

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**SECOND YEAR EXAMINATION FOR BACHELOR OF SCIENCE IN  
PUBLIC HEALTH**

**PUHE 258 CLIMATE CHANGE AND HEALTH**

**STREAMS: Y1S1**

**TIME: 2 HOURS**

**DAY/DATE : .....**

.....

---

**INSTRUCTIONS:**

1. Do not write anything on the question paper.
2. Mobile phones and any other reference materials are NOT allowed in the examination room.
3. The paper has three sections. Answer ALL questions in Sections I and II and ONE question in section III.
4. All your answers for Section I (MCQs) should be on one page.
5. Number ALL your answers and indicate the order of appearance in the space provided in the cover page of the examination answer booklet.
6. Write your answers legibly and use your time wisely

**SECTION ONE (Answer ALL QUESTIONS )**

1. How does climate change (global warming) affect human health?
  - A. By increasing illnesses such as heat stress, cardiovascular disease and kidney disease
  - B. By increasing respiratory illnesses such as asthma and allergies
  - C. By increasing insect borne infections such as dengue fever
  - D. All of the above
2. Greenhouse effect refers to:
  - A. Ability of atmosphere to retain water vapor
  - B. Ability of certain atmospheric gases to trap heat and keep the planet relatively warm
  - C. Ability of cloud to scatter electromagnetic radiation
  - D. None of the above
3. The primary agenda of the Kyoto protocol is
  - A Regulation of hazardous wastes
  - B Regulate the production of nuclear energy
  - C Control anthropogenic sources of greenhouse gases
  - D None of the above

4. Depletion of the ozone layer is damaging to human health. Negative effects include
- A Skin cancers
  - B Osteoporosis
  - C Dyspepsia
  - D None of the above
5. Carbon dioxide is primarily called a greenhouse gas because
- A Traps heat
  - B Traps light
  - C Traps warm currents
  - D None of the above
6. Cosmic rays, such as gamma rays are a source of
- A Soil Pollution
  - B Noise Pollution
  - C Thermal Pollution
  - D Radiation pollution
7. What does IPCC stand for?
- A Intergovernmental Panel on Climate Change
  - B International Panel on Climate Change
  - C Intergovernmental Protocols on Climate Change
  - D International Panel on Climate Conservation
8. How food production reduced due to climate change?
- A Due to application of organic manures
  - B Due to modern technologies
  - C Due to increase in pests
  - D Due to reduction in pollution
9. Which one of the following is a result of high exposure of radiation?
- A Loss of white blood cells
  - B Hair loss
  - C Tooth decay
  - D Leg fracture
10. What is the main aim of UNFCCC?
- A Stabilization of greenhouse gas
  - B Increase of greenhouse gas
  - C Increase of temperature
  - D Stabilization of oxygen

**(10 marks)**

**SECTION TWO (Answer ALL QUESTIONS)**

1. Define the following terms:
- a) Climate change variability
  - b) Global warming
  - c) Early Warning System
  - d) Carbon sink

**(5 marks)**

- e) Emissions
2. List the purpose of the following treaties  
**(4 marks)**  
a) Paris Agreement  
b) Kyoto Protocol
3. With examples discuss how climate change has increased the incidences of infectious diseases  
**(8 marks)**
4. List five stakeholders identified to implement the Kenya National Adaptation Plan 2015-2030.  
**(5 marks)**
5. Explain any six benefits of an Early Warning System.  
**(6 marks)**
6. Briefly discuss any six human activities contributing to global climate change.  
**(12 marks)**

**(40 marks)**

**SECTION THREE (Answer ONLY ONE QUESTION)**

1. Over the last several decades the global climate has been changing. Discuss the impact climate change has on health.  
**(20 marks)**
2. It is important for the health sector to be involved in climate mitigation activities. Elaborate the role of the health sector in climate change mitigation.  
**(20 marks)**