

**DEWANHAT MAHAVIDYALAYA
DEPARTMENT OF GEOGRAPHY**

AY 2025 – 2026

EVEN SEMESTER

TEACHERS' ASSIGNMENTS

SEMESTER 4

Major 5

Name of the Paper: Settlement Geography and Population Geography (Theoretical)

Unit	Topic/Text	To Be Taught By
I	Settlement Geography: Definition, Nature and Scope. Rural settlements: Site and situation, Types and patterns. Urban Settlements: Classification of Towns (C.D. Harris, Nelson, Lewis Mumford, Ashok Mitra). Morphology of Settlements: Rural and Urban (Burgess, Hoyt, and Harris & Ullman). Some Concepts: Primate city, Rank-size rule, Metropolis and Megalopolis, Conurbation, Satellite Town, Smart city, PURA. Problems of rural and urban settlements in India.	Mijanur Rahaman
II	Population Geography: Definition, Nature and Scope. Theories of Population Growth: Malthus and Marx, Demographic Transition Theory. Population structure and composition: Age- and sex-specific, occupational and ethnic. Fertility and Mortality: Determinants and Measures. Population Migration: Types, Determinants, Theories (Stoufer, Lee, Ravenstein, Zelinsky, Gravity model). Issues in Population Geography: Child labour, Unemployment, Ageing of Population, Human Trafficking, Population-Resource Region.	Mijanur Rahaman

Name of the Paper: Settlement and Population Geography (Practical)

Unit	Topic/Text	To Be Taught By
I	Identification and interpretation of types of settlements according to "Site" from Survey of India 1:50k topographical maps. Nearest Neighbour analysis from Survey of India 1:50k topographical maps.	Mijanur Rahaman

	Determination of Urban centres as per Indian Census criteria (1991). Graphical Representation of Urban Centre Distribution According to Zipf's Rank-Size Rule	
II	Representation and interpretation of population density of Indian states of West Bengal districts by choropleth method (Equal Step, Mean & Standard Deviation, and Nested Mean Method and measurement of Accuracy. Dots and Spheres (representing rural and urban population). Construction and interpretation of Progressive and Regressive Age-Sex Pyramid. Population projection: Arithmetic and Exponential method.	Mijanur Rahaman

Major 6

Name of the Paper: Economic and Industrial Geography (Theoretical)

Unit	Topic/Text	To Be Taught By
I	Economic Geography: Definition, Nature and Scope. Economy: Types and indicators. Classification of economic activities: Primary, Secondary, Tertiary, Quaternary, and Quinary. Locational theory of economic activities Von Thünen. Classification of agricultural regions by Whittlesey. Key Concepts: Special Economic Zones (SEZ), Exclusive Economic Zones (EEZ), Export Processing Zones (EPZ), Free Trade Zones (FTZ).	Mijanur Rahaman
II	Industrial Geography: Definition, Nature and Scope. Industrial Location Theory: Alfred Weber's Model, Profit Maximization Theory of August Losch; Geographic and Dynamic Location Theory of Allan Pred (1967); Types of Industries. Agro-based Industry: Cotton Textile (U.S.A, India), Paper Industry (Canada, India). Mineral Based Industry: Metal - Iron & Steel (Japan, India); Non-metal - Petrochemical (Middle-East Countries, India) Automobile Industry: (U.S.A., India). Industrial regionalization in India	Mijanur Rahaman

Name of the Paper: Economic and Industrial Geography (Practical)

Unit	Topic/Text	To Be Taught By
I	Proportional Pie Diagrams (showing variation in occupational structure or areal coverage under different crops) Construction and interpretation of ergograph and Crop Calendar. Construction and interpretation of Nelson's Dominant and Distinctive Functions	Mijanur Rahaman
II	Time series analysis of industrial production of India using Semi-Average, Moving Average and Least Square Methods. Zones of concentration represented by Location Quotient. Z-Score (single criterion and two criteria)	Mijanur Rahaman

Minor 4(B)**Name of the Paper: Economic and Human Geography (Theory)**

Unit	Topic/Text	To Be Taught By
I	Concept of Resource: Definition, Characteristics, Classification of Resource. Forest Resources: Types, Depletion and Conservation. Mineral and Power resources: Uses and distribution of Coal, Petroleum and Iron ore, Conventional and Non-Conventional energy resources; Depletion and Conservation of resources	Mijanur Rahaman
II	Classification of economic activities: Primary, Secondary, Tertiary, Quaternary, and Quinary. Primary activities: Definition and Types of Agriculture. Secondary activities: Definition and Types of Manufacturing Industries.	Mijanur Rahaman
III	Human Geography: Definition, Nature, and Scope; Approaches to Human Geography with special reference to Man-Environment relationship. Human Adaptations in different climatic regions: Pygmy, Masai, Bedouin, Kirghiz, Eskimo. Concept of Ethnicity and Tribe, Distribution and Characteristics of Major Tribes of India: Oraon, Gond, Santhal, Jarawa, Khasi	Mijanur Rahaman

Name of the Paper: Topographical Map and Weather Map (Practical)

Unit	Topic/Text	To Be Taught By
I	General Interpretation of Topographical Map: Broad Physiographic Divisions & Relief features, Drainage Pattern, Settlements Transport & Communication and Transect Chart. Morphometric Techniques: Relative Relief (Smith), Average Slope (Wentworth) and Drainage Density (Horton)	Mijanur Rahaman
II	Weather instruments: Maximum and minimum Thermometer, Hygrometer and Rain gauge. Representation of climatic data: Climograph (According to Taylor) and Hythergraph (According to Taylor)	Mijanur Rahaman

