

---

CHUKA



UNIVERSITY

---

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF ARTS**

**GEOG 313: CLIMATOLOGY**

**STREAMS:**

**TIME: 2 HOURS**

**DAY/DATE: WEDNESDAY 11/12/2019**

**8.30 A.M – 10.30 A.M**

---

**INSTRUCTIONS**

**Answer question one and any other two. Sketches and diagrams may be used wherever they serve to illustrate an answer.**

1. (i) Write short essays on the following . [16 marks]
    - (a) Climatology and meteorology
    - (b) Paleoclimatology and paleotempestology
    - (c) Lithosphere and biosphere(ii) Differentiate between *climate base period* and *climate index*. [4 marks]  
(iii) Describe the concept green house gas effect. [10 marks]
  2. Discuss the various climate indices and assess their application. [20 marks]
  3. Explain the causes of climate change and assess its impacts on the hydrospheric components of the earth. [20 marks]
  4. (a) In the face of global climate change there have been attempts to tackle the problem as evidenced by global annual debates and negotiation under the united nations frame convention on climate change (UNFCCC) . Briefly assess the chronology of these debates from inception to date. [10 marks]  
(b) Discuss the indicators of climate change. [10 marks]
  5. Explain the importance of climate knowledge to society. [20 marks]
-