



‘সম্মান মন্ত্র: সমিতি: সমানী’

UNIVERSITY OF NORTH BENGAL
B.A./B.Sc. Honours 5th Semester Examination, 2024

CC11-GEOGRAPHY (501)
BIOGEOGRAPHY AND PEDOLOGY
MODIFIED SYLLABUS

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

SECTION-I

1. Answer any *five* questions from the following: 1×5 = 5
- (a) Podzolization
 - (b) Humus
 - (c) Soil conservation
 - (d) Biodiversity hotspot
 - (e) Entisols
 - (f) USDA
 - (g) Soil Texture
 - (h) Grassland.

SECTION-II

- Answer any *three* questions from the following 5×3 = 15
- 2. Write a short note on soil profile with suitable diagrams.
 - 3. What are the major causes of soil erosion?
 - 4. Write a short note on equatorial biome.
 - 5. Write a short note on Ecological Pyramid.
 - 6. Briefly discuss the concept of Food chain and Food web. 2½+2½

SECTION-III

- Answer any *two* questions from the following 10×2 = 20
- 7. Write a short note on role of macronutrients and micronutrients in maintaining soil fertility.
 - 8. Discuss the USDA soil classification with suitable examples.
 - 9. Briefly describe the ecological importance of desert and Savanna Biome. 5+5
 - 10. What do you mean by ecosystem? Mention the structure and functions of different types of ecosystem with suitable examples. 2+8

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UNIVERSITY OF NORTH BENGAL
B.A./B.Sc. Honours 5th Semester Examination, 2024

CC12-GEOGRAPHY (502)

REMOTE SENSING AND GIS

MODIFIED SYLLABUS

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

SECTION-I

1. Answer any *five* of the following:

1×5 = 5

- (a) Vector data
- (b) Visible spectrum
- (c) Spatial Resolution
- (d) Pixel
- (e) Nadir point
- (f) Swath
- (g) MSS
- (h) Fiducial Mark.

SECTION-II

Answer any *three* questions from the following

5×3 = 15

- 2. Briefly discuss different components of GIS with examples.
- 3. Discuss the different types of platform used in Remote Sensing.
- 4. Define Sensor. Classify the different types of sensor in Remote Sensing.
- 5. Differentiate between spatial and non-spatial data in GIS environment.
- 6. What are the basic geometric characteristics of Aerial Photography.

1+4

SECTION-III

Answer any *two* questions from the following

10×2 = 20

- 7. Write in detail about historical developments in remote sensing techniques.
- 8. Write a note on Landsat Mission in the field of Remote Sensing.
- 9. Discuss about EMR interaction processes with atmosphere and earth surface.
- 10. Write the application of Remote Sensing and GIS in Urban sprawl and Forest monitoring with suitable examples.

10

10

5+5

5+5

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UNIVERSITY OF NORTH BENGAL

B.A./B.Sc. Honours 5th Semester Examination, 2024

DSE-P1-GEOGRAPHY (503)

MODIFIED SYLLABUS

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

**Students will have to choose either DSE-1A (Population Geography) OR
DSE-1B (Resource Geography)**

Candidates should mention it clearly on the Answer Book.

DSE-1A

POPULATION GEOGRAPHY

SECTION-I

1. Answer any *five* questions from the following:

1×5 = 5

- (a) Unemployment
- (b) De-Jure method
- (c) Zero population growth
- (d) Sex ratio
- (e) NSSO
- (f) Migration streams
- (g) Age specific Birth rate
- (h) Brain Drain.

SECTION-II

Answer any *three* questions from the following

5×3 = 15

- 2. What are the causes of uneven distribution of population?
- 3. Briefly describe the different sources of population data.
- 4. What are the different measures of fertility?
- 5. Write a short note on different causes of migration.
- 6. Write a short note on importance of age-sex composition.

SECTION-III

Answer any *two* questions from the following

10×2 = 20

7. Write an account on the nature and scope of population geography.
8. Briefly describe the Demographic Transition Theory.
9. What are the different determinants and measure of mortality?
10. What are the causes and consequences of malnutrition in India?

DSE-1B

RESOURCE GEOGRAPHY

SECTION-I

1. Answer any *five* questions from the following:

1×5 = 5

- (a) Selva
- (b) Localised Resource
- (c) Non-conventional Energy
- (d) Fund resource
- (e) EIA
- (f) Phantom pile
- (g) Biomass energy
- (h) Deforestation.

SECTION-II

Answer any *three* questions from the following

5×3 = 15

2. Write a short note on management of water resource.
3. Explain the advantages of agroforestry.
4. Write a short note on problems of coal mining in India.
5. Explain the measures of forest conservation.
6. Why sustainable development of resource is important?

SECTION-III

Answer any *two* questions from the following

10×2 = 20

7. What is resource? Attempt a classification of resource with suitable examples. **2+8**
8. Give an account of the characteristics and distribution of Tropical Deciduous Forest.
9. Give an account of the distribution of petroleum in India.
10. Give an account on the various measures of conservation of natural resource.

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UNIVERSITY OF NORTH BENGAL

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DSE-P2-GEOGRAPHY (504)

MODIFIED SYLLABUS

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

**Students will have to choose either DSE-2A (Urban Geography) OR
DSE-2B (Agricultural Geography)
Candidates should mention it clearly on the Answer Book.**

DSE-2A

URBAN GEOGRAPHY

SECTION-I

1. Define any *five* from the following:

1×5 = 5

- (a) Slums
- (b) Service towns
- (c) Squatter settlement
- (d) CBD
- (e) Urban Agglomeration
- (f) Census town
- (g) Administrative town
- (h) Hinterland.

SECTION-II

Answer any *three* questions from the following

5×3 = 15

- 2. Write an account on the scope of Urban Geography.
- 3. Write a short note on the characteristics of slums.
- 4. What are the effects of urban heat island?
- 5. Write a brief account on the classification of cities based on their functions.
- 6. Write a short note on the functional classification of cities given by C.D. Harris.

SECTION-III

Answer any *two* questions from the following

10×2 = 20

- 7. Compare and contrast the patterns of urbanisation in developed and developing countries.
- 8. Write an account on Ashok Mitra's functional classification of towns.

9. Elaborate the problem of housing as a major urban issue in India.
10. Discuss the problems of water and transport in any one of the major urban centres in North Bengal.

DSE-2B

AGRICULTURAL GEOGRAPHY

SECTION-I

1. Answer any *five* from the following: 1×5 = 5
 - (a) NARP
 - (b) Sedentary agriculture
 - (c) Crop Combination
 - (d) Blue Revolution
 - (e) Sprinkler Irrigation
 - (f) Net Cropped Area
 - (g) Transhumance
 - (h) Jhum cultivation.

SECTION-II

Answer any *three* questions from the following

5×3 = 15

2. Write a short note on land capability and land suitability.
3. Discuss about technological determinants of agriculture with suitable examples.
4. Briefly classify different agro-ecological regions of India.
5. Analyse the relevance of Von Thunen's agricultural landuse model.
6. Write a short note on White Revolution in India.

SECTION-III

Answer any *two* questions from the following

10×2 = 20

7. Discuss about the nature and scope of Agricultural Geography.
8. Discuss about the physical and socio-economic determinants of agriculture with suitable example. 5+5
9. Briefly classify the agricultural system of the world according to Whittlesey.
10. Give an account of crop combination regions of India.

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