

Geography Honours (CBCS)
Syllabus Utilisation for Academic Session 2020-2021

Type	Paper	Unit	Topic	Teacher	Expected numbers of lectures	
SEMESTER-I (2020-2021)						
Discipline Core (DC) -1	DC1A Geotectonics and Geomorphology (Theory) (Theory)	Part 1: Geotectonics			SP	4
		1	Earth's tectonic and structural evolution and geological time scale			
		2	Earth's interior with special reference to seismology; Isostasy: theory of Airy and Pratt		PG	3
		3	Mechanism of plate tectonics and resultant landforms, origin and types of Folds and Faults and consequent landforms		SP	3
		Part 2: Geomorphology			ST	4
		1	Fundamental concepts in Geomorphology			
			Denudation processes (weathering, mass movement and erosion) and resultant landforms			
			Models on landscape evolution: Views of Davis, Penck, King and Hack		PG	4
		2	Development of river network and landforms on uniclinal and folded structures; slope development and evolution of slope (Davis and King)		ST	4
		3	Surface and subsurface flow in Karst region, fluvial processes and landforms, glacial and fluvio-glacial processes and landforms, aeolian and fluvial-aeolian processes and landforms		DM	4
	DC1B: (List of Practical)	1	Relief profile analysis (representative profile, serial, composite, superimposed, projected, long and cross profile)		ST	5
		2	Geological maps: Horizontal, Uniclinal and Folded structures		PD	5
		3	Identification of rocks and minerals (megascopic) (Basalt, granite, gneiss, sandstone, quartzite, limestone, mica, talc, calcite and feldspar)		DM	3
	Discipline Core (DC) -2	DC2A Cartographic Techniques (Theory)	1	Concept and application of scale: Plain, comparative, diagonal and Positive Vernier	SP	4
2			Coordinate systems and Map: Grid, concept of geoid, spheroid, rectangular and geographical coordinate system, concept of map, classification of map, components of a map	ST	4	
3			Bearing: Magnetic and true, whole-circle and quadrantal	PG	2	
4			Map projections: Classification, properties and uses; Concept and significance of UTM projection.	SG	3	

		5	Basic concepts of surveying and leveling : Prismatic compass, Dumpy level, theodolite, Abney level and Clinometer.	PG and DM	4
		6	Survey of India topographical maps: Reference scheme of old and open series. Information on the margin of maps	PD	3
	DC2B: (List of Practical)	1	Scale conversion: Statement, RF, Graphical (Linear, Diagonal, Positive vernier; enlargement and reduction of scale)	SP	6
		2	Construction of projections: Polar Zenithal Stereographic, Simple conical with standard parallels, Bonne's, Cylindrical Equal Area and Mercator's	SG	6
		3	Surveying: Prismatic compass (closed traverse), dumpy level (along a line), and theodolite (base accessible and inaccessible with same vertical plain)	SP	8

Type	Paper	Unit	Topic	Teacher	Expected numbers of lectures
SEMESTER-II (2020-2021)					
Discipline Core (DC) -3	DC3A Population and Settlement Geography (Theory)	1	Definition, scope and contents of Population Geography, Source of population Data	SG	2
		2	Components of population change. Demographic Transition Theory	PD	2
		3	Population distribution and density of Population Policy	PD	2
		1	Definition, scope and contents of Settlement Geography	ST	2
		2	Nature and characteristics of rural settlements, Morphometry	ST	2
		3	Census definition (Temporal) and categories	SG	2
	DC3B: (Practical)	1	Population data analysis: Decadal growth, population density and Age-sex pyramid	PD	4
		2	Spatial Distribution and Interactions: Nearest-Neighbour Analysis (Clerk and Evans) and Rank-Size Rule (Zipf)	ST	4
Discipline Core (DC) -4	DC4A Cartograms and Thematic Mapping (Theory)	1	Concepts of rounding, scientific notation, logarithm and anti-logarithm, natural and log scales.	SP	4
		2	Concept, use, geographical data: Line, Bar, Dot and Sphere, Proportional circles, Isopleths and choropleth	SP	4
		3	Preparation and interpretation. maps, climatological maps, Land Use/land cover maps and Thematic Maps	PG	4
		4	Application of GIS in thematic mapping, concept of Cadastral Map.	DM	4

