



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF SPATIAL PLANNING
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
WATER RESOURCE MANAGEMENT AND ENVIRONMENTAL CONSERVATION
SEMESTER 2016/2017 ACADEMIC YEAR**

CENTRE: MAIN CAMPUS

COURSE CODE: PES 3121

COURSE TITLE: BASIC CONCEPTS TO ENVIRONMENT AND DEVELOPMENT

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.**

Section A

1. (a) Define the following terms
 - (i) Environment (2 marks)
 - (ii) Development (2 marks)
- (b) List **four** functions of World Metrological Organization (WMO) (4 marks)
- (c) Outline **four** recommendations of Tbilisi Conference of 1978 with respect to Environmental Education (12 marks)
- (d) Explain **five key** areas or points which Copenhagen Accord of January, 2010 which member states are supposed to address in their respective jurisdictions (10 marks)

Section B

2. Discuss the impact of population on environment with respect to the following
 - (i) food production (7 marks)
 - (ii) energy (7 marks)
 - (iii) water resources (6 marks)
3. (a) Explain the meaning of International Union for Conservation of Nature (IUCN) (3 marks)
- (b) Discuss the **three** broad goals of IUCN (12 marks)
- (c) List five functions of IUCN (5 marks)
4. (a) Explain your understanding of Global Environment Fund (GEF) (2 marks)
- (b) Outline two reasons why GEF was established (6 marks)
- (c) Discuss five focal areas of GEF (12 marks)
5. (a) Define Sustainable Development (2 marks)
- (b) Discuss **Political, Socio-economic and Technological constraints** to realizing sustainable development in Sub-Saharan Africa (18 marks)