SEMESTER 6**Major 10****Name of the Paper: Development Geography and Regional Geography of North Bengal (Theoretical)**

Unit	Topic/Text	To Be Taught By
I	Development Geography: Definition, Nature and Scope. Key indicators of Development: Economic, social and environmental. Human Development: Concept and Measurements. Issues in Development Geography: Rural development, Urban planning. Need and measures of balanced development in India. Concept of Sustainable development	Mijanur Rahaman
II	Physiography. Drainage and Vegetation. Biodiversity of North Bengal. People, Culture and Heritage: Rajbanshi, Rava, Toto, Oraon, Drukpa. Tourism: Major Tourist Spots, Present status, Problems and Prospects. Major issues in North Bengal: Flood, Flash flood, Landslide, Hailstorm, Human-Wildlife conflict	Mijanur Rahaman

Name of the Paper: Map Projection and Inferential Statistics (advanced) (Practical)

Unit	Topic/Text	To Be Taught By
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I	Map projection: Definition, key terminologies, classification. Mathematical/graphical construction, properties and uses of i) Polar Zenithal Orthographic and Equal Area, Simple Conical Projection with one Standard Parallel, Bonne's Projection, Polyconic Projection, Simple Conical Projection of two Standard Parallels, Interrupted Sinusoidal, Cylindrical Equal Area, Mercator's Projection	Mijanur Rahaman
II	Basic concept of hypothesis: Null and alternative; Parametric and Non-parametric; Type-I and Type-II Errors. Application of some Statistical Tests: Student's T-test, Chi-Squared test, One- and Two-way ANOVA.	Mijanur Rahaman

Major 11

Name of the Paper: Political Geography and Geography of Sustainability (Theoretical)

Unit	Topic/Text	To Be Taught By
I	Political Geography: Concepts, Nature and Scope. Concept of Nation, State and Nation-State. Global strategic views: Heartland and Rimland theories. Boundaries and frontiers, Importance of Buffer State.. World Political Blocks: UN, NATO, SEATO, BRICS, SAARC, ASEAN. Major Geopolitical Issues: Climate Change, Rich-Poor Gap, Health Issues	Mijanur Rahaman
II	Sustainability: Meaning, Principles and Importance. Sustainable Development Goals (SDGs) and Millennium Development Goals (MDGs). Sustainable Agriculture: Concept and strategies. Urban Sustainability: Concept and strategies. Sustainable Tourism: Concept and Strategies. Environmental Sustainability: Concept and strategies.	Mijanur Rahaman

Name of the Paper: Advanced Surveying and Computer Application (Practical)

Unit	Topic/Text	To Be Taught By
I	Preparation of Contour Plan by Dumpy Level. Determination of Height and Distance of an object (Base accessible and Inaccessible) with a Transit Theodolite	Mijanur Rahaman

	(Same instrument height and different Instrument height). Plane Table Survey: Radiation, Intersection and Traversing method. Global Positioning System (GPS): Only recording of Points	
II	Computer Application in Geography: Demographic data, Weather and Climatic data and Socioeconomic data processing and Thematic Diagrams using Basic Calculations and interpretation (Bar, Pie and Line Graph, Regression) by MS–Excel. Preparation of PowerPoint slides. Preparation of posters (in Computer or manual)	Mijanur Rahaman

Major 12:

Name of the Paper: Environmental Geography (Theoretical)

Unit	Topic/Text	To Be Taught By
I	Environmental Geography: Definition, Nature and Scope. Components of Environment: Physical and Socio-cultural Environment. Environmental programmes in the World: Kyoto Protocol, Rio-Summit, Montreal Protocol, Chipko and Narmada Bachao Movement. Wetland: Definition, Wetland Services, Wetland Degradation and Management, Ramsar Sites Environmental programmes in India: Swachh Bharat Mission, Mission Nirmal Bangla, and Ganga Action Plan. Environmental Pollution: Water, Soil, Air.	Mijanur Rahaman
II	Definition and Concepts: Hazards, Disasters; Risk, Vulnerability, Susceptibility. Disasters in India: Factors, Vulnerability, Consequences, and Management: Drought. Disasters in India: Factors, Vulnerability, Consequences, and Management: Tropical Cyclone. Disasters in India: Factors, Vulnerability, Consequences, and Management: Riverbank erosion. Disasters in India: Factors, Vulnerability, Consequences, and Management: Manmade disasters. Response and Mitigation to Disasters.	Mijanur Rahaman

Name of the Paper: Field Report (Practical)

Unit	Topic/Text	To Be Taught By
	<p>Prepare a field report within 50 pages (computer typed), including diagrams and photo pages, by conducting field visits in groups to address any one of the issues mentioned in the following. The topics selected for study should be divided into different parts, with each part assigned to groups of 5-10 students. This should be clearly mentioned in the report at the beginning. The report should be duly signed by the concerned teacher(s) for evaluation by the external expert(s), followed by a Viva-Voce. It must encompass a description of the study area, specific objectives, relevant research questions, results, discussions, recommendations, policy implications, and APA formatted references. The report should be based on primary and/or secondary data and typed on A4 pages, with spiral-bound/Hard-bound formatting on a transparent/clear cover.</p>	<p>Mijanur Rahaman</p>

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