



MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

**THIRD YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR
BACHELOR OF ENVIRONMENTAL STUDIES (ENVIRONMENTAL RESOURCE
CONSERVATION)**

ERC 316: MULTIPLE USE FOREST MANAGEMENT

DATE: 26/3/2021

TIME: 8.30-10.30 AM

INSTRUCTIONS;

Answer question ONE and any other TWO questions

SECTION A (30 MARKS)

1. a) differentiate between the following concepts in Multiple Use Forest Management
 - i. Forest management and sustainable Forest Management (2 marks)
 - ii. Forest and Forest Ecosystem (2 marks)
 - iii. Global Warming and Climate Change (2 marks)
 - iv. Productive and Social functions of forest (2 marks)
 - v. Crown and Underground fire (2 marks)
 - vi. Forest Association and Forest user group (2 marks)
- b) Outline the importance of multiple use forestry management (6 marks)
- c) Explain the objectives of managing indigenous forests as given in the forest conservation and management Act, 2016 (6 marks)
- d) Explain the unique characteristics that distinguish taiga forests from tropical rain forests (6 marks)

SECTION B (40 MARKS)

2. Discuss the role of intact forests in biodiversity conservation and water production
(20 marks)
3. You are in charge of Mau forest and there is a fire outbreak, detail how you would go about containing the fire and give the challenges you might encounter
(20 marks)
4. Explain problems facing forests in Kenya and suggest sustainable forest management and conservation techniques
(20 marks)
5. Explain the legal and institutional framework governing forest and forest products in Kenya
(20 marks)