

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

**UNIVERSITY EXAMINATIONS 2013/2014**

**SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF  
ARTS AND EDUCATION**

**NGE 202: CLIMATOLOGY**

**(SCHOOL-BASED- MAIN CAMPUS)**

**INSTRUCTIONS**

- Answer question **ONE** and any other **TWO** questions.
- Sketch maps and diagrams should be used whenever appropriate

- 1 (a) Describe the formation process of the tropospheric ozone (10 marks)  
(b) Explain the effects of ultra-violet radiation on the Earth's surface (20 marks)
2. Write explanatory notes on the following  
(i) Chinook/ Foehn winds (5 marks)  
(ii) Classification of air masses (15 marks)
3. Describe the structure of the sun and the main features found on its outer layer (20 marks)
4. Examine the roles of the following in climate change:  
(i) Variations in atmospheric carbon dioxide (12 marks)  
(ii) Volcanic eruptions (8 marks)
5. Discuss the various causes of desertification in Sub-Saharan Africa (20 marks)