



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: PES 3412

COURSE TITLE: ENVIRONMENTAL RESOURCE PLANNING AND MANAGEMENT

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 1

- a) Define the term a resource and distinguish its three characteristics (5 marks)
- b) With concrete examples distinguish the terms institution and organization as applied to natural resources planning and management (5 marks)
- c) Outline the environmental resources values that are attached to the natural resources (5 marks)
- d) Outline any five uses of agricultural land to national and rural economy (5 marks)
- e) Explain how floods can impact on the planning and management of natural resources (5 marks)
- f) Outline five general objectives of a CBNRM strategy (5 marks)

Question 2

Discuss the role of Community Based Natural Resources Management(CBNRM) strategy with respect to concept and structure, principles, challenges and benefits to both humans and nature (20 marks)

Question 3

Discuss any five key approaches applied to natural resources planning and management (20 marks)

Question 4

Discuss the role of Environmental Management and Coordination Act of 1999/2015 (EMCA) in Environment Management in Kenya (20 marks)

Question 5

For sustainable management of natural resources, institutions organize their decision-making plans through (i) holistic and (ii) adaptive mechanisms, Discuss. (20 marks)