	DC4B: Practical	1	Cartograms: Proportional squares, pie diagram, proportional divided circle, dots and spheres	SP	4
		2	Preparation of thematic maps: Choropleth, Isoline and Chorochromatic map	PG	4

Type	Paper	Unit	Topic	Teacher	Expected numbers of lectures	
SEMESTER-III (2020-2021)						
Discipline Core (DC) -5	DC5A Climatology (Theory)	1	Structure and composition of the atmosphere, Insolation and heat budget	SG	2	
		2	Horizontal and vertical distribution of temperature, concept and types of inversion of temperature: its causes and consequences, Ozone layer and green house effects	SG	5	
		3	Condensation and precipitation process and forms; mechanism of precipitation: Bergeron-Findeisen theory, Collision and coalescence theory	DM	4	
		4	Air mass: typology, origin, characteristics and modification; Fronts: warm and cold; frontogenesis and frontolysis; weather: stability and instability; barotropic and baroclinic conditions	PD	4	
		5	Circulation in the atmosphere: Planetary winds, jet stream, index cycle; tropical and mid-latitude cyclones; monsoon circulation and mechanism with reference to India	PG	4	
		6	Climatic classification after Köppen and Thornthwaite	SP	3	
	DC5B: (Practical)	1	Measurement of weather elements by Meteorological Instruments: Hygrometer, Maximum-Minimum Thermometer, Barometer, Rain gauge (Simon's)	DM	4	
		2	Preparation of Climatic Graphs and Charts: Taylor's Climograph, Hythergraph, Star Diagram and Ergograph	ST	6	
		DC6A Statistical Methods in Geography (Theory)	1	Concept and significance of Statistics; Concept of data, sources of data, methods of data collection, discrete and continuous data, population and samples and scales of measurement (nominal, ordinal, interval and ratio)	ST	4
			2	Sampling: Need, types, and significance and methods of random sampling	ST	2
			3	Theoretical distribution: frequency, cumulative frequency, normal and probability distribution	ST	4
4			Central tendency: Mean, median, mode and other partitioned values	PD	4	
5			Measures of dispersion: range, quartile deviation, mean deviation, standard deviation;	PD	6	

			coefficient of variation and coefficient of quartile deviation		
		6	Correlation: Rank correlation, product moment correlation; Regression (linear and non-linear) and time series analysis (moving average)	PD	4
	DC6B: Practical	1	Construction of histograms and frequency curve; measures of central tendency; computation of mean (arithmetic and geometric), median and mode;	ST	4
		2	Measures of dispersions: standard deviation and coefficient of variation	PD	2
		3	Computation of correlation (Pearson); Regression and graphical plotting	PD	2
	DC7A Geography of India (Theory)	1	Tectonic and stratigraphic provinces, physiographic divisions	SP	2
		2	Climate, soil and vegetation: Characteristics and classification	DM	3
		3	Agricultural regions. Green revolution and its consequences; mineral and power resources distribution and utilisation of iron ore, coal, petroleum and gas	PG	3
		4	Industrial development: Automobile and information technology	ST	2
		5	Regionalisation of India: Physiographic (R. L. Singh), Socio-cultural (Sopher) and Economic (Sengupta)	PD	2
		6	Contemporary population issues: Poverty, Illiteracy, Malnutrition and unemployment	SP	2
	DC7B Practical	1	Interpretation of Indian daily weather Map: Temperature, pressure, sky condition, wind direction and speed, sea condition and other weather phenomena (Pre-monsoon, Monsoon and Post-monsoon)	ST	8
		2	Identification of rocks and minerals: Sandstone, Limestone, Shale, Basalt, Granite, Gneiss, Marble, Quartzite, Conglomerate; Quartz, Chalcopryite, Feldspar, Galena, Calcite, Haematite, Magnetite, Mica and Talc	SP	4

