

ASSIGNMENT BOOKLET

**MSc in Geography Programme
(MSCGG)
(2nd Semester)**

Valid from 1st January, 2025 to 31st December, 2025



**School of Sciences
Indira Gandhi National Open University
MaidanGarhi
New Delhi-110068
(2025)**

Dear Student,

Please read the section on assignments in the Programme Guide of MSc Geography Programme. A weightage of 30 per cent, as you are aware, has been earmarked for continuous evaluation, **which would consist of one tutor-marked assignment** for this course. The assignment given in this booklet consists of three parts, Part A, B and C. The total marks of all the parts are 100, of which 35% are needed to pass it.

Instructions for Formatting Your Assignments

Before attempting the assignment please read the following instructions carefully:

- 1) On top of the first page of your answer sheet, please write the details exactly in the following format:

ENROLMENT NO.:.....
NAME:.....
ADDRESS:.....
.....
.....

COURSE CODE:
COURSE TITLE:
ASSIGNMENT NO.:
STUDY CENTRE:DATE:

PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

- 2) Use only foolscap size writing paper (but not of very thin variety) for writing your answers.
- 3) Leave 4 cm margin on the left, top and bottom of your answer sheet.
- 4) Your answers should be precise.
- 5) Complete each of Part A, Part B and Part C of this assignment separately, and **submit them together.**
- 6) The assignment answer sheets are to be submitted to your Study Centre within the due date. **Answer sheets received after the due date shall not be accepted. We strongly suggest that you retain a copy of your answer sheets.**
- 7) **This assignment is valid from 1st January, 2025 to 31st December, 2025. The last date for assignment submission is as follows:**
31st March 2025 for July 2024 admission cycle
30th September 2025 for January 2025 admission cycle
If you have failed in this assignment or fail to submit it by due date, then you need to get the assignment for the year 2026, and submit it as per the instructions given in the Programme Guide.
- 8) **You cannot fill the exam form for this course** till you have submitted this assignment. For any further queries, please contact: satyaraj@ignou.ac.in, vishalwarpa@ignou.ac.in, knrao@ignou.ac.in

We wish you good luck.

ASSIGNMENT

Climatology

Course Code: MGG-005

Assignment Code: MGG-005/TMA/2025

Maximum Marks: 100

Part-A

All Questions are compulsory. Each question carries 10 marks.

1. Discuss the origin and evolution of earth's atmosphere.
2. Explain the processes of heating and cooling of earth's atmosphere. Describe the horizontal and vertical distribution of temperature and the concept of adiabatic lapse rate.
3. Explain the origin of monsoon with a special reference to India. Discuss the factors affecting monsoon, including El Nino and La Nina.
4. Define fronts and cyclones. Explain the characteristics of temperate and tropical cyclones.

Part-B

All Questions are compulsory. Each question carries 10 marks.

5. Describe the procedures, tools, and methods used in weather forecasting. Discuss weather forecasting practices in India.
6. Describe the climatic classification system proposed by Thornthwaite. Discuss its bases, thermal efficiency, precipitation effectiveness, classification, and evaluation.
7. Give a detailed description of the vertical layers of the earth's atmosphere.

Part-C

8. Write Short notes on the following. Each question carries 5 marks.

- a) Distinguish between weather and climate. Identify the elements controlling weather and climate.
- b) Distinguish between seasonal winds and local winds.
- c) Explain the "B" Type of Climate of Koeppen.
- d) Explain the role of sub-fields within climatology, such as synoptic climatology and applied climatology, in addressing environmental challenges.
- e) Describe the significance of jet streams in shaping global weather patterns and aviation routes.
- f) Explain how air masses influence weather patterns and climatic conditions in different regions.