

ASSIGNMENT BOOKLET

**M.Sc. Programme in Geography
(MSCGG)
(3rd Semester)**

Valid from 1st July, 2025 to 30th June, 2026



**School of Sciences
Indira Gandhi National Open University
Maidan Garhi
New Delhi-110068
(2025-26)**

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 is in this booklet, and it 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:

ROLL 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 July, 2025 to 30th June 2026. The last date for assignment submission is as follows:**
30th September 2025 for January 2025 admission cycle and
31st March 2026 for July 2025 admission cycle
- 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.

TUTOR MARKED ASSIGNMENT
Geographical Information System (GIS)

Course Code: MGG-011
Assignment Code: MGG-011/TMA/2025-26
Maximum Marks: 100

Part-A

All Questions are compulsory. Each question carries 10 marks.

1. Write a note on geography, cartography and GIS.
2. Discuss key functionalities and capabilities of GIS.
3. Explain in brief the spatial and non-spatial data models in GIS.
4. Explain overlay in GIS.

Part-B

All Questions are compulsory. Each question carries 10 marks.

5. Discuss display and visualization in GIS.
6. Explain the concept of Spatial Decision Support System (SDSS).
7. Explain the role of GIS applications in land and water resource management.

Part-C

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

- a) Coordinate Systems
- b) GIS Workflow
- c) Big Data
- d) Attribute-based and spatial data query
- e) Spatial Autocorrelation
- f) Environmental Impact Assessment (EIA)