ASSIGNMENT BOOKLET

M.Sc. in Geography Programme
(MSCGG)
(4th Semester-Second Year)

Valid from 1st January, 2026 to 31th December, 2026

School of Sciences
Indira Gandhi National Open University
Maidan Garhi
New Delhi-110068
(2026)

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, 2026 to 31th December 2026. The last date for assignment submission is as follows:**

   31st March 2026 for January admission cycle

   30th September 2026 for July 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 2027, 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 Programme Coordinators: satyaraj@ignou.ac.in, knrao@ignou.ac.in, vishalwarpa@ignou.ac.in

We wish you good luck.

ASSIGNMENT

Course Code: MGG - 012
Assignment Code: MGG - 012/TMA/2026
Maximum Marks: 100

Part-A

All Questions are compulsory and carries 10 marks each.

1. What is thermal law of radiation? Describe any two types of thermal laws of radiation in remote sensing.
2. Write a note on types of satellites.
3. Write a brief description on data product generation in remote sensing. Discuss the case study of Resourcesat-2.
4. Explain the types of aerial photographs with suitable diagrams, wherever necessary.

Part-B

All Questions are compulsory. Each question carries 10 marks.

5. What is spectral signature? Discuss the spectral signature of vegetation and soil with suitable examples and diagrams.
6. Write a detailed description on active and passive types of remote sensors.
7. Describe the application of remote sensing in floods (physical aspects) and settlements (human aspects) with suitable examples.

Part-C

8. **Write Short notes on the following. Each question carries 5 marks**.
   (a) Spatial resolution
   (b) Scattering and its types
   (c) Major missions of JAXA
   (d) Remotely sensed data recorded from television cameras
   (e) Airborne and satellite TIR scanner systems
   (f) Applications of hyperspectral remote sensing