Post Graduate Geography [M. Sc.]

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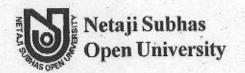
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PGGR-01 Geotectonics and Geomorphology Hydrology and Oceanography

Group

Part I: Geotectonics

| | | | | 100 |
|-------|---|---|--|-------|
| UNIT | 1 | | Modern Theories of Orgin of the Earth | 7-15 |
| UNIT | 2 | 0 | Isostasy and Related Theories | 16-27 |
| UNIT | 3 | 0 | Vulcanicity and Related Landforms | 28-38 |
| UNIT | 4 | | Plate Tectonics and Mountain Building | 39-52 |
| UNIT | 1 | 0 | Development of Modern Concepts | |
| TIMEE | 1 | - | Development of Modern Concents | |
| | | | in Geomorphology | 53-68 |
| UNIT | 2 | | Non-Cyclic Concept and Process Geomorphology | 69-81 |
| UNIT | 3 | 0 | Concept of Grade, Profile of | |
| | | 7 | Equilibrium and Base Level | 82-90 |
| UNIT | 4 | 0 | Theories of Slope Evolution | 91-96 |

Group B Hydrology

| UNIT | 1 | 0 | Estimation and Measurements of Hydrological Parameter | s 99-108 |
|------|----|-----|---|----------|
| UNIT | 2 | 0 | Unit Hydrograph and its Application | 109-115 |
| UNIT | 3 | 0 | Wetland Ecosystem of India and West Bengal | 116-125 |
| UNIT | 4 | 0 | Criteria for River-basin Management | 126-128 |
| Ocea | no | gra | aphy | |
| UNIT | 1 | 0 | Distribution of Ocean Water over the Globe-Salinity | 1 /8 |
| | | (r | and Temperature of Ocean Water | 131-148 |
| UNIT | 2 | 0 | Coastal Geomorphology-Mangroves and Coral Reefs | 149-165 |
| UNIT | 3 | 0 | Morphology of the Oceans : Ridges, Submarine | |
| | | | | |
| | | | Canyons and Oceanic Deposits | 166-183 |

POST GRADUATE GEOGRAPHY [M.Sc]

PAPER: PGGR-02

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PGGR - 02 Groups A & B Climatology & Soil and Biogeography

Group

| A | | Climatology | |
|--------|----|---|---------|
| Unit 1 | | Climatology and its Relation with Meteorology | 7-21 |
| Unit 2 | | Atmospheric Disturbances | 22-41 |
| Unit 3 | | Global Warming-Causes and Consequences, | |
| | | Impact on Global Water Balance, EL Nino | |
| | | and La Nina/ENSO phenomena-mechanism | |
| | | and Impact on Biosphere | 42-62 |
| Unit 4 | | Climate Changes-Evidences and Possible | |
| | | Causes, Reconstruction of Past Climates. | |
| | | Climate Changes through Geological Time- | |
| | | Quaternary Ice Age. Changes after Industrial | |
| | | Revolution, Theories of Climate Change. | 63-79 |
| Grou | ıp | | |
| В | | Soil and Biogeography | |
| Unit 1 | | Processes of Soil Formation, Development of Soil Profiles, Genetic & Environmental Classifications of Soils | 83-103 |
| Unit 2 | | Soil Nutrients And Soil Organisms—Their Role in Determining Soil Fertility | 104-109 |
| Unit 3 | | Concepts of Ecology | 110-215 |
| Unit 4 | | Means and Barriers of Global Dispersal of Animals | 216-264 |

UNIT 1 CLIMATOLOGY AND ITS RELATION WITH METEOROLOGY

Structure

- 1.0 Introduction
- 1.1 Climatology and its relation with meteorology
- 1.2 Agro-climatology and applied climatology
- 1.3 Concept of macro and microclimate
- 1.4 Concept of climate resources and climatic hazards
- 1.5 Weather forecasting
- 1.6 Questions
- 1.7 Suggested Readings

1.0 Introduction

Climate has immense influence on almost everything on the earth's surface. Climate interlinks all the spheres namely lithosphere, hydrosphere, atmosphere, biosphere and non-sphere (related to brain work of human beings) that are studied in geography, through a system, called climate system. Climate is a very dynamic system, and is quite sensitive to any kind of change occurring in it.