Type	Paper	Unit	Topic	Teacher	Expected numbers of lectures
SEMESTER-IV (2020-2021)					
Discipline Core (DC) -8	DC8A Regional Planning and Development (Theory)	1	Concept, Types and delineation of regions.	PD	2
		2	Types of planning, tools and techniques of planning, principles, needs and objectives of regional planning and multi- level planning in India	PD	3
		3	Concepts of metropolitan areas and urban agglomerations	PD	2

		1	Development: Meaning and Concept of regional development with reference to India,	ST	2
			Indicators (Economic, social and environmental) of development, growth versus development	SP	2
		2	Growth pole model of Perroux, growth centre model and Cumulative causation (Myrdal) and	ST	2
			Core periphery (Hirschman, Rostov and Friedman) theories for regional development		2
	3	Strategies of regional development with reference to India, Need and measures for balanced development in India, Regional inequality, disparity and diversity	ST	4	
	DC3B: (Practical)	1	Delineation of formal region: Weighted index number	PD	2
			Delineation of functional region: Gravity Analysis (Reilly's)	PD	1
		2	Measuring regional disparity:	ST	1
			Lorenz curve, Gini Coefficient and Simson's method		2
	Discipline Core (DC) -9	DC9A Economic Geography (Theory)	1	Meaning, Concepts and approaches of Economic Geography, concepts of goods, services,	PG
production, exchange and consumption, GATT, OPEC				1	
Concept of economic man, theories of choices				1	
2			Economic distance, transport costs, Transnational sea-routes, railways and highways with reference to India	PG	2
3			Concept and classification of economic activities, factors affecting location of economic activity with special reference to agriculture (Von Thunen), and industry (Weber).	SP	4
4			Primary activities: Subsistence (paddy) and commercial agriculture (tea), forestry (lumbering), fishing (India: inland and coastal) and mining (coal, iron in India);	DM	2
		Secondary activities: Manufacturing (cotton textile and iron and steel), Special economic zones (SEZ) and technology parks (India);	SP	4	
		Tertiary activities: transport-types and importance, trade (e- commerce) Quaternary and Quinary-concept			
5		Liberalization, privatization, globalization and Indian economy	PG	2	
DC9B: Practical		1	Agricultural Efficiency Analysis: Kendal's Method	SP	1
	2	Measuring transport accessibility: Konig and Shimmel index	ST	2	


		3	Comparison of spatial industrial development: Location quotient and Geographical association.	PG	2
--	--	---	---	----	---

Discipline Core (DC) -10	DC 10A Environmental Geography (Theory)	1	Geographers' approach to environmental studies, concept of holistic environment and system approach	SP	1
		2	Perception of environment in different stages of civilization	SP	1
		3	Concept, structure and functions of ecosystem	SG	1
		4	Environmental pollution and degradation (Land, water and air), Space-time hierarchy of environmental problems (Local, regional and global)	SG	3
		5	Urban environmental issues with special reference to waste management	SP	2
		6	Environmental programmes and policies - Global, national and local levels	SP	2
	DC 10B: Practical	1	Preparation of check-list for Environmental Impact Assessment of an urban / industrial project	PD	2
		2	Determination of soil type by ternary diagram textural plotting	PG	2
		3	Quality assessment of water using lab kit: pH and TDS	SP	2

Note:

ST = Sayfujjaman Tarafder SP = Satyajit Paul PD = Prabir Das

DM = DM PG = Paban Ghosh SG = Sanjay Ghosh


Head
Department of Geography
Gour Mahavidyalaya
Manasbari, Malda.