Curriculum Plan

of

Mr. Nabanu Roy

Session: 2024-2025

Department of Geography **July to December (Odd Semesters)**

Month		Semesters	Title of the Topics	Sub Topics	No. of Classes	Remarks
AUGUST	1ST SEMESTER	1st Sem - MINOR/DSC (Theory)	Geomorphology	Nature and scope of geomorphology; Interior of the earth; Continental Drift Theory (Wegener); Plate Tectonics	4	4 class lectures
		1st Sem - MINOR/DSC (Practical)	Scale	Definition and types; Construction of linear and comparative Scale	2	2 class lectures with signature
	3RD SEMESTER	3rd Sem MAJOR-1 (Theory)	Geomorphology	Nature and scope of geomorphology; Fundamental concepts in geomorphology; Concept of morphogenetic regions by Peltier	4	4 class lectures
		3rd Sem MAJOR-1 (Practical)	Topographical Map	Interpretation of physical and cultural features of a topographical map (plateau/mountain area)	2	2 class lectures with signature
		3rd Sem MAJOR-2(Theory)	Resource	Nature and definition; Resource-creating factors: Nature, man and culture; Functional and dynamic concept of resources	4	4 class lectures
		3rd Sem MAJOR-2 (Practical)	Rocks & Minerals	Megascopic identification of rocks and minerals: Granite, Gneiss, Basalt, Limestone, Marble, Shale	2	2 class lectures with signature
		3rd Sem MAJOR-3 (Theory)	Nature and scope of population geography	Nature and scope of population geography and its relation to demography; Sources of population data and its relevance (India)	4	4 class lectures
		3rd Sem MAJOR-3 (Practical)	Population projection	Arithmetical increase method, geometrical progression method and incremental increase method	2	2 class lectures with signature
		3rd Sem – SEC(Theory)	Definition and component of environment	Definition and component of environment; Environmental pollution (air, water and noise): Sources, effects and remedies	3	3 class lectures

		3rd Sem-SEC(Practical)	Project Report	Project Report based on secondary data	2	2 class lectures with signature
	5TH SEMESTER	5th Sem - DSE (Theory)	Disasters	Definition and concepts: hazards, disasters; risk and vulnerability; classification	4	3 class lectures &1doubt clearing class
		5th Sem - DSE (Practical)	Project Report	Planning for Field Trip	2	2 class lectures
		5th Sem - SEC	Remote Sensing	Definition and Development of Remote Sensing, Platforms of Remote Sensing	4	3 class lectures & 1 doubt clearing class
SEPTEMBER	**1ST SEMESTER**	1st Sem - MINOR/DSC (Theory)	Geomorphology & Weathering	Folds and faults. & Definition, controlling factors, types and resulting landforms; Mass wasting: Definition, factors affecting mass wasting and types	6	6 class lectures & library work
		1st Sem - MINOR/DSC (Practical)	Scale & Map projection	Diagonal scale & Definition, classification, properties and uses	2	2 class lectures with signature
	3RD SEMESTER	3rd Sem MAJOR-1 (Theory)	Geomorphology	Classification of drainage and drainage patterns; Drainage development on folded and uniclinal structure.	6	6 class lectures
		3rd Sem MAJOR-1 (Practical)	Topographical Map	Interpretation of topography/ landforms with the help of serial, superimposed, projected and composite profiles; Drawing of long and cross profile of a river.	2	2 class lectures with signature
		3rd Sem MAJOR-2 (Theory)	Resource	Classification of resources based on exhaustibility, distribution, ownership and status of development.	6	6 class lectures
		3rd Sem MAJOR-2 (Practical)	Megascopic identification of rocks and minerals	Sandstone, Conglomerate, Bauxite, Slate, Quartzite, Schist, Phyllite, Calcite, Mica Chalcopyrite, Feldspar, Galena, Haematite, Magnetite Quartz, Tourmaline & Talc.	2	2 class lectures with signature
		3rd Sem MAJOR-3 (Theory)	Nature and scope of population geography	Density of population: Meaning and types (arithmetic, physiological, nutritional, habitational, agricultural density and man-land ratio); Population pyramid; over, under, optimum population, population explosion.	6	6 class lectures & library work
				Measures of fertility (crude birth rate, general fertility		

