

2015-2019  
**TRIPURA UNIVERSITY**  
**M.A. /M.SC. SYLLABUS (CBCS) IN GEOGRAPHY AND DISASTER MANAGEMENT**  
**Total Credits: 72**  
**1<sup>st</sup> Semester**

<b>Core Courses</b>	<b>Name of the Courses</b>	<b>No. of Credits</b>	<b>No. of Periods</b>	<b>Internal Marks</b>	<b>External Marks</b>	<b>Total Marks</b>
GEDM 701C	Geomorphology	04	45	30	70	100
GEDM 702C	Population & Settlement Geography	04	45	30	70	100
GEDM 703C	Statistical Techniques and Cartography I (Practical)	04	60	30	70	100
CSK- II	# Compulsory paper i.e. computer skill-II	04				
Elective Courses (select any one)						
GEDM 704E	Natural Resource Management	04	45	30	70	100
GEDM 705E	Regional Geography of India	04	45	30	70	100
GEDM 706E	Industrial Geography	04	45	30	70	100
<b>Minimum number of Credits for 1<sup>st</sup> semester= 20</b>						

**3<sup>rd</sup> Semester**

<b>Core Courses</b>	<b>Name of the Courses</b>	<b>No. of Credits</b>	<b>No. of Periods</b>	<b>Internal Marks</b>	<b>External Marks</b>	<b>Total Marks</b>
GEDM 901C	Philosophy of Geography	04	45	30	70	100
GEDM 902C	Remote Sensing & GIS (Practical)	05	45	30	70	100
GEDM 903C	Field Report & Surveying (Practical)	05		30	70	100
Elective Courses (Select any one)						
GEDM 904E	Agricultural Geography	04	45	30	70	100
GEDM 905E	Hydrology & Water Resource Management	04	45	30	70	100
GEDM 906E	Environment & Disaster Management	04	45	30	70	100
<b>Minimum number of Credits for 3<sup>rd</sup> semester = 18</b>						

## 2<sup>nd</sup> Semester

Core Courses	Name of the Courses	No. of Credits	No. of Periods	Internal Marks	External Marks	Total Marks
GEDM 801C	Climatology & Oceanography	04	45	30	70	100
GEDM 802C	Social & Political Geography	04	45	30	70	100
GEDM 803C	Quantitative Techniques Cartography II(Practical)	04	60	30	70	100
Elective Courses (Select any one)						
GEDM 804E	Geography of north-east India & Tripura	04	45	30	70	100
GEDM 805E	Soil & Bio Geography	04	45	30	70	100
GEDM 806E	Geography of Tourism	04	45	30	70	100
# Students have to select one paper from other departments		<b>04</b>				
<b>Minimum number of Credits for 2<sup>nd</sup> semester = 20</b>						

## 4<sup>th</sup> Semester

Core Courses	Name of the Courses	No. of Credits	Internal Marks	External Marks	Total Marks
GEDM 1001C (Special Paper)	Fluvial Geomorphology (A)	04	30	70	100
	Regional Planning & Development (B)	04	30	70	100
	Transport Geography (C)	04	30	70	100
	Resources & Disaster management (D)	04	30	70	100
	Population & Resource (E)	04	30	70	100
	Watershed Management (F)	04	30	70	100
GEDM 1002C (Project & Practical)	Fluvial Geomorphology (A)	06	30	70	100
	Regional Planning & Development (B)	06	30	70	100
	Transport Geography(C)	06	30	70	100
	Resources & Disaster management (D)	06	30	70	100
	Population & Resource (E)	06	30	70	100
	Watershed Management (F)	06	30	70	100
Elective Courses (Select any one)					
GEDM 1003E	Research Methodology	04	30	70	100
GEDM 1004E	Urban Geography	04	30	70	100
GEDM 1005E	Cultural & Historical Geography	04	30	70	100
<b>Minimum number of Credits for 4<sup>th</sup> semester = 14</b>					

**M.A./M.Sc. 1st SEMESTER SYLLABUS**  
**GEOGRAPHY AND DISASTER MANAGEMENT**

<b>TRIPURA UNIVERSITY</b>		
<b>M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT</b>		
Code No. GEDM 701C		
Title: GEOMORPHOLOGY		
No. of Credits: 04		
No. of Periods: 45		
<b>Sl. No.</b>	<b>THEME</b>	<b>SUB-THEME</b>
1.	Fundamentals of Geomorphology	1. Introduction to Geomorphology: Meaning and Historical Development 2. Concepts Relating to Processes and Forms 3. Applied Geomorphology: Nature, Scope and Significance
2.	Geo-Tectonics	1. Orogenesis and Sea-floor Spreading: Plate Tectonics 2. Earthquake and Vulcanicity
3.	Denudational Processes	1. Weathering: Physical, Chemical and Biological 2. Mass Movement: Creep, Flows, Falls and Slides 3. Erosion, Transportation and Deposition
4.	Evolution of Landforms	1. Fluvial, Glacial, Periglacial, Karst, Aeolian and Coastal 2. Models of Slope Evolution: Davis, Penck, King 3. Uniclinal, Folded and Domal Structure
5.	Environmental Changes	1. Causes and Impact on Landforms
<p><u>Chorley, R. J., Schumm, S. A. and Sugden, D. E. (1984): Geomorphology, Methuen, London.</u></p> <p><u>Holmes: Physical Geology</u></p> <p><u>Kale, V. S. and Gupta, A. (Rep.2011): Introduction to Geomorphology, Orient Longman, Calcutta.</u></p> <p><u>Fairbridge, R. W. (1968): Encyclopedia of Geomorphology, Reinholdts, New York.</u></p> <p><u>Ollier, C. D. (1981) Tectonics and Landforms, Longman , London</u></p> <p><u>Savindra Singh (Rep. 2011): Geomorphology, Prayag Pustak Bhawan, Allahabad</u></p> <p><u>Spark B. W. (1972): Geomorphology, Longman, New York</u></p> <p><u>Steers, J.A. (1937) The Unstable Earth, Methuen and Co., Ltd, London.</u></p> <p><u>Strahler A. H and Strahler, A. N. (1992) : Modern Physical Geography, John Wiley, New York</u></p> <p><u>Thornbury, W. D. (Rep.2011): Principles of Geomorphology, John Wiley and Sons, New York.</u></p> <p><u>Wooldridge and Morgan: Geomorphology</u></p>		