Weather and climate are two basic terms used in atmospheric sciences including climatology and metocoology, but they are defined variously. However, the elements of weather and climate are more or less the same. The commonly observed atmosphoric variables constituting both weather and climate are-senshing, atmospheric temperature, dew point temperature, pressure, cloud conditions, precipitation, wind characteristics and regurified weather, e.e. visibility, thunder storms, evolones etc. The basic relationbetween weather and climate can be stated by the fact that 'climate is the integration of weather, and weather is differentiation of climate' (G. F. Taylor), meaning a composite of weather conditions including departures of normal conditions, for over a long period of time constitutes a climate. So the difference between the two is mainly based on time. Weather can be simply defined as the over-all condition of the atmosphere of a locality in a specific time; and climate is the nature of change of weather throughout the year in that locality. Barring few extreme conditions, called departures from the normal, climate of a locality usually remain the same for a long period of time, say three to four decades, unless and until there is any sudden or repaid intervention acting adversely in that climate system, resulting in appreciable change in it. The normal time period of thirty to forty years is taken to define a elimate, because of the fact that during this period an average condition of weathers can be found, although there is no appreciable change in climate itself.

POST GRADUATE GEOGRAPHY [M. Sc]

PAPER : PGGR-03

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Group

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| | Scope, Content and Recent Trends in | TE, HM. |
|----|--|--|
| 16 | Economic Geography . | 7–16 |
| ۵ | Natural Resources: Its Classification and Spatial Distribution | 17–45 |
| ۵ | Classification of Industries | 46-127 |
| ۵ | Transporation — Modes of Transport | 128–161 |
| | 0 | ☐ Natural Resources : Its Classification |

POST GRADUATE GEOGRAPHY [M.Sc]

PAPER

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PGGR-03

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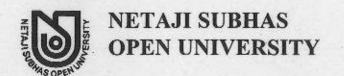
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PGGR - 03 Social and Cultural Geography

Group B

| Unit | 1 | | Nature, Scope and Development of Social Geography | 1-19 |
|------|-----|---|--|-------|
| Unit | 2 | | Social Well-being and Deprivation | 20-25 |
| Unit | 3 | | Nature, Scope and Development of Cultural Geography | 26-41 |
| Unit | 4 | 0 | Cultural Diversity | 42-65 |
| | 771 | | | |

Unit 2 ☐ POPULATION PROBLEMS OF THE THIRD WORLD

Structure

- 2.1 Backward classes.
- 2.2 Women Development
- 2.3 Poverty
- 2.4 Gender discrimination
- 2.5 Population Policies
- 2.6 Select Readings
- 2.7 Questions

2.1 BACKWARD CLASSES

The backward classes form a very important section of Indian society, accounting for more than 30% of the total population of the country. They are, however not homogeneous category but consist of three broad divisions: the scheduled castes, the scheduled tribes and other backward classes. Of the three problems of the other backward classes [OBCs] are in many ways different from the first two. However, the condition of all the three groups is intimately linked with the basic features of traditional Indian society and nature of their problems can be understood only in terms of these features and change and continuity. (D. C. Bhattacharya: Sociology)

The term 'Backward Classes' broadly refers to the category of the people who have been designed as 'backward' by the Government and are entitled to get certain special benefits and privilege conferred by the Government. Andre Beteille observes that the use of the term Backward Classes is not altogether happy one because the word class denotes not only an economic category but also one which is relatively open. In reality, the Backward Classes are not classes at all but an aggregate of closed status groups.

Of the three categories of Backward Classes, the Position of the Scheduled Castes and Scheduled Tribes is defined, more or less specifically, in the Constitution of India but the Position of the OBCs is not clearly mentioned in the Constitution. Their position was not defined in specific terms until recently. The OBCs are now entitled to special facilities in education and employment. But unlike the SCs/STs, they are not given the privilege of political representation through reserved Constituencies.

