

Serampore Girls' College
DEPARTMENT OF GEOGRAPHY-LESSON PLAN
CBCS SYSTEM-2022
GENERAL

SEME STER	PAPER	UNIT	TOPIC	TEA CHI NG HOU RS	FACULTY NAME
1st Semest er	GEO-G-CC-1- 01-TH – Physical Geography	Unit I: Geotecto nics	1.Earth's interior with special reference to seismology	3	Dr.Asraful Alam
			2.Plate Tectonics as a unified theory of global tectonics. Formation of major relief features of the ocean floor and continents according to Plate Tectonics	7	Dr.Asraful Alam
			3.Folds and faults: Classification and surface expression	6	Priyanka Dey
		Unit II: Geomor phology	4. Degradational processes: Weathering, mass wasting and resultant landforms	4	Priyanka Dey
			5.Principal geomorphic agents. Classification and evolution of fluvial, coastal, aeolian and glacial landforms	12	Tumpa Hudut
			6. Ideas of Davis, Penck and King on slope evolution. Systems approach and its significance in geomorphology	7	Priyanka Dey
		Unit III: Hydrolog y	7. Global hydrological cycle: Its physical and biological role	2	Dr.Asraful Alam
			8.Run off: controlling factors. Concept of ecological flow	4	Taniya Kar
			9.Drainage basin as a hydrological unit. Principles of watershed	3	Taniya Kar

			management		
		Unit IV: Oceanography	10.Physical and chemical properties of ocean water. Distribution and determinants of temperature and salinity	5	Moumita Kundu
			11.Overview of air-sea interactions. Ocean circulation, wave and tide	7	Tumpa Hudut
			12.Marine resources: Classification and sustainable utilisation	3	Moumita Kundu
	GEO-G-CC-1-01-P – Physical Geography Lab		1.Megascope identification of <i>mineral samples</i> : Bauxite, calcite, chalcopyrite, feldspar, galena, hematite, mica, quartz, talc, tourmaline	8	Priyanka Dey
			2.Megascope identification of <i>rock samples</i> : Granite, basalt, laterite, limestone, shale, sandstone, conglomerate, slate, phyllite, schist, gneiss, quartzite	12	Priyanka Dey
			3.Extraction of physiographic information from Survey of India 1:50k topographical maps of plateau region: Delineation of drainage basins, construction and interpretation of relief profiles (superimposed, projected and composite), Construction and interpretation of relative relief map	20	Tumpa Hudut
			4.Extraction of drainage information from Survey of India topographical maps: Construction and interpretation of drainage density maps, extraction and interpretation of channel features and drainage patterns	20	Moumita Kundu
SEM 2	GEO-G-CC-2-02-TH – Environmental Geography	Unit I: Climatology	1.Insolation and Heat Budget. Horizontal and vertical distribution of atmospheric temperature and pressure.	5	Dr.Asraful Alam

			2. Overview of planetary wind systems. Indian Monsoons: Mechanisms and controls.	6	Dr.Asraful Alam
			3. Atmospheric disturbances: Tropical and temperate cyclones. Thunderstorms.	7	Taniya Kar
			4. Overview of global climatic change: Greenhouse effect. Ozone depletion.	5	Dr. Asraful Alam
			5. Scheme of world climatic classification by Köppen.	2	Taniya Kar
		Unit II: Soil Geography	6. Factors of soil formation.	4	Moumita Kundu
			7. Soil profile development under different climatic conditions: Laterite, Podsol and Chernozem.	6	Taniya Kar
			8. Physical and chemical properties of soils: Texture, structure, pH, salinity and NPK status.	6	Tumpa Hudut
			9. USDA classification of soils. Soil erosion and its management.	4	Tumpa Hudut
		Unit III: Biogeography	10. Ecosystem and Biomes. Distribution and characteristics of tropical rainforest; Savannah and hot desert biomes.	6	Priyanka Dey

			11.Plant types, occurrence and ecological adaptations: Halophytes, xerophytes, hydrophytes and mesophytes .	5	Moumita Kundu
			12.Biodiversity: Types, threats and management with special reference to India.	4	Priyanka Dey
	GEO-G-CC-2-02-P – Environmental Geography Lab		1.Interpretation of a daily weather map of India (any one): Pre-Monsoon, Monsoon or Post-Monsoon	20	Taniya Kar
			2.Construction and interpretation of hythergraph, climograph (G. Taylor) and wind rose (seasonal).	20	Moumita Kundu & Priyanka Dey
			3.Determination of soil type by ternary diagram textural plotting	10	Tumpa Hudut
			4.Preparation of peoples’ biodiversity register.	10	Dr.Asraful Alam
3RD SEMESTER	GEO-G-CC-3-03-TH – HUMAN Geography	Unit I: Economic Geography	1.Sectors of the economy: Primary, Secondary, Tertiary and Quaternary. Factors affecting	5	Dr.Asraful Alam