**TRIPURA UNIVERSITY**

**M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT**

Code No. GEDM 702C

Title: POPULATION AND SETTLEMENT GEOGRAPHY

No. of Credits: 04

No. of Periods: 45

Sl. No.	THEME	SUB-THEME	NO. OF PERIODS
<b>Group A: POPULATION GEOGRAPHY</b>			
1	Definition and Scope of Population Geography	1. Population Geography and Demography 2. Population and its Relationship with other Disciplines	
2	Sources of Population Data	1. International Sources of Population Data, 2. Sources of Population Data in India: Census of India, Civil Registration System, NSS and NFHS 3. Data Reliability and Comparability	
3	Population Composition	1. Linguistic and Religious 2. Age and Sex 3. Rural and Urban 4. Labour Force and Occupational Structure 5. Demographic Characteristics: Developed and Developing Countries	
4	Population Growth	1. Computation of Population Growth and Population Projection 2. Decennial and Annual Growth Rates 3. Population Growth in India since Independence 4. Spatial Patterns of Population Growth in India	
5	Fertility and Mortality	1. Measurement 2. Malthusian Views 3. Demographic Transition 4. Fertility and Mortality – Spatial and Temporal Trends in India	
6	Population and Resources	1. Measurement of Population Pressure on Resources 2. Gross Population Density 3. Population and Agricultural Resources: Case of India	
<b>Group B: SETTLEMENT GEOGRAPHY</b>			
7	Study of Human Settlements	1. Objectives and Scope 2. Types of Settlement: Urban and Rural 3. Rural Urban Fringe 4. Rural-Urban Continuum	
8	Urban Settlement System	1. Rank Size Principles 2. Central Place Theory: Concepts of Threshold and Range 3. Settlement Hierarchy	
9	Internal Structure of Towns	1. Concentric, Sector and Multiple Nuclei Models	
10	Rural Settlements	1. Villages and Hamlets 2. Distribution Pattern of Rural Settlements 3. Near Neighbour Analysis 4. Environment and House types – Illustrations from India	
References			

**TRIPURA UNIVERSITY**

**M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT**

Code No. GEDM 703C

Title: STATISTICAL TECHNIQUES AND CARTOGRAPHY

No. of Credits: 04

No. of Periods: 60

<b>Sl. No.</b>	<b>THEME</b>	<b>SUB-THEME</b>	<b>NO. OF PERIODS</b>
1	Spatial Sampling	1.Probability and Purposive Sampling 2.Random, Systematic and Stratified	
2	Centographic Measures	1.Mean and Median Centre, Standard Distance	
3	Geographical Data Matrices	1.Attribute/ Structural Matrix 2.Interaction/ Behavioural Matrix	
4	Association and Correlation	1.Chi-square Analysis 2.Scatter Diagram 3.Rank and Product Moment Correlation 4.Regression and Residuals	
5	Network Analysis	1.Concept of Graph Theory and Transport Network 2.Drainage Basin Analysis: Stream Ordering, Bifurcation Ratio	
6	Spatial Simulation	1.Deterministic and Probabilistic Models	
References			

# TRIPURA UNIVERSITY

## M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT

Code No. GEDM 704E

Title: NATURAL RESOURCE MANAGEMENT

No. of Credits: 04

No. of Periods: 45

<b>Sl. No.</b>	<b>THEME</b>	<b>SUB-THEME</b>	<b>NO. OF PERIODS</b>
1	Concept and Classification of Resource	1. Resource: Meaning and Changing Concepts 2. Classification of Resource: Bases of Classification and Classification Scheme	
2	Natural Resources	1. Population Growth and Natural Resource Use 2. Major Natural Resources: Distribution and Availability/ Production of Land, Forest, Water, Energy and Marine Resources	
3	Conservation and Management of Resources	1. Concept and Importance of Conservation and Management of Resources 2. Conservation of Renewable and Non-renewable Resources	
4	Resource Regions of India	1. Distribution of Resources in India 2. Major Resource Regions of India 3. Resource Use in North- East India	
5	Resource Conservation Policies	1. Global Policies 2. National and Regional Policies in India	

References

**TRIPURA UNIVERSITY**

**M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT**

**Code No. GEDM 705E**

**Title: REGIONAL GEOGRAPHY OF INDIA**

**No. of Credits: 04**

**No. of Periods:45**

<b>Sl. No.</b>	<b>THEME</b>	<b>SUB-THEME</b>	<b>NO. OF PERIODS</b>
1	Concept of Region	1.Area, Region and Space 2.Techniques of Grouping, Classification and Regionalisation	
2	Physical Regions	1.Comparison of O H K Spate's and R L Singh's Schemes	
3	Agro Climatic Regions	1.Parameters for Classification, 2. Macro Agro-climatic Regions: Detailed Study of any Two Regions	
4	Industrial Regions	1.Industrial Corridors and Manufacturing 2.IT Parks 3.Special Economic Zones as Industrial Regions	
5	Cultural Regions	1.Cultural Regionalisation of India : Variables and Methods 2.Approach of R K Mukherjee and J E Schwartzberg	
6	Regional Disparities	1.Grouping Districts on the basis of Development: Indicators and Methods 2. Concept of Backward Regions: Case Study of KBK, North Bengal	
References			

**TRIPURA UNIVERSITY**

**M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT**

**Code No. GEDM 706E**

**Title: INDUSTRIAL GEOGRAPHY**

**No. of Credits: 04**

**No. of Periods:45**

<b>Sl. No.</b>	<b>THEME</b>	<b>SUB-THEME</b>	<b>NO. OF PERIODS</b>
1	Classification of Industries	1.Manufacturing and Industry 2.National Industrial Classification System	
2	Location Theories	1. Deterministic and Behavioural Models	
3	Special Economic Zones	1.Industrial Policy in Plan Periods 2. Concept, History and Evolution, SEZ Act in India and Issues 3.Industrial Corridor-Territorial Production Complex 4.Policy Framework and Current Status	
4	Industrial Pollution	1.Clean Technology 2.Location and Re-location of Polluting Industry 3.Concept of Polluters Pay	
5	Global Production Network	1.Impact of Globalisation on Indian Industry 2.Concept, Status of India in GPN	
6	Case Studies	1.Apparel Industry 2.IT Industry	
References			

