



‘समानो मन्त्रः समितिः समानी’

UNIVERSITY OF NORTH BENGAL
B.A./B.Sc. Honours 3rd Semester Examination, 2023

SEC1-P1-GEOGRAPHY (305)

MODIFIED SYLLABUS

Time Allotted: 2 Hours

Full Marks: 60

The figures in the margin indicate full marks.

**The question paper contains SEC1A and SEC1B.
The candidates are required to answer any *one* from *two* courses.
Candidates should mention it clearly on the Answer Book.**

SEC1A

REMOTE SENSING

SECTION-I

1. Answer any *four* questions from the following: 3×4 = 12
- (a) Photogrammetry.
 - (b) What is EMR?
 - (c) Define spatial resolution.
 - (d) Define the three terms: 1+1+1
 - (i) RADAR
 - (ii) LIDAR
 - (iii) SONAR SYSTEM
 - (e) What is Mie Scattering?
 - (f) Atmospheric Window.

SECTION-II

2. Answer any *four* questions from the following: 6×4 = 24
- (a) Define Sensors. Discuss different types of sensors used in remote sensing. 1+5
 - (b) Differentiate between Geostationary and Sun-synchronous satellite.
 - (c) Briefly describe the IRS satellite programme in India.
 - (d) What is platform? Discuss about the different types of platforms used in Remote Sensing. 2+4
 - (e) Briefly describe the EMR interaction with earth surface with suitable diagrams.
 - (f) Write a short note on application of remote sensing in forest management with some examples.

SECTION-III

3. Answer any *two* questions from the following: 12×2 = 24
- (a) Define Remote Sensing. Discuss about the historical development of remote sensing system.
 - (b) Write the processes of EMR interaction with atmosphere and their role in remote sensing.
 - (c) Discuss the role of various elements in visual image interpretation of a satellite image.
 - (d) Write the application of remote sensing in Landuse/Landcover mapping.

SEC1B

RURAL DEVELOPMENT

SECTION-I

1. Answer any *four* questions from the following: 3×4 = 12
- (a) Jan Dhan Yojana
 - (b) NITI Aayog
 - (c) Target group
 - (d) Multi-level Planning
 - (e) What do you mean by rural development?
 - (f) Discuss the importance of MNREGA.

SECTION-II

2. Answer any *four* questions from the following: 6×4 = 24
- (a) Give an account of basic elements of rural development.
 - (b) Explain briefly the Lewis' model of economic development.
 - (c) Elaborate the major rural development policies of India after independence.
 - (d) Explain the role of Panchayati Raj System in rural governance.
 - (e) Write a note on NABARD.
 - (f) Write a short note on SGSY.

SECTION-III

3. Answer any *two* questions from the following: 12×2 = 24
- (a) Explain the impact of rural infrastructure on rural poverty.
 - (b) Discuss the Gandhian approach of rural development.
 - (c) Discuss the different measures taken by the Indian Government for rural development in drought prone areas.
 - (d) Discuss critically how PMGSY is helping to change the rural development in India.