



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2021/2022 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER MAIN EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY

COURSE CODE:

SZL 221

COURSE TITLE:

AQUATIC ECOLOGY

DATE: 10TH MAY 2022

TIME: 9.00 -11.00 AM

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

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QUESTION ONE

a) Define the following terms

(10 marks)

- i) Aquatic ecosystem
- ii) Habitat quality
- iii) Watershed
- iv) Nutrient cycling
- v) Hydrologic cycle
- b) Explain the importance of protecting water resources

(5 marks)

c) Differentiate between Phytoplankton and zooplankton, giving examples in each case

(5 marks)

d) Outline the main processes involved in the water cycle

(5 marks)

e) Explain how a biotic and biotic factors interact in an aquatic ecosystem

(5 marks)

QUESTION TWO

Water quality monitoring is an essential strategy for water resource management. **Discuss**

(20 marks)

QUESTION THREE

Identify and discuss water quality factors

(20 marks)

QUESTION FOUR

Identify and discuss the factors that influence the distribution of Aquatic species (20 marks)

QUESTION FIVE

Citing relevant examples, discuss the structural, physiological and behavioral adaptations of species in water (20 marks)