**M.A./M.Sc. 2<sup>nd</sup> SEMESTER SYLLABUS**

**GEOGRAPHY AND DISASTER MANAGEMENT**

<b>TRIPURA UNIVERSITY</b>			
<b>M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT</b>			
<b>Code No. GEDM 801C (A)</b>			
<b>Title: CLIMATOLOGY AND OCEANOGRAPHY</b>			
<b>No. of Credits: 04 (2)</b>			<b>No. of Periods: 45</b>
Sl. No.	THEME	SUB-THEME	NO. OF PERIODS
<b>Group A: CLIMATOLOGY</b>			
1	Meaning and Importance of Climatology	1. Meaning, Scope and Development of Climatology 2. Importance of Climatology in the Present Global Environmental Context	
2	Structure of the Atmosphere	1. Composition 2. Vertical Structure	
3	Planetary Energy Budget	1. Nature of Radiation 2. Energy Balance of the Earth's Surface	
4	Atmospheric Temperature, Pressure and Wind Systems	1. Horizontal and Vertical Distribution of Temperature 2. Pressure Distribution 3. Planetary Wind Systems 4. Monsoon with reference to Jet Stream and ENSO Phenomena	
5	Classification of World Climate	1. Approaches to Climatic Classification 2. Koppen's and Thornthwaite's Systems	
6	Climate Change	1. Meaning and Trend of Climate Change 2. Global Warming 3. Response to Climate Change: Issues and Challenges	

<b>Group B: OCEANOGRAPHY</b>			
7.	Nature and Importance of Oceanography	1. Meaning and Scope of Oceanography 2. Importance of Oceanography as branch of Physical Geography	
8	Bottom Configuration of Oceans	1. Features of Ocean Bottom: Continental Shelf, Slope, Deep Sea Floor, Submarine Ridge and Trench 2. Bottom Configuration of Indian, Atlantic and Pacific Oceans 3. Coral Reefs	
9	Temperature and Salinity Distribution of Oceans	1. Temperature Distribution of Ocean Water: Indian Ocean and Atlantic Ocean 2. Salinity of Ocean Water: Indian and Pacific Oceans	
10	Oceanic Circulation	1. Waves and Tides 2. Ocean Currents: Causes and Effects with Special Reference to Indian Ocean and Atlantic Ocean 3. Sea Level Change	
11	Marine Resources	1. An Outline of Marine Resources 2. Fish and Mineral Resource 3. Conservation of Marine Resources 4. EEZ, CRZ: Importance	
<b>References</b>			

**TRIPURA UNIVERSITY**

**M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT**

**Code. No. GEDM 802C  
GEOGRAPHY**

**Title: SOCIAL AND POLITICAL**

**No. of Credits: 04**

**No. of Periods: 45**

Sl. No.	THEME	SUB-THEME	NO. OF PERIODS
<b>Group A: SOCIAL GEOGRAPHY</b>			
1	Nature and Scope of Social Geography	1. Defining Social Geography 2. Development of Social Geography in India	
2	Elements of Social Geography and Concept of Social Differentiation	1. Caste, Tribe and Religion 2. Socio-Cultural Regions of India	
3	Society, Gender and Geography	1. Gender Issues in Education, Health, Employment and Empowerment	
<b>Group B: POLITICAL GEOGRAPHY</b>			
4	Evolution of Political Geography	1. Contribution of Ratzel, Huntington, Taylor and Harvey	
5	Concept of Nation-State	1. Nation, Nation-State, Nationalism and Nation Building 2. Territorial State and Globalisation	
6	Frontiers and Boundaries	1. Nature and Functions 2. Classification and Hierarchy of Boundaries	
7	Electoral Geography	1. Electoral Systems 2. Voting Pattern Analysis	
8	Geopolitics and Geo-Strategy	1. Contemporary Relevance of Views of Mackinder and Spykman 2. Global Conflicts and Negotiations	
References			

**TRIPURA UNIVERSITY**

**M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT**

**Code No. GEDM 803C**  
**CARTOGRAPHY No. of Credits: 04**

**Title: QUANTITATIVE TECHNIQUES AND**  
**No. of Periods: 60**

<b>Sl. No.</b>	<b>THEME</b>	<b>SUB-THEME</b>	<b>NO. OF PERIODS</b>
1	Indices of Concentration and Dispersion	1.Location Quotient 2.Lorenz Curve and Gini Coefficient	
2	Data Transformation	1.Normalisation and Standardization of Data	
3	Rank-Size Rule	1.Zipf's Rank-Size Rule, Primacy 2.Expected and Actual Population Distribution	
4	Gravity and Potential Concepts	1.Gravity Model 2.Population Potential: Mapping and Interpretation	
5	Classification	1.Weaver's Crop Combination Technique 2.Ashok Mitra's Classification of Towns 3.Nelson's Functional Classification of Towns	
6	Index of Sustainability	1.Computation and Interpretation at Macro and Micro Levels	
References			

**TRIPURA UNIVERSITY**

**M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT**

**Code No. GEDM 804E (A)**

**Title: GEOGRAPHY OF NORTH EAST INDIA AND TRIPURA**

**No. of Credits: 04**

**No. of Periods:45**

<u>Sl. No.</u>	<u>THEME</u>	<u>SUB-THEME</u>	<u>NO. OF PERIODS</u>
<b><u>Group A: GEOGRAPHY OF NORTH EAST INDIA</u></b>			
<u>1</u>	<u>Introducing North East India</u>	<u>North East India as a Region</u> <u>Locational and Strategic Significance of North East India</u>	
<u>2</u>	<u>Physical Environment</u>	<u>Geology and Topography</u> <u>Climate and Natural Vegetation</u> <u>River Systems</u>	
<u>3</u>	<u>Population Growth and Distribution (Inter-state comparison)</u>	<u>Population Growth and Distribution</u> <u>Population Density: Rural and Urban Scenario</u> <u>Population Migration: Emerging Problems</u>	
<u>4</u>	<u>Natural Resource Base and Management</u>	<u>Water Resources: Potentiality and Use</u> <u>Sustainable Use of Forest Resources</u> <u>Mineral Resources: Potentiality and Use</u> <u>Management of Resources: geographical Issues and Challenges</u>	
<b><u>Group B: GEOGRAPHY OF TRIPURA</u></b>			
<u>1</u>	<u>Introducing Tripura</u>	<u>Position of Tripura in North-East India</u> <u>Tripura's Uniqueness</u>	
<u>2</u>	<u>Physical Setting</u>	<u>Geology and Soil</u> <u>Topography and Drainage</u> <u>Climate</u> <u>Natural Vegetation</u> <u>Biodiversity</u>	
<u>3</u>	<u>Population Growth and Distribution</u>	<u>Population Growth</u> <u>Population Distribution and Density</u> <u>Population Migration</u>	
<u>4</u>	<u>Economic Development</u>	<u>Distribution and Use of Resources (Forest, Water and Mineral)</u> <u>Agricultural Development: Sedentary and Shifting Cultivation, Productivity and Output of Major crops –Rice, Oil seeds, Potato and Plantation Crops-Tea and Rubber</u> <u>Industrial Development: Constraints and Future Prospects</u> <u>Transport and Communication</u>	