POST GRADUATE : GEOGRAPHY [M. Sc]

Paper: PGGR-04

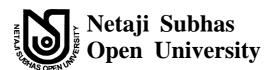
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PGGR-04 Qunatitative Techniques

Group B

| Unit 1 | Point Pattern Analysis • Mean Centre of Population • Nearest Neighbour Analysis | 7–14 |
|--------|--|-------|
| Unit 2 | Line Pattern Analysis Measures of Connectivity (alpha, beta and gamma index) Measures of accessibility from a point (de Tour Index) | 15–25 |
| Unit 3 | Areal Pattern Analysis Measures of Specialisation Dominant and Distinctive Analysis Indices of Specialisation—Location Quotient Pattern of Regional Inequality Lorenz Curve and Gini's Coefficient Z-score values | 26–42 |
| Unit 4 | Hierarchy Analysis • Rank-size Distribution of Towns • Dominant and Distinctive Analysis | 43–50 |

POST-GRADUATE GEOGRAPHY [M. Sc]

Paper : Groups PGGR: 05 : A & B

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PGGR-05 Preparation of Thematic Maps & Map Interpretation and Field Techniques

Group A

| 10-15 |
|-------|
| |
| 16-17 |
| 18-19 |
| 20-26 |
| - |

Group B

| Unit 6 | Map Interpretation and Field Techniques | 29 |
|---------|---|-------|
| Unit 7 | Interpretation of Topographical Sheets | 30-34 |
| Unit 8 | Interpretation of Aerial Photograph | 35-41 |
| Unit 9 | Interpretation of Satellite Imagery | 42-46 |
| Unit 10 | Preparation of Questionnaire Schedule | 47-50 |

POST GRADUATE GEOGRAPHY [M. Sc]

PAPER : GROUP

PGGR-06 : A

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PGGR - 06 Geographical Thought

Group - A

| Unit 1 | Dichotomies in Geography: Physical and Human, Systematic and Regional, Determinism and Possibilism | 7–21 |
|--------|--|---------|
| Unit 2 | Landscape Morphology – Cultural Expression of Carl Sauer | 22–25 |
| Unit 3 | Hartshorne – Schaefer Debate on Regional Differential and Spatial Organization | - 26-30 |
| Unit 4 | Nomothetic and Idiographic Approaches in Geography; System and Ecological Approaches in Geography | 31–43 |
| Unit 5 | Radicalism | 44–48 |
| Unit 6 | Geography of Inequality and Geography of Gender | 49–59 |
| Unit 7 | Post Modernism | 60–66 |
| Unit 8 | Recents Trends in Geography in Methods and Contents | 67–71 |
| | | |

POST GRADUATE : GEOGRAPHY [M. Sc.]

Paper-6: Group B(I)
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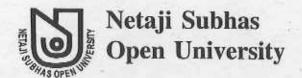
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Post Graduate : Geography M. Sc.

Paper-6: Group B(I) Historical Geography

| Unit | 1.1 | | Nature Scope and Content; Source Materials of Geography; Literature, Travel Accounts Archives and Chronicles | 7–14 |
|------|-----|---|---|-------|
| Unit | 1.2 | 0 | Territorial Organisation of Janapadas in Ancient India; Trade accounts of Hiuen Tsang and Ibn-e-Batuta | 15-41 |
| Unit | 1.3 | 0 | Territorial Organization of the Mughal Empire; Agriculture, Trade and Urbanisation during the Mughal Period | 42-57 |
| Unit | 1.4 | a | Agriculture, Industrialisation, Urbanisation and Trade in colonial economy with special reference to Eastern India; development of port oriented transport network; origin and development of Gateway Cities | 58-80 |

POST GRADUATE GEOGRAPHY

[M. Sc.]

PAPER : GROUP

PGGR - 07 : A

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PGGR-07



Group

A

| Unit 1.1.1 | ☐ Geographer's Approach to Environmental Studies; Physical Components of Environemnt | 7–14 |
|-----------------|--|---------|
| Unit 1.2 | ☐ Socio-cultural Components of Environment | 15–19 |
| Unit 1.3 | ☐ Concept of Holistic Environment, Degradation, Hazards and Disaster | 20–39 |
| Unit 1.4 | ☐ Global Resource Crisis and Sustainable Development | 40–51 |
| Unit 2.1 | ☐ Soil, Air, Water and Noise Pollution | 52-84 |
| Unit 2.2 | ☐ Conservation of Forests, Wetlands and Biodiversity | 85–89 |
| Unit 2.3 | ☐ Important Protocols at the International Level | 90–99 |
| Unit 2.4 | ☐ Environmental Impacts of Big Dams and Urban-Industrial Expansion | 100–119 |

POST GRADUATE GEOGRAPHY [M.Sc.]

