

**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 ENVIRONMENTAL STUDIES (BIOLOGY AND HEALTH)**

**COURSE CODE: FOR 327**

**COURSE TITLE: FOREST ECONOMICS AND**

**VALUATION**

**DATE: 3RD 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 the following terms as used in forest economics, give appropriate examples where applicable **(8 Marks)**
2. Forest economics
3. Resource
4. Public goods
5. Merit goods
6. a) How many euros are required from a final felling at year 60 to earn a 3 % average annual rate of return for 800-euros planting investment at year zero (0)? **(3 Marks)**

b). Give the advantages of the IRR method of investment appraisal **(2 Marks)**

1. Explain the importance of objectives in evaluating forest management decisions **(4 Marks)**
2. a) Define the following terms giving appropriate examples **(3 Marks)**
3. Use value of forests
4. Non-use Value of forests
5. What is the importance of economic valuation of forests? **(5 Marks)**

**Section B (answer Question 5 and any other 2 questions in this section)**

1. a) Given that a monopolist’s (inverse) market demand is, P=4000-200QD, where QD is the quantity demanded and P is the price (marginal willingness to pay). The marginal cost is given by MC=1000+100Q, where Q is the quantity produced and MC is the marginal cost. Determine optimum quantity and Price **(5 Marks)**
2. Explain the price determination in a monopolistic market for a forest product **(5 Marks)**
3. a) Define stumpage price **(5 Marks)**

b) Using diagrams illustrate the effects of an increase in demand for timber products on stumpage price. **(10 Marks)**

1. Discuss the similaries and differences between the Faustmann Model and the forest rent approach in forest management. **(15 Marks)**
2. Compare the approaches of a silviculturalist and an economist in con­sidering how best to manage a forest. What are the main concerns of each likely to be? How can approaches be reconciled? **(15 Marks)**

**//END**