References

**TRIPURA UNIVERSITY****M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT****Code No. GEDM 805E (A)****Title: SOIL AND BIO-GEOGRAPHY****No. of Credits: 04****No. of Periods:45**

Sl. No.	THEME	SUB-THEME	NO. OF PERIODS
Group A: SOIL GEOGRAPHY			
1	Introducing Soil Geography	1. Soil Geography as a branch of Physical Geography 2. Significance of Soil Geography	
2	Soil Forming Process	Factors of Soil Formation Weathering as a Process of Soil Formation Soil Profile Development: Podzol, Laterite and Chernozem	
3	Soil Classification	Genetic System of Classification Modern System of Classification Major Soil Groups of India: Alluvial Soils, Black Soils, Red Soils, Laterite Soils, Desert Soils, Peat and Marshy Soils	
4	Soil and Environmental Problems	Soil Pollution, Soil Erosion and Environmental Degradation Shifting Cultivation and Problem of Soil Erosion Sustainable Use of Soil Resource	
Group B: BIOGEOGRAPHY			
1	Introducing Biogeography	1. Meaning, Scope and Development of Biogeography	
2	Distribution of Plants and Animals	Factors affecting Distribution Dispersal and Migration of Plants and Animals Phytogeographical and Zoogeographical Regions	
3	Biodiversity	Concept and Significance Biodiversity in Mountain, Grassland, Wetland and Coastal Ecosystems Factors of Biodiversity Loss	
4	Conservation of Forest and Wildlife	1. Issues and Strategies of Conservation 2. Conservation of Forests: Afforestation, Agro-forestry, Social Forestry 3. Conservation of Wildlife: Protected Areas, Eco-restoration 4. Conservation Policies in India: Wildlife Act, Biodiversity Act and Other Related Policies	
References			

**TRIPURA UNIVERSITY****M.A. /M.SC. SYLLABUS IN GEOGRAPHY AND DISASTER MANAGEMENT****Code No. GEDM 806E****Title: GEOGRAPHY OF TOURISM****No. of Credits: 04****No. of Periods:45**

<b>Sl. No.</b>	<b>THEME</b>	<b>SUB-THEME</b>	<b>NO. OF PERIODS</b>
1	Basics of Tourism	<ol style="list-style-type: none"><li>1. Meaning and Importance of Tourism</li><li>2. Factors Influencing Tourism: Historical, Natural, Socio-Cultural and Economic</li><li>3. Motivating Factors for Travel: Leisure, Recreation, Academic and Religious</li></ol>	
2	Spatial Aspects and Types of Tourism	<ol style="list-style-type: none"><li>1. Spatial Affinity: Areal and Locational Dimensions</li><li>2. Tourism Types: Historical, Cultural, Ethnic, Adventure</li><li>3. Eco-Tourism: Concept and Prospects</li></ol>	
3	Tourism in India	<ol style="list-style-type: none"><li>1. Regional Dimension</li><li>2. Evolution, Promotion and Problems</li><li>3. Tourist Resources: Nature, Heritage, Art and Culture</li><li>4. Tourist Movement: Domestic and Foreign</li><li>5. Tourism Policy and Action Plan</li><li>6. Project Work on Tourism Development (Case studies from North- East India)</li></ol>	
4	Infrastructure and Support System	<ol style="list-style-type: none"><li>1. Accommodation and Supplementary Accommodation</li><li>2. Tourism Circuit – Short and Long</li><li>3. Agencies and Intermediaries</li><li>4. Impact of Globalization on Tourism Development Environmental Laws and Tourism</li></ol>	
5	Impact of Tourism	<ol style="list-style-type: none"><li>1. Positive and Negative Impact of Tourism on Society, Economy and Environment</li><li>2. Tourism and Economic Development</li><li>3. Sustainable Development of Tourism</li></ol>	

References

**M.A./M.Sc. 3<sup>rd</sup> SEMESTER SYLLABUS**

**GEOGRAPHY AND DISASTER MANAGEMENT**

**PHILOSOPHY OF GEOGRAPHY**

**PAPER GEDM-901C**

**Credits 04**

Unit 1 Evolution of Geographical Thought:

Geographical concept in Ancient India, Greek, Roman and Medieval; Changing Paradigm; Spatial Organization; Geography as an integrating Science.

Unit 2 Dualism in Geography:

Systematic vs Regional, Physical vs Human, Idiographic vs Nomothetic, Concept of Region and Regionalisation.

Unit 3 Philosophical debates in Contemporary Geography: Positivism, Behaviouralism, Marxism, Post Structuralism, Post Modernism.

Unit 4 Geographical Analysis and future of Geography:

Quantitative and Qualitative, Field and Cartography, Future of Geography in Globalised world.

Unit 5 Progress and Contribution in Indian Geography.

References :

**REMOTE SENSING AND GIS (PRACTICAL)**  
**PAPER GEDM-902C**

Unit 1 Aerial Photography:

Principles, Stereoscope, Photo Mosaicing, Photo Interpretation.

Unit 2 Remote Sensing:

Principles, Resolutions, Sensors, Visual Interpretation and application on Landuse changes, Urban studies, Geomorphology and Geology.

Unit 3 Digital Image Processing:

Image correction, Filtering/ Image Enhancement, Supervised and Unsupervised classification.

Unit 4 Geo-Spatial Databases:

Data entry and map composition; Digitizing, Scanning, Editing, Plotting and map making, Topology, Raster and Vector database structures and conversions (Point, Line, Area), Buffer Zones in Raster and Vector models.

Unit 5 GIS and Spatial Analysis:

Concept of DEM, DTM, TIN; Overlay analysis, Boolean operations, Spatial Analysis- GIS application  
- Land information system, resource management application, environmental GIS and Urban GIS.

Laboratory Notebook and Viva Voce.

