



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF HUMANITIES AND SOCIAL SCIENCES**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION**  
**ARTS WITH IT**  
**2<sup>ND</sup> YEAR 1<sup>ST</sup> SEMESTER 2019/2020 ACADEMIC YEAR**  
**MAIN CAMPUS**  
**(SPECIAL/RE-SIT EXAMINATION)**

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**COURSE CODE: NGE 202**

**COURSE TITLE: CLIMATOLOGY**

**EXAM VENUE:**

**STREAM: (BED-ARTS)**

**DATE:**

**EXAM SESSION:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer Question ONE (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.**

1. a) Discuss FIVE factors that influence the climate of a given place (15 marks)  
b) How has climate change affected socio-economic development in Africa (15 marks)
  
2. a) Describe the composition of the atmosphere (10 marks)  
b) Explain how the elements described in a) above affect solar radiation received on the Earth's surface (10 marks)
  
3. Discuss the causes and consequences of Urban Heat Island (20 marks)
  
4. a) Explain how wind is formed (8 marks)  
b) Why do temperatures decrease poleward? (12 marks)
  
5. Discuss various instruments used in a weather station to collect weather data (20 marks)