(*Knowledge for Development*)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER

SPECIAL/SUPPLEMENTARY EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF COMMERCE AND BACHELOR OF BUSINESS MANAGEMENT

COURSE CODE: **SES 123/SES 211**

COURSE TITLE: **FUNDAMENTALS OF ENVIRONMENTAL SCIENCE**

DATE: FRIDAY 1ST OCTOBER, 2021 **TIME:** 8:00 – 10:00 a.m.

INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 2 Hours

This paper consists of 3 printed pages. Please Turn Over

KIBU observes ZERO tolerance to examination cheating

Question ONE:

h) Discuss the word "radiative equilibrium". (4 marks)

i) Briefly describe human activities that have contributed to environmental degradation in the biosphere (5 marks).

j) Briefly discuss the health impacts of environmental degradation (5 marks)

k) Define the following terms:

(i) Eco-system (2 marks)

(ii) Biome (2 marks)

l) Discuss sustainable management of bio resources (5 marks)

m) Define the word 'social welfare" as applied in environmental sciences and give examples (4 marks)

n) "Pollution is a negative externality". Briefly explain (3 marks)

Question TWO:

d) Discuss the relationship between Climate and "biomes" (8 marks)

e) Outline ways of regulating the commons (8 marks)

f) Differentiate between autotrophs and chemoautotrophs giving examples (4 marks)

Question THREE:

d) Describe the water cycle (8 marks)

e) Explain the importance of solar radiation to living things (8 marks)

f) Define the term "anthropogenic activities" and give example (4 marks)

Question FOUR:

d) Discuss efforts of protecting the environment (8 marks)

e) Discuss short wave and long wave processes in atmosphere (8 marks)

f) Discuss environmental pollution as an externality (4 marks)

Question FIVE:

d) Discuss natural resource markets and externalities (8 marks)

e) Describe the demand and supply curve and explain its behavior in the presence of environmentally instigated "social costs" (8 marks)

f) Explain how you can value natural resources (4 marks).