References :

**FIELD REPORT AND SURVEYING (PRACTICAL)**  
**PAPER GEDM-903C**

**GROUP A**

\*\* Students are required to prepare a field report of about 50 to 75 pages based on scientific excursion organized by the department.

Field Report (35), Field Assessment/ Performance/ Internal Assessment (15)

**GROUP B**

Unit 1 Traversing by Prismatic Compass.

Unit 2 Determination of height by Theodolite- Intersection method, **Tacheometric** method.

Unit 3 Preparation of slope map/ contouring by- Dumpy level, Abney level, GPS, Total Station

Laboratory Notebook and Viva Voce.

References :

**AGRICULTURAL GEOGRAPHY**  
**PAPER GEDM 904E**

Unit 1 : Determinants of Agricultural Land use

Physical, socio-economic and technological, crop combination, crop diversification, agricultural productivity and efficiency, Land holdings, Land reforms, Land Policy

Unit 2 : Agricultural Regionalization

Criteria, Land capability classification, Whittlesey's agricultural regions, agricultural typology, Agricultural regions of India

Unit 3 : Models in Agricultural Geography

Von Thunen theory of agricultural location and its modification, innovation and diffusion model in agriculture

Unit 4 : Agricultural Productivity and Trends

Green Revolution, Blue, White, Yellow, Pink, smart agriculture, environmental implications of green revolution

Unit 5 : Perspective of Agricultural Development

Diversification of crop, agri-business, farm technology, sustainable agriculture (organic farming), Krishi Vigyan Kendra

References :

**HYDROLOGY AND WATER RESOURCE MANAGEMENT**  
**PAPER GEDM-905E**

Unit 1 Hydrological Cycle:

Precipitation intensity and duration, Evaporation, Infiltration, Evapotranspiration, Runoff.

Unit 2 Water Balance Elements and Analysis:

Water balance analysis, Flood and Drought Analysis

Unit 3 Groundwater occurrence and types:

Hydrogeological cycle, Movement, Darcy's law, Ground water recharge, Water Quality, Types of aquifer, Salinization, Sea water intrusion, Distribution of groundwater in India.

Unit 4 River basin Hydrology:

Major river basins, Surface water potential, Characteristics.

Unit 5 Water Resource Conservation and Management:

Application of Remote Sensing and GIS in Hydrological studies, Water Harvesting, Integrated Watershed Management, National Water Policy, National Water Grid

References :

**ENVIRONMENT AND DISASTER MANAGEMENT  
PAPER GEDM 906E**

GROUP A (Environmental Science)

Unit 1

Environment, Ecosystem, Human Ecology, Environmental perceptions and behavior, Man-environment relationship – Case study of mountain ecosystem.

Unit 2

Environmental Policy of 1986 and 2006, Sustainable Developmental goals, Wildlife Act, Biodiversity Act, Climate change negotiation under COP21, National Action Plan on Climate Change

GROUP B (Disaster Management)

Unit 3

Hazard, disaster, vulnerability, exposure, risk, types of hazard

Unit 4

Major disasters – Flood, Drought, Earthquake, Landslide and cyclones; Human and Technological hazards

Unit 5

Disaster Risk Reduction, prediction and early warning, preparedness, mitigation, recovery and rehabilitation, community based disaster mitigation plan, Disaster Insurance Policy.

References :

**M.A./M.Sc. 4<sup>th</sup> SEMESTER SYLLABUS  
GEOGRAPHY AND DISASTER MANAGEMENT**

**FLUVIAL GEOMORPHOLOGY (SPECIAL PAPER THEORETICAL)  
PAPER: GEDM 1001C (A)  
NO. OF CREDIT: 4**

Unit 1 Introduction to Fluvial Geomorphology:

Stream's denudation, Stream hydraulics, Entrainment and Sediment transport.

Unit 2 Mechanics and Landforms of Fluvial processes:

Erosion processes and landforms, transportation processes, deposition processes and landforms

Unit 3 River morphology :

Channel forms, Channel patterns; Structural and lithological control.

Unit 4 Hill slope characteristics and processes; Concept of Fluvial dynamics and Hazard Management, Impact of human activities on Fluvial Systems.

Unit 5: Basin analysis :

Quantitative analysis, Remote Sensing and GIS application in fluvial geomorphology.

References:

**FLUVIAL GEOMORPHOLOGY (SPECIAL PAPER PRACTICAL)**

**PAPER: GEDM 1002C (A)**

**NO. OF CREDIT: 6**

**GROUP – A**

**(Laboratory Practical)**

**Marks: 50**

Unit 1 Delineation of a drainage basin on a topographical map, Calculation and interpretation of Stream Order after Horton and Strahler, Bifurcation Ratio, Correlation between Stream Order, Stream Number and Stream length.

Unit 2 Morphometric analysis of a river basin as depicted on a topographical map (1:50,000): Relative relief, Dissection Index, Average Slope, Drainage Density, Ruggedness Index – their correlation and interpretation.

UNIT-3 Drawing and interpretation of Longitudinal Profile of the main river and its major tributaries, Calculation of gradient.

UNIT-4 Drawing and interpretation of Hydrograph and Rating Curve.

UNIT-5 Description of channel morphology of any selected site on the basis of its Velocity, Discharge, Cross-sectional Area, Wetted Perimeter and Hydraulic Radius.

Laboratory Notebook and Viva-voce.

**GROUP – B**

**(Dissertation)**

**Marks: 50**

A dissertation paper to be prepared by the candidate on any one selected topic related to Fluvial Geomorphology.

**REGIONAL PLANNING & DEVELOPMENT (SPECIAL PAPER  
THEORETICAL)  
PAPER:GEDM 1001C(B)  
NO. OF CREDIT: 4**

Unit	THEME	SUB-THEME
1.	<b>Concept of Region and Regional Planning</b>	Concept, Classification and Delineation of Region, Type of Planning, Model of Planning, Basic Principles of Regional Planning, Concept, Nature and Scope of Regional Planning, Methods and Approaches to Regional Planning.
2.	<b>Regional Development Theory</b>	Growth Pole and Growth Centers, Backward Area, Tribal Area,
3.	<b>Planning Region</b>	Classification and Delineation of Planning Region, Planning Strategy and Method, Planning Region of India.
4.	<b>Regional Planning in India</b>	Measurement of Regional Development, Strategies for Regional Development, Regional and Economic Disparity and Diversity.
5.	<b>Rural and Urban Development in India</b>	Concept, Approaches of Rural Development, Strategies for Rural Development: Case study of Kerala, West, Bengal and Tripura, Community Development Approaches, Concept, Process and Measurement of Urbanization, Social Area Analysis, Factorial Ecology, Impact of Industrialization and Urbanization, Urban Planning Policy, Smart Cities- Case of Agartala, Planning Governance.

