



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HUMANITIES AND SOCIAL SCIENCE
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION
ARTS WITH IT
YEAR 2 SEMESTER 1 ACADEMIC YEAR 2017/2018
MAIN (REGULAR)

COURSE CODE: NGE 202

COURSE TITLE: CLIMATOLOGY

EXAM VENUE:

STREAM: BED Arts

DATE:

TIME: 2 HOURS

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) Different parts of the Earth receive different amount of energy from the Sun. Explain (12 marks)
- (b) “The flow of winds is a manifestation of differential heating of the Earth’s surface”. Discuss (8 marks)
- (c) “The troposphere is the life support layer of the atmosphere”. Justify this assertion (10 marks)
2. Attempt a generic classification of world climatic types according to Wladimir Köppen (1884) (20 marks)
3. Discuss any FIVE challenges to humanity arising from climate change and explain how these challenges can be ameliorated. (20 marks)
4. Describe different parts and/or features of the following instruments found in a weather station and explain the role played by each part/feature:
- (i) Stevenson Screen (12 marks)
- (ii) Evaporation Pan (8 marks)
5. Use a well-labelled diagram to explain the origin and circulation of the global Polar, Westerlies and Trade winds (20 marks)