



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF SPATIAL PLANNING
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN CONSTRUCTION
MANAGEMENT AND RENEWABLE ENERGY**

YEAR FOUR SEMESTER I 2024/2025 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: PNB 1407

COURSE TITLE: SUSTAINABLE DEVELOPMENT

EXAM VENUE: CRAFT ROOM

STREAM: BSc. CONSTRUCTION

MGT/RENEWABLE ENERGY [3.2]

DATE: 23/4/2024

EXAM SESSION: 15.00-17.00

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.**

Candidates must hand in their answer booklets to the invigilator while in the examination room.

QUESTION ONE

Question 1

- a) With examples and in the context of sustainable development, explain the meaning of development (6 marks)
- b) Using six examples analyze indicators for Sustainable Development (6 marks)
- c) Explain six characteristics of weak sustainability (6 marks)
- d) Analyze parameters that link environment and development to sustainability (6 marks)
- e) Analyze the precautionary principle as an overriding minimum guide for sustainable development (6 marks)

Question 2

- (i) Critically analyze key challenges and potential solutions for achieving sustainable development in a (named) county in Kenya (10 marks)
- (ii) Using examples explain how Kenya has integrated the Sustainability concept into her development agenda (10 marks)

Question 3

With examples discuss how Sustainable Development Goals (SDGs) promote sustainability of an economy (20 marks)

Question 4

Discuss how the following sectors impact the Sustainability agenda:

- (a) Globalization (10 mark)
- (b) Innovation and Technology (10 marks)

Question 5

Explain how principles of sustainable development promote strong sustainability (20 marks)