



A Constituent College of Kenyatta University

UNIVERSITY EXAMINATIONS 2011/2012 ACADEMIC YEAR
3RD YEAR EXAMINATION FOR THE DEGREE PF BACHELOR OF
ENVIRONMENTAL SCIENCES
COURSE CODE/TITLE: ENS 338: WETLAND RESOURCES

END OF SEMESTER: I

DURATION: 3 HOURS

DAY/TIME: THURSDAY 8.00 TO 11.00AM DATE: 24.11.2011 (ROOM TF1)

INSTRUCTIONS

Answer **ALL** questions in section **A** and any other **TWO** from Section **B**

SECTION A: Answer ALL questions from this section

Question One

Explain in brief the following concepts as used in wetland in the study of resources.

- i) Principle of Wise Use (2 marks)
- ii) Limiting factors (2 marks)
- iii) Water recharge and discharge (2 marks)
- iv) Hydric soils (2 marks)

Question Two

Briefly explain the need for people to have basic knowledge and understanding on wetland ecosystem functioning. (4 marks)

Question Three

- i) Using specific examples, explain what carbon sinks are (2 marks)
- ii) Explain threats posed by global warming to wetlands (4 marks)
- iii) Explain how wetlands can contribute to mitigating global warming. (6 marks)

Question Four

Briefly explain how lacustrine wetlands help control downstream flooding and soil erosion. (4 marks)

Question Five

Explain three (3) adaptive mechanisms found in wetland flora. Give example where appropriate. (6 marks)

Question Six

- i) What is Sustainable aquaculture (2 marks)
- ii) briefly state two (2) ways how sustainable aquaculture can improve the livelihoods of local communities. (4 marks)

SECTION B: - ANSWER ANY TWO QUESTIONS FROM THIS SECTION

Question Seven

Discuss the challenges facing management of Lake Victoria wetland resources and give recommendations to promote its sustainability. (15 marks)

Question Eight

Using a well annotated diagram, discuss the water budget of wetland areas, explaining human activities that impact on it, and suggest measures to maintain it. (15 marks)

Question Nine

Discuss the socio-economic and ecological significance of the Tana delta area and the associated impacts of human development. (15 marks)