



**MASINDEMULIROUNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

**UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

**FOURTH YEAR FIRST SEMESTER EXAMINATIONS
FOR THE DEGREE
OF
BACHELOR OF EDUCATION (ARTS)**

COURSE CODE: GEO 421

COURSE TITLE: CLIMATOLOGY

DATE: WEDNESDAY 20TH DEC 2023 TIME: 9.00AM TO 11.00AM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS.

USE ILLUSTRATIONS TO ADD VALUE.

TIME: 2 HOURS

**MMUST OBSERVES ZERO TOLERANCE TO EXAMINATION
CHEATING**

QUESTION ONE.

Write explanatory notes on any five of following.

- i. Development of Climatology (5 marks)
- ii. Solar radiations. (5 marks)
- iii. Elements of weather (5 marks)
- iv. Precipitation formation. (5 marks)
- v. Frontal rainfall. (5 marks)
- vi. Seasonal Winds. (5 marks)

QUESTION TWO.

- i. Discuss the main factors influencing infiltration process. (10 marks)
- ii. Differentiate between land breeze and sea breeze winds. (10 marks)

QUESTION THREE.

With aid of well labeled diagram, describe the hydrological cycle. (20 marks)

QUESTION FOUR.

- i. Apart from altitude, discuss any **Five** factors influencing weather and climate of a given place. (10 marks)
- ii. Explain **Five** functions of the atmospheric air. (10 marks)

QUESTION FIVE.

- i. With a well labeled diagram, account for solar radiation from the sun. (10 marks)
- ii. Man has played a vital role in climate change process. Discuss (10 marks)