

**MAASAI MARA UNIVERSITY**

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

**THIRD YEAR FIRST SEMESTER**

**SCHOOL OF TOURISM AND NATURAL RESOURCE MANAGEMENT**

**BACHELOR OF SCIENCE IN ENVIRONMENTAL STUDIES**

**COURSE CODE: FOR 323**

**COURSE TITLE: SIVICULTURE OF NATURAL**

**FORESTS**

**DATE: 5TH JULY, 2017 TIME: 1100 – 1300HRS**

**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 this section**

1. Describe the various definitions used in modern silviculture **(2 marks)**
2. Describe how modern forestry is applied for the management of indigenous forests **(2 marks)**
3. On the basis of height and crown cover, natural wooded vegetation in Kenya can be classified in five main categories. Name them **(5 marks)**
4. State any four considerations that need to be satisfied when choosing a desired silvicultural system for management of natural forest **(4 marks)**
5. Based on regeneration, differentiate between high forest systems and coppice systems as methods of classification for silvicultural systems **(2 marks)**
6. Differentiate between seed tree system and the pollard systems **(2 marks)**
7. Identify three tree species used in farm forestry in Kenya **(3 marks)**
8. Explain five challenges faced by forest managers in Kenya **(5 marks)**

**SECTION B: Answer ANY THREE questions from this section. All questions in this section carry equal marks.**

1. (a) Explain the term regeneration as applied in silvicultural management of natural forests **(3 marks)**

(b) Identify the advantages of natural regeneration **(5 marks)**

(b) Discuss the multiple uses of indigenous forests **(7 marks)**

1. Explain the advantages and disadvantages of:

(a) Clear-fell system **(8 marks)**

(b) The coppice system **(7 marks)**

1. Discuss the following silvilcultural systems as may be applied in

  Kenya.

(a) Retention system **(7.5 marks)**

(b) Shelter wood system **(7.5 marks)**

1. Discuss the roles of forestry trees on farms **(15 marks)**

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