

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF SPATIAL PLANNING

# UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN WATER RESOURCE AND ENVIRONMENTAL MANAGEMENT SEMESTER 2016/2017 ACADEMIC YEAR

**CENTRE: MAIN CAMPUS** 

**COURSE CODE: PWE 3316** 

**COURSE TITLE: WETLAND ECOLOGY AND CONSERVATION** 

EXAM VENUE: STREAM: SPATIAL PLANNING

DATE: EXAM SESSION:

**TIME: 2 HOURS** 

## **Instructions:**

1. Answer question 1 (compulsory) and ANY other 2 questions.

- 2. Candidates are advised not to write on the question paper.
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.

#### **QUESTION ONE**

- a) Discuss the noteworthy fauna and flora of Lake Naivasha as a Ramsar site (10 marks)
- b) Discuss the classification of wetlands based on location

(10 marks)

c) Discuss the four categories of marcophytes

(10 marks)

#### **QUESTION TWO**

a) Discuss with examples five ways how plants are adapted to wetland conditions

(10 marks)

b) Discuss with examples five ways how animals are adapted to wetland conditions

(10 marks)

#### **QUESTION THREE**

Discuss the four ways through which wetland degradation and loss can be mitigated against.

(20 marks)

#### **QUESTION FOUR**

Give the Criteria for the designation of Wetlands of International Importance according to the following groups:

a) Group A of the criteria

(4 marks)

- b) Group B of the criteria
  - i. Criteria based on species and ecological communities

(12 marks)

ii. Specific criteria based on other taxa

(4 marks)

### **QUESTION FIVE**

a) Discuss five factors upon which value may be attributed to a wetland

(10 marks)

b) Discuss five benefits of wetlands in regulating hydrological processes

(10 marks)