**REGIONAL PLANNING & DEVELOPMENT (PRACTICAL)**

**Paper: GEDM 1002C(B)**

**NO. OF CREDIT: 6**

**Group A ( Laboratory Practical)**

**Marks: 50**

<b>Sl. No.</b>	<b>Theme</b>	<b>Sub- Theme</b>
<b>1.</b>	<b>Regional Concentration and Disparities</b>	Sphere of influence by Gravity Model, Measurement of Inequality by Lorenz Curve, Concentration by Location Quotient, Regional Disparity by Sopher's index
<b>2.</b>	<b>Transport and Regional Development</b>	Accessibility by Detour Index, Measurement of Transport Accessibility by Shortest Path Matrix. Regional Growth by analysis of Time series data.
<b>3.</b>	<b>Regional Growth</b>	Rural-urban growth and differentials, Correlation and Spatial correspondence, Weighted Score and Combination analysis.
<b>4.</b>	<b>3D Modelling</b>	Drawing & GIS Analysis of 2-D & 3D overview of a Neighborhoods
<b>5.</b>	<b>Lab Note Book &amp; Viva-Voce</b>	

**GROUP – B  
(Dissertation)**

**Marks: 50**

A dissertation paper to be prepared by the candidate on any one selected topic related to Regional Planning and Development.

**TRANSPORT GEOGRAPHY (SPECIAL PAPER THEORETICAL)**  
**PAPER GEDM 1001C (C)**  
**NO. OF CREDIT: 4**

**Unit 1 : Transport Geography – Concept and Evolution**

Concept and objective of transport geography, different approaches to transport geography – recent trends; factors associated with transport system; role of transport as a lead sector of economy; Transport economics

**Unit 2 : Structural Analysis of Transport Network**

Network shape and location, regional variation in its density; Network in graph theory, concept of topology, spatial interconnection – connectivity and accessibility; Traffic flow and regional interaction; Transport models

**Unit 3 : Transport Infrastructure**

Importance of different transport modes – mass transport, MRTS, role of intermediary transport modes; Public and private transport system; Transport amenities and facilities, vehicular technology; Transport services and land use pattern with special reference to Northeast India

**Unit 4 : Impact of Transport on Environment and Health**

Energy consumption in transport and environmental pollution – emission, noise; Issues associated with urban transport – accidents and congestion; health hazard

**Unit 5 : Transport Planning and Sustainable Transport Development**

Transport planning strategies, National Transport Policy - NHDP, Transport planning in India – roadways, railways, waterways and airways; Urban transport system and design, Growth and problems of urban transportation with special reference to Tripura.

References :

**TRANSPORT GEOGRAPHY (SPECIAL PAPER PRACTICAL)**  
**PAPER GEDM 1002C (C)**  
**NO. OF CREDIT: 6**

**GROUP – A**  
**(Laboratory Practical)**  
**Marks: 50**

Unit 1 Network as a graph: alpha, beta and gamma index; Connectivity – Direct connectivity

Unit 2 Accessibility by Detour Index – actual distance and straight line matrix; Accessibility by shortest path matrix, distance flow matrix

Unit 3 Gravity model and Breaking point analysis; Correlation and bivariate analysis; residual mapping

Unit 4 Measurement of emission and noise, Transport networking with help of computer application and GIS.

Unit 5 Perception Study : Preparation of survey schedule and questionnaire

Laboratory Note Book and Viva-voce

**GROUP – B**  
**(Dissertation)**  
**Marks: 50**

A dissertation paper to be prepared by the candidate on any one selected topic related to Transport Geography.

**RESOURCES AND DISASTER MANAGEMENT (SPECIAL PAPER THEORETICAL)**  
**PAPER GEDM-1001C (D)**  
**NO. OF CREDIT: 4**

Unit 1 Resource utilization and Disaster:

Major resources with reference to Tripura, resource utilization and scarcity

Unit 2 Land-induced disaster:

Erosion, Landslide, Rockfall, Avalanche.

Unit 3 Water and climate-induced disaster:

Liquefaction, Extreme rainfall, flash flood, Drought, Cloudburst and cyclone, Arsenic and fluoride contamination.

Unit 4 Forest and biological hazard:

Forest fire, Man-wildlife conflict, Epidemics, Nuclear hazard

Unit 5 Disaster Response and Emergency Management:

Role of communication and GPS technology, Community Risk Reduction; Vulnerable groups during disaster- Women, Physically disabled, Children, Old age, Animals; Youth and Disaster Management.

References :

**RESOURCE AND DISASTER MANAGEMENT (SPECIAL PAPER PRACTICAL)**

**PAPER GEDM-1002C (D)**

**NO. OF CREDIT: 6**

**GROUP – A**

**(Laboratory Practical)**

**Marks: 50**

Unit 1 Soil testing- NPK, Soil pH, soil salinity, soil alkalinity, permeability test.

Unit 2 Water Quality test, Water level recorder (surface and subsurface).

Unit 3 Climograph, Hythergraph, Ombrothermic Diagram, Ergograph.

Unit 5 Micro zonation mapping, Seismic data collection, Geodetic GPS data collection, Flood frequency analysis, Cyclone Analysis, Mapping of landslides, Mapping of Avalanches, Mapping of forest fires.

Unit 5 SWOT Analysis.

Laboratory Notebook and Viva Voce.

**GROUP – B**

**(Dissertation)**

**Marks: 50**

A dissertation paper to be prepared by the candidate on any one selected topic related to Resources and Disaster Management.

**M.A. /M.Sc. 4<sup>th</sup> semester**  
**Geography and disaster management**  
**Population and resources (special paper theory)**  
**Paper: GEDM 1001C (E)**  
**Number of credits: 4**

**Unit I**

Components of population change: fertility, mortality, migration; its patterns and trends; implications.

**Unit II**

Population and resource: population-resource regions, optimum population, over population, under population, land carrying capacity, density of population

**Unit III**

Human resources: Measurement, patterns, trends and implications of age groups, age indices, population structure.

**Unit IV**

Distribution and access to resources: gender, location, caste, tribe, ethnicity, religion  
Resources and conflicts: global patterns and trends; case study from India in general and North East India in particular

**Unit V**

Resource consumption and environment: trend and patterns of resource consumption in developed and developing regions; effects on the environment.

