

UGANDA MARTYRS' UNIVERSITY

Faculty of Education

B.A. EDUC. YEAR TWO: SEMESTER TWO EXAMS, 2022/2023

PAPER: GEO2201: CLIMATOLOGY

DATE: 23rd /5/2023 DURATION: 3 HOURS TIME: 9:30 AM to 12:30 PM

Instruction:

- *Attempt any four questions in total*
- *Maps, diagrams and illustrations should be used wherever appropriate*
- *Do not write anything on the question paper*

1. a) Examine the various forms of energy as applied in climatological studies (13 marks)
b) Discuss the methods of energy transfer as applied in climatological studies (12 Marks)
2. a) With the aid of a diagram draw an Electro-magnetic spectrum (10 Marks)
b) Discuss the importance of waves to man
3. a) What is meant by the term temperature profile (5 Marks)
b) Discuss the components of the temperature profile in the atmosphere. (20 Marks)
4. Write short notes on any 5 of the following:
a) Black body (5 Marks)
b) Albedo (5 Marks)
c) White body (5 Marks)
d) Solar constant. (5 Marks)
e) Insolation (5 Marks)
f) Earth's revolution (5 Marks)
5. a) What is meant by the term Coriolis effect (5 Marks)
b) Discuss the effects/consequences of the rotation of the earth on its axis from the vertical (20 Marks)
6. Examine the factors (characteristics) of the earth systems that influence climate (25 Marks)
7. Examine the influence of the earth's revolution on the world climate (25 Marks)

END