



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY**

**SCHOOL OF HEALTH SCIENCES**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF PUBLIC  
HEALTH**

**4<sup>TH</sup> YEAR 1<sup>ST</sup> SEMESTER 2023/2024 ACADEMIC YEAR**

**MAIN CAMPUS - REGULAR**

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**COURSE CODE: HCB 1415**  
**COURSE TITLE: CLIMATE CHANGE AND HEALTH**  
**EXAM VENUE: STREAM: (BSC PUBLIC HEALTH**  
**DATE: :**  
**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer ALL questions in Section A and Any TWO questions in Section B**
  - 2. Candidates are advised not to write on question paper**
  - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**
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**SECTION A (30 Marks) Answer all questions**

1. Define the following terms (3 marks).
  - i) Climate
  - ii) Weather
  - iii) Variations
2. Describe the greenhouse effects (3 marks).
3. Define the terms; Mitigation, Adaptation and Resilience in regards to climate change ( 3 marks)
4. Discuss the sources/reasons for the increase in any named 4 green house gases (4 marks)
5. Define a tropical cyclone and the four types of tropical cyclones between a tropical storm, hurricane and cyclone, a typhoon and a tsunami (5 marks)
6. Describe the Kyoto protocol (3 marks).
7. Describe carbon credits and how they work (3 marks).
8. Describe the Paris Agreement (3 marks)
9. Describe early warning systems and the type of early warning systems (3 marks)

**SECTION B (40 Marks) Answer any 2 questions**

11. Discuss the impacts of climate change on health with a focus on vector borne diseases (20 marks).
12. Discuss the impact of climate change and health in Kenya under the Water, Sanitation and Hygiene and Food Insecurity and undernutrition (20 marks).
13. Discuss challenges faced by epidemiologists when studying climate change (20 marks).
14. Discuss the DPSEEA framework in studying environment health indicators (20 marks).