MGG-012

ASSIGNMENT BOOKLET

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

Introduction to Remote Sensing MGG-012

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



School of Sciences Indira Gandhi National Open University Maidan Garhi New Delhi-110068 (2025) Dear Student,

Please read the section on assignments in the Programme Guide of M.Sc. Programme in Geography. 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	D.:
	••••••
COURSE CODE.:	
COURSE TITLE.:	
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. You can also use A4 size paper if you do not get foolscap size paper. Paper should be lined. Use only blue pen for writing. Avoid using red pen even for highlighting anywhere in the paper. You can use other highlighters if you need.
- 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 2023 admission cycle
 - 30th September 2025 for January 2024 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: vishalwarpa@ignou.ac.in

We wish you good luck.

ASSIGNMENT

Course Code: MGG-012 Assignment Code: MGG-012/TMA/2025 Maximum Marks: 100

Part-A

All questions are compulsory. Each question carries 10 marks.

- 1. Describe any two types of resolutions in remote sensing.
- 2. Write a brief note on any two types of platforms used in the remote sensing.
- 3. Give a brief description of sources of remotely sensed data.
- 4. Discuss the elements of visual image interpretation with suitable diagrams, wherever necessary.

Part-B

All questions are compulsory. Each question carries 10 marks.

- 5. Discuss active and passive types of remote sensors. Support your answer with diagrams.
- 6. Give a brief description of remote sensing programmes of Indian Space Research Organisation (ISRO).
- 7. Briefly describe the application of remote sensing for water resources pertaining to physical aspects and for agriculture pertaining to human aspects with suitable examples.

Part-C

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

- (a) Electromagnetic radiation (EMR)
- (b) Reflection OR Atmospheric windows
- (c) Drone and its utility
- (d) Radiometric error
- (e) Image quality OR Hyper-spectral data products
- (f) Multiband concept of image interpretation OR Concept of colour composite