PAPER : GROUP PGGR-7 : B

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PGGR 7 Regional Planning and Development

Group B

| Unit 1 | Concept of Region and Regional Planning | 1-12 |
|--------|---|---------|
| Unit 2 | Concept of Multilevel Planning | 13-42 |
| Unit 3 | Economic Base Theory & Theory of Growth Centre & Growth Pole | 43-51 |
| Unit 4 | Metropolitan Concept, Metropolis, Metropolit Area & Metropolitan Regions, Mega City and Megalopolis | |
| Unit 5 | Basic Principles of Regional Planning | 63-106 |
| Unit 6 | Indicators of Regional Development | 107-139 |
| Unit 7 | Integrated Regional Development | 140-161 |
| Unit 8 | Concept of Regional Disparity and Imbalances | 162-181 |

POST-GRADUATE GEOGRAPHY [M. Sc]

Paper : Group

PGGR: 08: A

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PGGR-08 Urban Geography

Group

A

| Unit 1 | 0 | Concept of Urban |
|--------|---|--------------------------|
| Unit 2 | | Urban Structure |
| Unit 3 | 0 | Urban Space |
| Unit 4 | | Urban Internal Structure |

POST GRADUATE GEOGRAPHY

[M. Sc.]

PAPER : GROUP

PGGR - 08: B

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Group - B Special Paper - I

Advanced Geomorphology

| Unit 1 🗆 | Applied Geomorphology | 7–45 |
|----------|--|---------|
| Unit 2 🗆 | Case Studies of Land-forms and Landuse | 46–80 |
| Unit 3 🗆 | Management of Geomorphic Problems | 81–113 |
| Unit 4 🔲 | Management of Geomorphic Hazards | 114–159 |



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Post-Graduate Geography [M.Sc]

Paper: PGGR 09

Group: B

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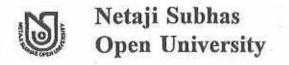
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PGGR on Remote Sensing & Geographic Information System

| Unit 1 | 0 | Visual Image Interpretation | 7-60 |
|--------|---|-----------------------------|--------|
| Unit 2 | o | Digital Image Processing | 61-81 |
| Unit 3 | | GIS Data Processing | 82-104 |

POST GRADUATE : GEOGRAPHY [M. Sc]

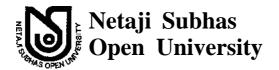
Paper: PGGR 10A (Practical)

Course Writing
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PGGR-10A Advanced Geomorphology (Practical)

| Unit 1 | Analysis of Drainage Basin Morphometry and Channel Aspects from Topographical maps | 8–30 |
|--------|---|-------|
| | Geomorphic Mapping | 31–38 |
| | Velocity, Discharge and Sediment Load Analysis | 39–58 |

PAPER 10A

ADVANCED GEOMORPHOLOGY (PRACTICAL) 50 marks

- 1. Analysis of drainage basin morphometry and channel aspects from topographical maps 14 marks
 - 1.1 : Computation of stream order (Strahler's method), bifurcation ratio, drainage density and constant of channel maintenance
 - 1.2 : Computation of braiding index, sinuosity index, meander wavelength and radius of curvature
 - 1.3 : Computation of river profiles

2. Geomorphic mapping

14 marks

- 2.1 : Preparation of geomorphic maps from field data using standard symbols and colours.
- 2.2 : Preparation of overlays from topographical maps showing geomorphic features
- 2.3 : Extraction of geomorphic features from satellite FCCs

3. Velocity, discharge and sediment load analysis

14 marks

- 3.1 : Measurement of wetted perimeter, velocity (by current meter or floats) and discharge.
- 3.2 : Preparation and interpretation of hydrographs, unit hydrographs and rating curves
- 3.3 : Collection and analysis of coastal or riverine sediments using (J)-graded sieves and chemical / electronic balance
- 3.4 : Analysis of fluvial or coastal pebbles for shape and constituents.

4. Laboratory Notebook and Viva-voce

8 marks

POST GRADUATE : GEOGRAPHY [M. Sc]

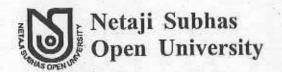
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PGGR-10A Advanced Geomorphology (Practical)

| Unit 1 | 0 | Analysis of Drainage Basin Morphometry and Channel Aspects from Topographical maps | 8–30 |
|--------|---|---|-------|
| Unit 2 | 0 | Geomorphic Mapping | 31–38 |
| Unit 3 | | Velocity, Discharge and Sediment Load Analysis | 39–58 |