

**MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS**

**2016/2017 ACADEMIC YEAR**

**THIRD YEAR SECOND SEMESTER**

**SCHOOL OF TOURISM AND NATURAL RESOURCE MANAGEMENT**

**BACHELOR OF SCIENCE IN FORESTRY**

**COURSE CODE: FOR 328**

**COURSE TITLE: AGROFORESTRY**

**DATE: 12TH JULY, 2017 TIME:1100 – 1300HRS**

**INSTRUCTIONS TO CANDIDATES**

I**nstruction:** Answer **All** questions in Section A, and Any three in section B.

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

**SECTION A**

1. Explain the three major components in agroforestry system **(1 mark)**
2. Differentiate between an Agroforestry practice and an Agroforestry Technology **(2 marks)**
3. Briefly describe how light profile can be manipulated as a management option for manipulating photosynthesis of plant communities in agroforestry systems **(3 marks)**
4. Identify six properties that are likely to make a woody perennial suitable for soil fertility maintenance or improvement **(3 marks)**
5. Briefly describe FIVE underlying mechanisms contributing to efficient nutrient cycling in agroforestry systems **(5 marks)**
6. Using diagrams briefly describe the basic features of the diagnostic and design (D and D) methodology of land management problems/solutions in agroforestry **(5 marks)**
7. Describe three factors that influence plot size in an agroforestry experiment **(6 marks)**

**SECTION B**

1. You have been requested to present a paper titled “The Future and Challenges of Agroforestry” as a key note speaker during the upcoming national agroforestry conference at Maasai Mara University. Based on the knowledge covered during this course, discuss the key issues your presentation will focus on **(15 marks)**
2. Discuss FIVE environmental/Ecological benefits of Agroforestry
3. Describe five principle methodscommonly used to estimate the amounts of nitrogen fixed in agroforestry systems
4. Using examples, discuss the variations in agroforestry as a land use in the tropics verses the temperate regions

**//END**