			location of economic activities		
			2.Location of economic activities: Theories of von-Thunen, Lösch and Weber	5	Dr..Asraful Alam
			3.Location of industries with special reference to India: Cotton, Iron and Steel	5	Tumpa Hudut
			4. Globalisation and integration of world economies	5	Tumpa Hudut
		Unit II: Social Geography	5.Human Society: Structure, functions, social systems. Population and migration: overview, causes and effects	5	Taniya Kar
			6.Types and characteristics of social organisations: Primitive, hunting–gathering, agrarian, industrial	5	Moumita Kundu
			7.Race, Language and Religion: Origin, characteristics and spatial variations	6	Taniya Kar
			8.Social Issues: Diversity, conflict and transformation	5	Moumita Kundu
		Unit III: Cultural Geography	1.Carl Sauer: cultural landscape and its elements	6	Moumita Kundu
			2.Rural and urban settlements: Differentiation in cultural landscapes	5	Dr..Ashraful Alam
			3.Cultural regions and cultural realms	5	Priyanka Dey
			4.Diffusion of culture and innovations	4	Priyanka Dey

	GEO-G-CC-3-03-P– Human Geography Lab		1.State-wise variation in occupational structure by proportional divided circles	15	Moumita Kundu
			2.Time series analysis of industrial production using any two manufactured goods from India	20	Dr..Ashraful Alam
			3.Measuring arithmetic growth rate of population comparing two datasets	15	Taniya Kar
			4. Nearest neighbour analysis: Rural example from Survey of India 1:50k topographical maps	10	Tumpa Hudut
4th Semester	GEO-G-CC-4-04-TH – Cartography	Unit I: Scale and Projections	1.Maps: Classification and types. Scales: Types, significance and applications	3	Tumpa Hudut
			2.Coordinate systems: Polar and rectangular. Bearing: Magnetic and true, whole-circle and reduced	3	Tumpa Hudut
			3.Map projections: Classification, properties and uses. Concept and significance of UTM projection	8	Taniya Kar
		Unit II: Topographic and Thematic Maps	4.Survey of India topographical maps: Reference scheme of old and open series. Information on the margin of maps	4	Taniya Kar
			5.Representation of data by dots and proportional circles	4	Moumita Kundu
			6.Representation of data by isopleth and choropleth	4	Priyanka Dey
			7.Principal national agencies producing thematic maps in India: GSI, NATMO, NBSSLUP, NHO, NRSC etc. Acquaintance with Bhuvan platform	5	Moumita Kundu

		Unit III: Remote Sensing and Geographical Information System	8.Basics of Remote Sensing: Types of satellites, sensors, bands and resolutions with special reference to the ISRO missions	10	DR.Ashraful Alam
			9.Principles of preparing standard FCCs and classified raster images	5	DR.Ashraful Alam
			10.Principles of preparing standard FCCs and classified raster images	6	DR.Ashraful Alam
		Unit IV: Surveying	11.Basic concepts of surveying and survey equipment: Prismatic compass	6	Priyanka Dey
			12. Basic concepts of surveying and survey equipment: Dumpy level	6	Tumpa Hudut
		GEO-G-CC-4-04-P – Cartography Lab		1.Graphical construction of scales: Plain and comparative	10
	2.Construction of projections: Simple Conic with one standard parallel, Cylindrical Equal Area, and Polar Zenithal Stereographic			20	Taniya Kar
	3.Construction of thematic maps: Proportional squares, proportional circles, choropleths and isopleths			20	Moumita Kundu & Priyanka Dey
	4.Preparation of annotated thematic overlays from satellite standard FCCs of 1:50k			10	DR.Ashraful Alam
	5th Semester	GEO-G-DSE-A-5-01-TH – Regional Development		1.Definition of region. Types and need of regional planning.	3
2.Choice of a region for planning;characteristics of an ideal planning region; delineation of planning region.				7	Tumpa Hudut

