



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL
B.A./B.Sc. Honours 3rd Semester Examination, 2022

SEC1-P1-GEOGRAPHY

OLD SYLLABUS [For students with registration session 2018-2019 to 2020-2021]

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) Mie Scattering
 - (b) Perfect specular reflection
 - (c) Push broom scanner
 - (d) Swath
 - (e) DN values
 - (f) Differentiate between Image and Photograph.

SECTION-II

Answer any four questions from the following 6×4 = 24

- 2. Illustrate the Atmospheric window with suitable sketches. 6
- 3. Write a short note on various types of sensor with suitable examples. 6
- 4. Differentiate between active remote sensing and passive remote sensing. 6
- 5. Explain 'spectral signature' and 'spectral reflectance curve' with suitable sketch and diagrams. 6
- 6. Write a short note on the advantages and disadvantages of remote sensing. 6
- 7. Write a short note on Landsat 7, and Landsat 8 Oli. 6

SECTION-III

Answer any two questions from the following 12×2 = 24

- 8. Write a brief note on the stages of remote sensing. 12

9. Define EMR. What are the major characteristics of EMR based on Wave theory? Illustrate the Interaction EMR with earth surface. 3+3+6
10. Differentiate between Image and Photograph. Analyse the methods of visual Satellite Image Interpretation. 3+9
11. Write a brief note on the application of remote sensing in Land use and Land cover mapping. 12

SEC1B

RURAL DEVELOPMENT

SECTION-I

1. Answer any **four** questions from the following: 3×4 = 12
- (a) Explain anti-poverty programmes undertaken by the government of India. 3
- (b) Write a short note on NWP. 3
- (c) Write a short note on mid-day meal scheme. 3
- (d) What was the Gandhian approach to rural development? 3
- (e) Write a short note on Nai Talim. 3
- (f) Briefly explain ICDS programme. 3

SECTION-II

Answer any **four** questions from the following

6×4 = 24

2. Explain the basic elements of rural development in India. 6
3. Write in brief about National Agricultural Policy in India. 6
4. Give an account of the major rural development programme in India after independence. 6
5. Discuss the objectives of SJSY. 6
6. What are the problems of rural development in India? 6
7. Explain the three-tier system of Panchayati raj in India. 6

SECTION-III

Answer any **two** questions from the following

12×2 = 24

8. Explain the scope and concept of rural development in India. 12
9. Discuss the challenges and short comings in implementation of rural development policies and programmes in India. 12
10. Briefly discuss the objectives of NABARD. 12
11. Discuss the role of MNREGA on rural development in India. 12

—x—