(*Knowledge for Development*)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS

2017/2018 ACADEMIC YEAR

FOURTH YEAR SECOND SEMESTER

MAIN EXAMINATIONS

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

COURSE CODE: SBT 422
COURSE TITLE: AQUATIC BOTANY

DATE: WEDNESDAY 1ST August, 2018. **TIME:** 9:00 – 11:00 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

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Question one

a) List three examples of marine ecosystems (3marks)

b) List two types of aquatic ecosystems (3marks)

c) Describe any 3 environmental problems that affect marine ecosystems (3marks)

d) Highlight three basic types of freshwater ecosystems (3marks)

e) Define;
   i.   Littoral zone (1mark)
   ii.   Profundal zone (1mark)
   iii. Riparian zone (1mark)

f) Briefly describe three major functions of aquatic ecosystems (3marks)

g) Write short notes on the following:
   i.   Submersed leaves (1mark)
   ii.   Floating leaves (1mark)
   iii. Emersed leaves (1mark)

h) Explain the meaning of the term "biodiversity" as used in aquatic botany (3marks)

i) Briefly describe any three marine pollutants (3marks)

j) Define the following terms as used in aquatic botany
   i.   Hypertrophy (1.5marks)
   ii.   Bog (1.5marks)

Question two

Discuss the two types of aquatic ecosystems (20marks)

Question three

Discuss the anatomical and structural adaptations of fresh and marine water plants (20 marks)

Question four

   i.   Discuss 5 plant communities found in Aquatic Zone (10 marks)
   ii.   Discuss 4 plants communities found in Transitional Zone (8marks)

   iii. Describe any 2 carnivorous plants that are common in bogs (2marks)

Question five

Discuss Conservation and management of aquatic flora as natural resources (20marks)