		3rd Sem MAJOR-3 (Practical)	Population projection:	rate, age-specific fertility rate and total fertility rate); Measures of mortality (crude death rate, age specific death rate and infant mortality rate); Construction and interpretation of age-sex pyramids; Flow diagram showing migration trends.	3	3 class lectures with signature
		3rd Sem – SEC(Theory)	Definition and component of environment	Environmental degradation due to agricultural development, industrial development and urbanization; Solid wastes: Types, sources and their management.	6	6 class lectures
		3rd Sem- SEC(Practical)	Project Report	Based on available sources of secondary data	2	2 class lectures
	5TH SEMESTER	5th Sem - DSE (Theory)	Disasters in India	Flood and Landslide: Causes, Impact, Distribution and Mapping	6	5 class lectures 1 Q&A session
		5th Sem - DSE (Practical)	Field Based Project Report	Project related activities	2	2 class lectures
		5th Sem - SEC	Remote Sensing	Types of Remote Sensing and Photogrammetry	6	6 class lectures
OCTOBER	**1ST SEMESTER**	1st Sem - MINOR/DSC (Theory)	Weathering	Classification of drainage and drainage patterns; Cycle of Erosion and Slope Development Theory (Davis & Penck).	6	6 class lectures
		1st Sem - MINOR/DSC (Practical)	Map projection	Polar Zenithal Gnomonic Projection, Simple Conical Projection with One Standard ParallelProjection.	2	2 class lectures with signature
	3RD SEMESTER	3rd Sem MAJOR-1 (Theory)	Weathering	Definition, controlling factors, types and resulting landforms; Mass wasting: Definition, factors affecting mass wasting and types; Cycle of Erosion and Slope Development Theories (Davis, Penck and King).	6	6 class lectures & library work
		3rd Sem MAJOR-1 (Practical)	Topographical Map	Average slope (Wentworth); Relative relief (Smith); Dissection index (Dov Nir); Ruggedness index (Schumann)	2	2 class lectures with signature
		3rd Sem MAJOR-2 (Theory)	Distribution of resources	Distribution of resources with special reference to India: Forest, coal, iron ore, petroleum, atomic minerals, solar, wind and hydel power.	6	6 class lectures

		3rd Sem MAJOR-2 (Practical)	Diagrammatic data presentation	Chorochromatic map, dot and sphere map, choropleth map	2	2 class lectures with signature
		3rd Sem MAJOR-3 (Theory)	Population growth and distribution	Determinants and patterns (world and India); Theories of population growth: Malthusian Theory and Demographic Transition Model; Ageing population & demographic dividend.	6	6 class lectures & library work
		3rd Sem MAJOR-3 (Practical)	Basic computer skills	Basic computer skills (data representation with MS Excel): Overview of Excel interface and functionalities; Basic knowledge of work book, worksheet, cell & range; Customizing chart elements (titles, legends & labels)	2	2 class lectures with signature
		3rd Sem – SEC(Theory)	Environmental planning and management	Meaning, importance and needs of Environmental Impact Assessment; Environmental ethics; Environmental movements in India: Chipko and Narmada Bachao Andolan	6	6 class lectures
		3rd Sem- SEC(Practical)	Project Report	Based on available sources of secondary data	2	2 class lectures with signature
	5TH SEMESTER	5th Sem - DSE (Theory)	Disasters in India	Drought and Earthquake: Causes, Impact, Distribution and Mapping	6	6 class lectures
		5th Sem - DSE (Practical)	Project Report	Project related activities	3	3 class lectures
		5th Sem - SEC	Satellite Remote Sensing	Principles, EMR Interaction with atmosphere and earth surface	6	6 class lectures &1 class for library work
	1ST SEMESTER	1st Sem - MINOR/DSC (Theory)	Evolution of landforms	Evolution of landforms (erosional and depositional): Fluvial, aeolian & glacial	6	6 class lectures
		1st Sem - MINOR/DSC (Practical)	Map projection	Mathematical/graphical construction of, Cylindrical Equal Area Projection.	2	2 class lectures with signature
	3RD SEMESTER	3rd Sem MAJOR-1 (Theory)	Evolution of landforms	Evolution of landforms (erosional and depositional): Fluvial, aeolian, glacial, coastal and karst.	6	6 class lectures
		3rd Sem MAJOR-1 (Practical)	Topographical Map	Drainage density; Stream frequency; Watershed: Delineation and calculation of area using graph paper; Stream ordering (Strahler);	3	3 class lectures with signature