**References:**

1. Beaujen- Garnier J (1966) Geography of Population; Longman, London.
2. Bhende Asha A and Kanitkar (2002) Principles of Population Studies, 14th Edition, Himalaya Publishing House, Mumbai.
3. Bilasborrow, Richard E and Daniel Hogan, Population and Deforestation in the Humid Tropics, International Union for the Scientific Study of Population, Belguim 1999.
4. Bogua, D. J. Principles in Demography, John Wiley, New York 1969.
5. Bose, Ashish et al. : Population in India's Development (1947-2000); Vikas Publishing House, New Delhi 1974.
6. Brock, J.O.M and Welb: Geography of Mankind, McGraw Hill, London 1978.
7. Chandana, R.C. (2002) Geography of Population : Concepts, determination and patterns, Kalyani Publishers, New Delhi.
8. Clarke, J.I. (1992) Population Geography, Second Edition, Pergamon Press, Oxford England.
9. Council for social development (2006) India social development report OUP new Delhi
10. Crook, Nigel Principles of Populations and Development. Pergmaon Press. New York 1997.
11. Daugherty, Helen Gin, Kenneth C. W. Kammeryir, An Introduction to Population (Second Edition) The Guilford Press, New York London 1998.
12. Devaki jain (2005) women development and UN – A sixty years of quest for equality and justice, Indiana university press, USA
13. Domash M et al. (2001) Putting women in place, Gulliford press, New York.
14. Garnier, B. J. Geography of Population Longman, London 1970.
15. Hassan, M.I. (2005) Population Geography, Rawat Publication, Jaipur.

16. Mitra, Ashok India's Population : Aspects of Quality and Control Vol I & II. Abhiman Publications, New Delhi 1978.
17. Newbold Bruce K. (2007) six billion plus: world's population in the 21st century, rowman and little field pub. USA
18. Premi, M.K. (1991) India's Population Heading Towards a Billion, B.R. Publishing Coporation, New Delhi.
19. Ramakumar R (2006) technical demography, new age international New Delhi
20. Saraswati raju et al (1999) atlas of women and man in India, kali for women, New Delhi
21. Sialkind nail J (2006) encyclopedia of human development vol I,II,III sage new York
22. Srinivasan, K. and M. Vlassoff, Population Development Nexus in India : Challenges for the New Millennium Lata Mc Graw- Hill, New Delhi 2001.
23. Srinivasn K. Basis Demographic Techniques and Applications Sage Publications, New Delhi 1998.
24. Sundaram K. V. and sudesh Nangia, (ed) Population Geography, Henlage Publilcations, UNDP : Human Development Report, Oxford University Press, Oxford 2000.
25. United Nations, Methods for projections of urban and Rural Population No. VIII, New York 1974.
26. Woods R. Population Analysis in Geography Longman, London 1979.
27. Zelinsky Wilbur, A Prologue to Population Geography, Preglic Hall, 1966.
28. Zukerman Ben at al. (1996) human population and environmental crisis, jone & berlett, boston

**M.A. /M.SC. 4<sup>TH</sup> SEMESTER**  
**GEOGRAPHY AND DISASTER MANAGEMENT**  
**POPULATION AND RESOURCES (SPECIAL PAPER PRACTICAL)**  
**Paper: GEDM 1002C (E)** **Number of credits: 6**

Group-A  
Marks: 50

Unit I

Measures of mortality: disaggregation of mortality rate by age and sex, infant mortality rate, maternal mortality rate

Measures of fertility: age specific birth rate, total fertility rate, replacement rate.

Measures of migration: in-migration rate, out-migration rate, net migration rate, survival ration methods, age-sex specific net migration, birth place method

Unit II

Population Distribution: dot maps and sphere, mean centre of population, standard distance from mean centre, location quotient.

Population density: arithmetic density, physiological, agricultural, lived density

Unit III

Population composition: median age, dependency ratio, economic participation measures, sex ratio, population pyramids,

Unit IV

Measurement of inequality: Gini co-efficient, Lorenz curve, gender disparity index, disparity index by Sopher's method.

Group B  
(Dissertation)  
Marks: 50

A dissertation to be prepared on any selected topic related to population and resource.

References:

David M. Smith (1975), Patterns in Human Geography, Penguin, Harmondsworth.

Ebdon D (1983) Statistics in Geography : A Pratical Approach, Blackwell, London.

Fitz, Gomid, B.P. : Science in Geography, Developments in Geographical Method, Oxford University Press.

Gregory, S. (1978) Statistical Methods and the Geographer (4th Edition), Longman, London.

Gupta, S.P. : Statistical Methods, Sultan Chand and Sons, Latest Edition.

Hagget P., Models in Geography.

Hammond & Mccullah 1977 : Quantitative Techniques in Geography, Clarendon Press, Oxford.

Mahmood, Aslam 1971 : Statistical Methods in Geographical studies Rajesh Pub., New Delhi.

Mathews, J.A. (1987) Quantitative and Statistical Approaches to Geography, Practical Manual, Pergmon, Oxford.

Monkhouse, F.J. & H.R. Wilkinson; Maps and Diagrams Mathuen, London.

Pal, S.K. (1998) Statistics for Geoscientists; Techniques and Applications, Concept Publishing Company, New Delhi.

Peter, J. Taylor (1977), Quantitative Methods in Geography, Houghton Mifflin Company, Boston.

Robert Hammond and Patrik Mc. Cullagh (1974), Quantitative Methods in Geography, Clarendon Press, Oxfords.

Sarkar, A., Practical Geography

Singh, R.L. & P.K. Dutt : Elements of Practical Geography Students triends.

Yeates, Mauris (1974), An Introduction to Quantitative Analysis in Human Geography, McGraw Hill , New York.

**M.A./M.Sc 4<sup>th</sup> Semester**  
**GEOGRAPHY AND DISASTER MANAGEMENT**  
**Watershed Management (Special Paper Theory)**  
**Paper: GEDM 1001C (F)**  
**No. of credit: 04**

**Unit 1 Watershed concept**

Definition of watershed, morphological characteristics of watershed, classification of watershed; Concepts of watershed management, Principle of watershed management; Components of watershed management

**Unit 2 Management of water quality**

Water quality and pollution, types and sources of pollution; Hydrological processes and water quality; Environmental guidelines for water quality (Indian).

