



UNIVERSITY EXAMINATIONS

FIRST SEMESTER 2025/2026 ACADEMIC YEAR

**FOURTH YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF EDUCATION (SCIENCE/ARTS)**

GEOG - 418: CLIMATOLOGY

STREAM: BEd (SCIENCE/ARTS)

TIME: 2 HRS

DAY: FRIDAY [11.30 -13.30 P.M]

DATE: 30/01/2026

THIS QUESTION PAPER CONSISTS OF TWO (2) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.

ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS*Use diagrams where appropriate to illustrate your answer***QUESTION ONE- (30 MARKS)- COMPULSORY**

- a) Explain the following terms used in Climatology
 - i) Coriolis effect (2 Marks)
 - ii) Synoptic chart (2 Marks)
 - iii) Paleo-climate (2 Marks)
 - iv) Albedo (2 Marks)
 - v) Greenhouse effect (2 Marks)
- b) Clearly distinguish between climate change and climate variability (4 Marks)
- c) Examine the scope of climatology (6 Marks)
- d) Critically discuss **FIVE** branches of Climatology (10 Marks)

QUESTION TWO (20 MARKS)

- a) Citing relevant examples, examine the impacts of climatic regimes on human activities. (10 Marks)
- b) Examine any classification of climate systems (10 Marks)

QUESTION THREE (20 MARKS)

- a) Describe **FIVE** Statistical methods used in analysing Climate data. (10 Marks)
- b) Explain **FIVE** measures of climate data quality control. (10 Marks)

QUESTION FOUR (20 MARKS)

- a) Describe the **FOUR** layers of earth atmosphere. (8 Marks)
- b) Examine any **SIX** weather variables and the associated instrument for measuring each. (12 Marks)

QUESTION FIVE

- a) Critically discuss any **FIVE** factors influencing climate. (10 Marks)
- b) Explain any **FIVE** climate change mitigation measures. (10 Marks)