N O V E M B E R				Settlement frequency; Transect chart.		
		3rd Sem MAJOR-2 (Theory)	Concept of resource exploitation and degradation	Concept of resource exploitation and degradation; Resource conservation: Forest, soil, water, mineral and energy; Ecological, economic and ethnological approach to resource management.	6	6 class lectures
		3rd Sem MAJOR-2 (Practical)	Diagrammatic data presentation	Diagrammatic map (proportional square and cubes).	2	2 class lectures with signature
		3rd Sem MAJOR-3 (Theory)	Population composition	Population composition of the world (religion and language); Age-cohort; Population dynamics:Fertility and mortality (measures and determinants); Fecundity and morbidity; Migration: Types, causes and consequences; Laws of migration (Ravenstein, Lee and Todaro)	6	6 class lectures & library work
		3rd Sem MAJOR-3 (Practical)	Basic computer skills	Data entry, data editing, data formatting and data types (numbers, dates, text); Sorting and filtering of data; Formulas and functions for data manipulation; Construction of tables for data organization; Creating different types of charts (column, bar, line, pie and scatter)	3	3 class lectures
		3rd Sem – SEC(Theory)	Environmental planning and management	Environmental laws and policies in India: Water (Prevention and Control of Pollution) Act: 1974, Forest Conservation Act: 1980, Air (Prevention and Control of Pollution) Act: 1981, Environmental Protection Act: 1986, Noise Pollution (Regulation and Control) Rules: 2000	6	6 class lectures
		3rd Sem-SEC(Practical)	Project Report	Based on available sources of secondary data	2	2 class lectures
	5TH SEMESTER	5th Sem - DSE (Theory)	Disasters in India	Tsunami and Cyclone: Causes, Impact, Distribution and Mapping	6	5 class lectures & 1 doubt clearing class
		5th Sem - DSE (Practical)	Field Based Project Report	Primary Data Collection	3	3 class lectures

		5th Sem - SEC	Satellite Remote Sensing	Satellites (Landsat and IRS) and Sensors, Visual Satellite Image Interpretation	6	6 class lectures
DECEMBER	**1ST SEMESTER**	1st Sem - MINOR/DSC (Theory)	Evolution of landforms	Karst landforms.	4	4 class lectures
		1st Sem - MINOR/DSC (Practical)	Revision	Revision	2	Preparation for exams
	3RD SEMESTER	3rd Sem MAJOR-1 (Theory)	Revision	Revision	4	Doubt clearing classes & Preparation for exams
		3rd Sem MAJOR-1 (Practical)	Revision	Revision	2	
		3rd Sem MAJOR-2 (Theory)	Revision	Revision	4	Doubt clearing classes & Preparation for exams
		3rd Sem MAJOR-2 (Practical)	Revision	Revision	2	
		3rd Sem MAJOR-3 (Theory)	Population composition	Population-resource regions (Ackerman); National Population Policy (2000) India	4	Doubt clearing classes & Preparation for exams
		3rd Sem MAJOR-3 (Practical)	Basic computer skills	Creating pivot tables and analyzing data.	2	Preparation for exams
		3rd Sem – SEC(Theory)	Environmental planning and management	Municipal Solid Waste (Management and Handling) Rules: 2000.	4	Doubt clearing classes & Preparation for exams
		3rd Sem-SEC(Practical)	Project Report	Based on available sources of secondary data	2	Preparation for exams
	5TH SEMESTER	5th Sem - DSE (Theory)	Response and mitigation to disasters	Mitigation and preparedness, NDMA and NIDM; Indigenous Knowledge and Community-Based Disaster Management	4	3 class lectures & 1 Doubt clearing class
		5th Sem - DSE (Practical)	Field Based Project Report	Primary data interpretation	2	Preparation for project report & signature
		5th Sem - SEC	Application of Remote Sensing	Application of Remote Sensing in Land use/Land cover mapping	3	4 class lectures

Signature of the Teacher