



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR

FOURTH YEAR SECOND SEMESTER
SPECIAL/SUPPLEMENTARY EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY, BACHELOR OF SCIENCE
IN BIORESOURCE MANAGEMENT, BACHELOR OF EDUCATION SCIENCE AND
BACHELOR AGRICULTURE EDUCATION AND EXTENSION

COURSE CODE: SBT 422
COURSE TITLE: AQUATIC BOTANY

DATE: 11th October, 2018. **TIME:** 3:00 – 5:00 p.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 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

Question one

- a) State the importance Marine ecosystems (3marks)
- b) List six classes of organisms found in marine ecosystems (3marks)
- c) Describe any 3 zones in the marine ecosystem (3marks)
- d) With the help of a diagram describe the three primary zones of a lake (3marks)
- e) Freshwater ecosystems:
 - i. Cover -----percentage of the Earth's surface (1mark)
 - ii. Generate -----percentage of the primary production (1mark)
 - iii. contain -----percentage of the world's known fish species. (1mark)
- f) Briefly describe three zones of a pond (3marks)
- g) Write short notes on the following:
 - i. Aerenchyma (1mark)
 - ii. Lenticels (1mark)
 - iii. Emerged leaves (1mark)
- h) Describe Biodiversity (3marks)
- i) List six obstacles that freshwater plants overcome in order to survive in water (3marks)
- j) Distinguish between Euryhaline and stenohaline organisms (3marks)
- k) **Question two**
Discuss aquatic plant communities (20marks)

Question three

- i. Discuss abiotic factors and how they affect aquatic plant communities (15 marks)
- ii. Discuss any two anatomical and structural adaptations of freshwater plants (5marks)

Question four

Discuss

- i. Autotrophic and Heterotrophic organisms (10marks)
- ii. Abiotic and characteristics (10marks)

Question five

Discuss sea grass, marine algae and mangrove ecosystems (20marks)