			3.Regionalization of India for planning (agro-ecological zones)	5	Dr. Asraful Alam
			4. Strategies/models for regional planning: growth pole model of Perroux.	6	Taniya Kar
			5.Growth centre model in Indian context; concept of village cluster.	4	Dr. Asraful Alam
			6. Problem regions and regional planning; backward regions and regional plans: special area development plans in India. DVC: success and failures.	5	Moumita Kundu
			7.Changing concept of development and underdevelopment; Efficiency-equity debate.	5	Moumita Kundu
			8.Indicators of development: Economic, social and environmental. Concept of human development.	5	Priyanka Dey
			9.Regional development in India, regional inequality, disparity and diversity.	5	Priyanka Dey
			10.Development and regional disparities in India since Independence: Disparities in agricultural development.	5	Dr. Asraful Alam
			11.Development and regional disparities in India since Independence: Disparities in industrial development.	5	Taniya Kar

			12. Development and regional disparities in India since independence : Disparities in human resource development in terms of education and health.	5	Tumpa Hudut & Taniya Kar
	GEO-G-DSE-A-5-01-P – Regional Development Lab		1. Delineation of regions according to given criteria using Weavers method.	15	Moumita Kundu
			2. Determination of sphere of influence by gravity model.	15	Priyanka Dey
			3. Measurement of inequality by Lorenz curve and location quotient.	15	Taniya Kar
			4. Preparation of Z score and composite Index from suitable data .	15	Dr. Asraful Alam
6th Semester	GEO-G-DSE-B-6-04-TH – Population Geography	Unit I: Population Dynamics	1. Development of Population Geography as a field of specialization. Relation between population geography and demography. Sources of population data, their level of reliability and problems of mapping	6	Dr. Asraful Alam
			2. Population distribution: density and growth. Classical and modern theories in population distribution and growth, Demographic transition model	6	Tumpa Hudut
			3. World patterns determinants of population distribution and growth. Concept of optimum population	4	Priyanka Dey
			4. Population distribution, density and growth profile in India	4	Tumpa Hudut
		Unit II:	5. Concepts of age-sex composition;	5	Moumita Kundu

		Populati on and Develop ment	Rural and urban composition; Literacy and education		
			6.Measurements of fertility and mortality. Concept of cohort and life table	5	Priyanka Dey
			7.Population composition of India: Urbanisation and occupational structure	7	Dr. Asraful Alam
			8.Migration: Causes and types	3	Moumita Kundu
			9.National and international patterns of migration with reference to India [5	Taniya kar
			10.Population and development: Population-resource regions. Concept of human development index and its components.	5	Taniya Kar
			11.Population policies in developed and less development countries. India's population policies. Population and environment, implication for the future	5	Taniya kar
			12.Contemporary issues: Ageing of population, declining sex ratio, population and environment dichotomy, impact of HIV/AIDS	5	Dr.Asraful Alam & Moumita Kundu
	GEO-G-DSE- B-6-04-Pr – Population Geography Lab		1.Population projection by arithmetic method	15	Priyanka Dey
			2.Population density mapping: State-wise for India	15	Tumpa Hudut
			3.Analysis of work participation rate: Total and gender-wise for India	15	Dr.Asraful Alam

			4. Analysis occupation structure by dominant and distinctive functions: Districts of West Bengal	15	Taniya Kar
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GEO-G-SEC-A-3/4-01-TH – Coastal Management

SEMESTER	PAPER	UNIT	TOPIC	TEACHING HOURS	FACULTY NAME
Semester- 3/5	GEO-A-SEC-A-3-01-TH – Coastal Management	SEC	1. Components of a coastal zone. Coastal morphodynamic variables and their role in evolution of coastal forms	7	TaniyaKar
			2. Environmental impacts and management of mining, oil exploration, salt manufacturing, land reclamation and tourism	8	Priyanka Dey
			3. Coastal hazards and their management using structural and non-structural measures: Erosion, flood, sand encroachment, dune degeneration, estuarine sedimentation and pollution	8	Tumpa Hudut & Moumita Kundu
			4. Principles of Coastal Zone Management. Exclusive Economic Zone and Coastal Regulation Zones with reference to India.	7	DR Asraful Alam

GEO-G-SKC-B-5/6-02-TH – Rural Development

SEMESTER	PAPER	UNIT	TOPIC	TEACHING HOURS	FACULTY NAME
Semester - 4/6	GEO-A-SEC-B-4-03-TH –		1. Rural Development: Concept, basic elements, measures of level	5	Dr. Asraful Alam

Rural Development	of rural development.		
	2.Paradigms of rural development: Gandhian approach to rural development Lewis model of economic development, 'big push' theory of development, Myrdal's model of 'spread and backwash effects' .	10	Asrafal Alam & Tumpa Hudut
	3. Area based approach to rural development: Drought prone area programmes, PMGSY, SJSY, MNREGA, Jan Dhan Yojana	10	Moumita Kundu & Priyanka Dey
	4.Rural Governance: Panchayati Raj System and rural development policies and Programmes in India	5	TaniyaKar