **(5 marks)**
3. Giving examples, differentiate between orthodox and recalcitrant seeds **(4 marks)**
4. Explain two proper hygiene conditions in which plant diseases and pests can be checked in the nursery **(4 marks)**
5. Identify four causes of seed dormancy **(4 marks)**
6. Explain the advantages and disadvantages of acid scarification method of treatment of tree seeds prior to sowing **(3 Marks)**

**Section B (answer any 3 questions in this section)**

1. Discuss five treatment methods that can be used to induce seed production     **(15 marks)**
2. Discuss five environmental factors affecting photosynthesis in trees **(15 marks)**
3. Discuss the advantages and disadvantages of raising tree seedlings in the nursery **(15 marks)**
4. Choice of silvicultural treatment is always constrained by ecological, managerial and social considerations. Discuss. **(15 marks)**

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