

ASSIGNMENT BOOKLET

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

**INTRODUCTION TO REMOTE SENSING
MGG-012**

Valid from 1st July, 2026 to 30th June, 2027



**School of Sciences
Indira Gandhi National Open University
Maidan Garhi
New Delhi-110068
(2026-27)**

Dear Student,

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

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 2026 to 30th June 2027. The last date for assignment submission is as follows:**
30th September 2026 for January 2026 admission cycle
31st March 2027 for July 2026 admission cycle
- 8) **You cannot fill the examination form for this course till you have submitted this assignment. For any further queries, please contact: satyaraj@ignou.ac.in, knrao@ignou.ac.in, vishalwarpa@ignou.ac.in**

We wish you good luck.

TUTOR MARKED ASSIGNMENT

Course Code: MGG-012
Course Name: Introduction to Remote Sensing
Assignment Code: MGG-012/TMA/2026-27
Maximum Marks: 100

Part-A

All Questions are compulsory. Each question carries 10 marks.

1. What is the 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 of 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 of 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

All Questions are compulsory. Each question carries 5 marks.

8. Write Short notes on the following.
 - 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