**Unit 3 Crop management**

Cropping pattern, strip cropping; mix cropping, crop rotation; soil water conservation; estimation of soil loss (RUSLE).

**Unit 4 Watershed management**

Rainwater harvesting; micro-catchments like farm ponds, percolation tanks, check dams etc; watershed development plan; Wasteland management; Watershed approach in Government programmes.

**Unit 5 RS and GIS applications**

Application of RS and GIS techniques in integrated watershed.

**References:**

1. Tideman, E.M., "Watershed management: Guidelines for Indian Conditions", Omega Scientific Publishers.
2. Ghanshyam Das, "Hydrology and Soil Conservation Engineering" Prentice Hall India.
3. Rajvir Singh, "Watershed Planning & Management", Yash Publishing House.
4. Pau A. Debarry, John Wiley & Sons, "Watersheds - Processes, Assessment and Management".
5. Singh, V.P. & Donald K. Frevert, Taylor & Francis. "Watershed Models"
6. Subramanya K., "Hydrology, Tata McGraw Hill Co., New Delhi, 1994.
7. Jeya Rami Reddy. P, "Hydrology, Laximi Publications, New Delhi, 2004
8. Odum, E. P. and G. W. Barrett, "Fundamentals of Ecology", India Edition, Thomson Brooks/cole, India, 2005
9. Canter L. W., "Environmental impact assessment", 2nd edition, Mc Graw Hill & Co., NY, USA, 1996
10. Vladimir Novonty, "Water Quality: Diffuse pollution and watershed Management", 2nd edition, John Wiley & Sons, , 2003
11. Jorgensen, S., J. G. Tundisi, J. M. Tundisi, "Handbook of inland aquatic ecosystem management", CRC Prerss, FL, USA, 2013.
12. Mackenzie L Davis, David A Cornwell, "Introduction to Environmental Engineering", McGraw-Hill 2006.
13. Lal, Ruttan. Integrated Watershed Management in the Global Ecosystem. CRC Press, New York, 2000.
14. Heathcote, I. W. Integrated Watershed Management: Principles and Practice. John Wiley and Sons, Inc., New York, 1988.
15. Dhruva Narayana, G. Sastry, V. S. Patnaik, "Watershed Management", CSWCTRI, Dehradun, ICAR Publications, 1997.

**M.A./M.Sc 4<sup>th</sup> Semester**  
**GEOGRAPHY AND DISASTER MANAGEMENT**  
**Watershed Management (Special Paper Practical)**  
**Paper: GEDM 1002 C (F)**  
**No. of credit: 06**

**GROUP-A**  
**(Laboratory Practical)**  
**Marks: 50**

**Unit 1:** Rainfall intensity; Rainfall variability; Rainfall ratio; Ground water recharge; Estimation of surface water resources; Thermal regime.

**Unit 2:** Water balance elements: Potential evaporation, Actual evaporation; Water surplus; Water deficit; Aridity index; Moisture index estimating by Thornthwaite and Mathur method, (1955).

Unit 3: Water quality testing like Hardness of water, pH, TDS, BOD etc.,

Unit 4: Estimation the cropping pattern, crop diversification, crop combination etc.

Unit 5: Application of RS & GIS techniques in integrated watershed.

**Laboratory note book and Viva-voce**

**Group –B**  
**(Dissertation)**  
**Marks: 50**

A dissertation paper to be prepared by the candidate on any one selected topic related to special paper.

**RESEARCH METHODOLOGY**  
**PAPER GEDM 1003E**  
**NO. OF CREDIT: 4**

Unit 1 : Geographic Enquiry and Methods

Objective of research, mode of geographic explanation, scientific methods in geography, research ethics.

Unit 2 : Research process

Problem identification, literature review, framing research questions, objectives and hypothesis

Unit 3 : Data Collection

Method of data collection, types and sources of data, primary and secondary data, sampling design, questionnaire preparation, selection of respondents

Unit 4 : Data Analysis

Quantitative and qualitative data analysis, data representation technique, correlation and regression analysis, principal component analysis, factor analysis, test of significance, cartographic data representation technique.

Unit 5 : Preparation of Research report

Chapterization, reference citation, bibliography preparation, presentation of tables, figures, plates, appendices, questionnaire and publication.

References :

**URBAN GEOGRAPHY**  
**PAPER GEDM 1004E**  
**NO. OF CREDIT: 4**

Unit 1 Urbanization Process

Concept, Process and Measurement of urbanization, Theoretical and Methodological Approaches of Urbanization, Urban System: Evolution, Growth, Primacy, hierarchy, Dynamics and World City system

Unit 2 Urban Morphology and Theories

Classical models of Burgess, Homer Hoyt, Harris and Ullman, Functional classification of Harris, Nelson and McKenzie, Henri Lefebvre's seminal theorization of the urban revolution

Unit 3 Urban Development Planning in India

Process, Pattern and Trends, Urban Definitions and Functions, Urban Planning Policy, Urban land use, Impact of LPG on Urbanization

Unit 4 Decentralized Urban Policy and Planning

Metropolitan Planning of India, Master Plan Analysis, Case Studies: Delhi, Mumbai and Kolkata, Medium City, Small City and Town Planning, Old and Modern Plan City: Concepts, Case Study of Chandigarh

Unit 5 Urban Problems and Sustainable Urban Development

Urban poor, Slums and City Blights, Pollution and Urban Environment: Air, Water, Noise, Urban Wastes, Urban Heat Island, Urban Health Wellbeing, Empirical Field Study and Analysis the Urban System

References

**PAPER GEDM 1005E**

**NO. OF CREDIT: 4**

**GROUP A (Historical Geography)**

**Unit 1 : Nature and scope of Historical Geography**

Development of Historical Geography, source material, relation with other branches, Historical Geography through different periods.

**Unit 2 : Territorial Organization in Ancient India**

Janapadas, Regional Geography of Medieval India; Social structure in ancient and medieval India

**GROUP B (Cultural Geography)**

**Unit 3 : Nature and Concept of Cultural Geography**

Carl Sauer and Cultural theory, the morphology of cultural landscape, cultural area, cultural region, cultural ecology, cultural diffusion

**Unit 4 : Culture and Technological Development**

Socio-cultural transformation, production of cultural spaces, culture and civilization

**Unit 5 : Globalization of Culture**

Cultural politics, role of media, International Year of Global Understanding, Hybridization of culture, Case study of culture of Tripura.

References :