

**W1-2-60-1-6**

## JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

**UNIVERSITY EXAMINATIONS 2020/2021**

**YEAR 2 SEMESTER 1 EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN LAND RESOURCE PLANNING AND MANAGEMENT**

**SBT 2406: FOREST ECOLOGY**

**DATE: MAY 2021 TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS**

QUESTION ONE

a) Outline the effects of the following factors on the forest ecosystem.

i) Precipitation (3 marks)

ii) Fire (3 marks)

b) Describe the ecosystem services provided by forests (4 marks)

c) Explain why tropical forests are rich in biodiversity (4 marks)

d) Outline the causes of ecological disturbance in tropical forest ecosystems (4 marks)

e) Briefly describe the general characteristics of soils found in tropical forests (4 marks)

f) Outline the non-timber forests products (NTFPs) derived from forests (3 marks)

g) Briefly discuss the Plantation Establishment and Livelihood Improvement Scheme (PELIS) as a forest management tool in Kenya (5 marks)

QUESTION TWO (20 MARKS)

Discuss the upland forests of Kenya.

QUESTION THREE (20 MARKS)

Discuss the role of Silvicutture in forest management in Kenya.

QUESTION FOUR (20 MARKS)

Discuss the practice of agroforestry.