



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 2022/2023 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: PPB1303

**COURSE TITLE: INDIGINOUS KNOWLEDGE IN NATURAL RESOURCE
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 ONE

Question 1

- (a) Define the following concepts as applied to indigenous knowledge systems:
- (i) Traditional Ecological Knowledge (TEK) (1 mark)
 - (ii) Copyrights (1 mark)
 - (iii) Civil society Organizations (CSOs) (1 mark)
 - (iv) Patency (1 mark)
 - (v) Bio-piracy (1 mark)
- (b) Outline any FIVE characteristics of Indigenous Knowledge (IK) (5 marks)
- (c) State any Five threats to Indigenous Knowledge Systems (IKS) (5 mark)
- (d) Outline any FIVE benefits of CBNRM interventions on natural resources management (5 marks)
- (e) State any FIVE benefits of incorporating IK into the science education system (5 marks)
- (f) Outline any FIVE sources of Indigenous Knowledge (5 marks)

Question 2

- (a) What are the similarities between Indigenous and Scientific Knowledge systems (5 marks)
- (b) Discuss how blending of both Indigenous Knowledge and Western Science enhances natural resource management (15 marks)

Question 3

- (a) Discuss the principles that underpin Kenya's national policy on Traditional Knowledge (IK), Genetic Resources and Traditional Cultural Expressions (2009) (20 marks)

Question 4

- (a) What is Intellectual Property Rights (IPRs)? (2 marks)
- (b) With examples explain types of IPRs through which IK is protected (18 marks)

Question 5

- (a) What are the factors that guide formulation of IKS' operational principles (4 marks)
- (b) Discuss with examples how indigenous communities applied Indigenous Knowledge Systems (IKS) to manage their natural resources (Cite at least four examples you know) (16 marks)