



'সমানো মন্ত্র: সপিতি: সমানী'

UNIVERSITY OF NORTH BENGAL

B.A./B.Sc. Honours 6th Semester Examination, 2022

DSE-P3-GEOGRAPHY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

**Students will answer questions from either Advanced Cartography OR
Political Geography**

ADVANCED CARTOGRAPHY (A)

SECTION-I

1. Answer any *five* questions from the following: 1×5 = 5
- (a) Standard parallel
 - (b) Constant of cone
 - (c) Spatial resolution
 - (d) Atmospheric window
 - (e) Tangential scale
 - (f) Reduced level
 - (g) Active sensor
 - (h) Absorption process.

SECTION-II

Answer any *three* questions from the following 5×3 = 15

2. Present the derivation of finding the radius of the standard parallel ($R \cot \phi$) in Simple Conical Projection with one standard parallel.
3. Discuss about the principles and components of Remote sensing.
4. Write in short on the role of various types of scattering and its effect in Remote sensing process.
5. Write about the differences in Raster and Vector data models in GIS.
6. Write various properties of Polar Zenithal Equal Area Projection.

SECTION-III

Answer any *two* questions from the following 10×2 = 20

7. Present the derivation of simple conical projection with two standard parallels.

8. Write briefly on the significance of modern GIS technology in the field of advanced cartography.
9. Write briefly about the role of energy and Electro-Magnetic Spectrum in Remote sensing process.
10. Explain the techniques of digital image processing.

POLITICAL GEOGRAPHY (B)

SECTION-I

1. Answer any *five* questions from the following: 1×5 = 5
 - (a) Sovereignty
 - (b) Enclave
 - (c) Buffer zone
 - (d) Organic state
 - (e) Hinterland
 - (f) Ecumene
 - (g) Lebensraum
 - (h) Resource Conflict

SECTION-II

Answer any *three* questions from the following

5×3 = 15

2. Write an account on the meaning and nature of political geography.
3. Discuss the various basis of classification of states.
4. Define boundary. Classify its various types.
5. Write a short note on the mineral based resource conflict.
6. Assess the role of Himalaya in the geopolitics of India.

SECTION-III

Answer any *two* questions from the following

10×2 = 20

7. Explain the scope and content of political geography.
8. Evaluate the significance of the study of geopolitics in political geography.
9. Give an account on Mackinder's Heartland theory.
10. Critically evaluate the disputes and conflicts related to forest rights.

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