UNIVERSITY OF NORTH BENGAL
B.A./B.Sc. Honours Part-III Examination, 2022

GEOGRAPHY

PAPER-XIV

Time Allotted: 2 Hours   Full Marks: 50

The figures in the margin indicate full marks.

Choose any *one* Option from

Option-I	**:**	**AGRICULTURAL GEOGRAPHY**
Option-II	**:**	**POPULATION GEOGRAPHY**
Option-III	**:**	**RIVER GEOGRAPHY**
Option-IV	**:**	**URBAN GEOGRAPHY**
Option-V	**:**	**REGIONAL PLANNING**
Option-VI	**:**	**CARTOGRAPHY**
Option-VII	**:**	**ENVIRONMENTAL GEOGRAPHY**

Mention the chosen Option on the cover page of the Answer Book

OPTION-I

AGRICULTURAL GEOGRAPHY

SECTION-I

Answer any *one* question   20×1 = 20

1. Explain the scope and content of Agricultural Geography.   20

2. Describe the salient features of the agricultural model developed by Von Thunen.   20

SECTION-II

Answer any *two* questions   10×2 = 20

3. Assess the environmental impact of shifting cultivation. Give suitable examples.   10

4. What are the problems of intensive agriculture in developing countries?   10

5. Describe various agricultural regions of India.   10

6. Explain USDA methods for land capability assessment.   10

SECTION-III

7.   Answer ***all*** questions: 2×5 = 10

   (a) Salinization
   (b) Primary Activity
   (c) Floriculture
   (d) Soil pH
   (e) F.A.O.

OPTION-II

POPULATION GEOGRAPHY

SECTION-I

Answer any *one* question   20×1 = 20

1.   Describe the changing growth pattern of Indian population since 1901.   20

2.   Explain different types of internal migration with suitable examples.   20

SECTION-II

Answer any *two* questions   10×2 = 20

3.   Describe various sources of population data in Geography.   10

4.   Describe the spatial distribution of Sex-Ratio in India.   10

5.   Explain major determinant of fertility.   10

6.   Write a short note on occupational structure of India.   10

SECTION-III

7.   Answer ***all*** questions: 2×5 = 10
   (a) Dependency Ratio
   (b) Zero Population Growth
   (c) Brain-drain and Brain gain
   (d) Neo-Natal mortality
   (e) Population Density.

OPTION-III
RIVER GEOGRAPHY

SECTION-I

Answer any *one* question   20×1 = 20

1.   Define Hydrological cycle. Discuss the significance of hydrological cycle   3+17
     mentioning the factors associated with it and make a suitable diagram on it.

2.   Discuss the erosional and depositional landforms of river with suitable diagrams.   10+10

SECTION-II

Answer any *two* questions   10×2 = 20

3.   Write a short note on transverse profile of a river.   10

4.   Define Channel Pattern. Write the characteristics of a braided channel.   10

5.   How does alluvial fans are formed? Explain its characteristics.   10

6.   Give a brief account on the meander channel pattern of a river.   10

SECTION-III

7.   Answer *all* questions: 2×5 = 10

    (a) Longitudinal profile

    (b) River Terrace

    (c) Hydrograph

    (d) Misfit River

    (e) Graded Profile.

OPTION-IV

URBAN GEOGRAPHY

SECTION-I

Answer any *one* question   20×1 = 20

1.   What do you understand by primacy of cities? Give an account of functional classification of towns with suitable examples.   5+15

2.   Critically analyse the concentric zone theory in respect to the internal structure of cities.   20

SECTION-II

Answer any *two* questions   10×2 = 20

3.   Discuss the scope and content of urban geography.   10

4.   What are the problems associated with urbanisation in India?   10

5.   Discuss the trend of urbanisation in India.   10

6.   What do you understand by Rank Size Rule? Differentiate between the primate   3+7
     city concept and rank size rule.

SECTION-III

7.   Answer the following questions: 2×5 = 10

   (a) Eopolis
   (b) Transition Zone
   (c) Squatter Settlement
   (d) Census Town
   (e) CBD.

OPTION-V

REGIONAL PLANNING

SECTION-I

Answer any *one* question   20×1 = 20

1.   Define Regional Planning. Discuss the objectives, principles and technique of   2+18
     regional planning.

2.   Critically analyse the Von Thunen model of agricultural land use.   20

SECTION-II

Answer any *two* questions   10×2 = 20

3.   Mention the causes of regional imbalances in India.   10

4.   Discuss the growth pole Model as proposed by Francois Perroux.   10

5.   Discuss the major problems associated with rural development in West Bengal.   10

6.   Describe one of the measures for development of Backward areas as proposed by 10
     the Government of India in detail.

SECTION-III

7.   Answer the following terms: 2×5 = 10

   (a) Locational Rent
   (b) Threshold Population

(c) Formal Region

(d) Growth foci

(e) Panchayat Raj.

OPTION-VI

CARTOGRAPHY

SECTION-I

Answer any *one* question   20×1 = 20

1.   What are the sources of error in theodolite Survey? Describe the methods of   5+15
     finding the height of an object above BM with theodolite when the base of the
     object is in accessible. Illustrate with necessary sketches.

2.   Prove that in Polar Zenithal Equal Area Projection the radius of any parallel of   20
     Latitude ϕ varies as 2R times the sine of half of its colatitude. Also submit your
     calculation for drawing graticules on Polar Zenithal Equal Area Projection for the
     northern hemisphere at an interval of 10° with a scale of 1 : 180,000,000.

SECTION-II

Answer any *two* questions   10×2 = 20

3.   What are the methods of plotting prismatic compass traverse? The whole circle   10
     bearings of the sides of a traverse ABCDEF are as follows. Compute the interval
     angles:

     Bearing of AB = 290°45'

     Bearing of BC = 250°48'

     Bearing of CD = 196°12'

     Bearing of DE = 175°24'

     Bearing of EF = 112°18'

     Bearing of FA = 30°0'

4.   What are the basic elements of visual image interpretation?   10

5.   Mention the principles of Bonne's projection and prove that Bonne's projection is   5+5
     an equal-area projection.

6.   Briefly explain the nature and scope of cartography.   10

SECTION-III

7.   Answer *all* questions: 2×5 = 10

     (a) Orthomorphism

     (b) Angle of Deflection

     (c) Crab and drift

(d) Principle of Surveying

(e) Scale factor in projection.

OPTION-VII

ENVIRONMENTAL GEOGRAPHY

SECTION-I

Answer any *one* question   20×1 = 20

1. Discuss the scope and content of Environmental Geography.   20

2. What are the components of environment?   2+18
Explain the physical and cultural components of environment with suitable example.

SECTION-II

Answer any *two* questions   10×2 = 20

3. Describe the different approaches of hazard mitigation.   10

4. What is energy flow? Mention the process of energy flow of an ecosystem.   2+8

5. Discuss the nature of blood problems in North Bengal.   10

6. What do you mean by environmental conservation? Make a suitable classification of Natural resources.   2+8

SECTION-III

7. Answer *all* questions: 2×5 = 10
   (a) Biomass
   (b) Pyramid of Energy
   (c) Ecotone
   (d) Global Warming
   (e) Halophyte.

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