Academic Calendar Year: 2020-21

P.N.Das College

Department of Geography SEM-I (HONS) GEOA

GEOACOR01T –Geotectonic and Geomorphology

4 Credits, 50 Marks [60 classes]

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						IA-I	IA-II	IA-III	Remarks
	Unit I:		**Geotectonic**			11.919-13.19	23.9.19, 25.9.19, 27.9.19	11.11.19 - 16.11.19, 27.11.19	
GEOACOR01T		1	Earth's tectonic and structural evolution with reference to geological time scale	5	RG				
GEOACOR01T		2	Earth's interior with special reference to seismology. Isostasy: Models of Airy and Pratt	8	RG				
GEOACOR01T		3	Plate Tectonics as a unified theory of global tectonics: Processes and landforms at plate margins and hotspots.	5	CS				
GEOACOR01T		4	Folds and Faults—origin and types	7	DC				
	Unit II:		**Geomorphology**						
GEOACOR01T		5	Degradational processes: Weathering, mass wasting and resultant landforms	7	CS				
GEOACOR01T		6	Development of river network and landforms on uniclinal and folded	6	RG				
GEOACOR01T		7	Development of landforms on granites, basalts and limestones.	4	DC				
GEOACOR01T		8	Coastal processes and landforms	4	DD				
GEOACOR01T		9	Glacial and glacio-fluvial processes and landforms	4	DD				
GEOACOR01T		10	Aeolian and fluvio-aeolian processes and landforms	4	DC				
GEOACOR01T		11	Models on landscape evolution: Views of Davis, Penck and Hack	6	CS,RG,DD				

GEOACOR01P –Geotectonic and Geomorphology

2 Credits, 25 Marks [60 classes]

GEOACOR01P	Unit III:	1	Megascopic identification of (a) *mineral samples*: Bauxite, calcite, chalcopyrite, feldspar, galena, gypsum, hematite, magnetite, mica, quartz, talc, tourmaline; and (b) *rock samples*: Granite, basalt, dolerite, laterite, limestone, shale, sandstone, conglomerate, slate, phyllite, schist, gneiss, quartzite, marble	30	RG(M),DDI				
GEOACOR01P		2	Interpretation of geological maps with unconformity and intrusions on uniclinal and folded structures	30	CS				

Academic Calendar Year: 2020-21

P.N.Das College

Department of Geography SEM-I (HONS)

GEOACOR02T –Cartographic Techniques

4 Credit, 50 Marks [60 classes]

PAPER	UNIT -I	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
GEOACOR02T		1	Maps: Classification and types. Components of a map	6	CS				
GEOACOR02T		2	Concept and application of scales: Plain, comparative, diagonal and venire	12	CS,DC				
GEOACOR02T		3	Survey of India topographical maps: Reference scheme of old and open series. Information on the margin of maps	8	DD				
GEOACOR02T		4	Coordinate systems: Polar and rectangular	8	DC				
GEOACOR02T		5	Concept of generating globe and UTM projection	8	CS				
GEOACOR02T		6	Grids: angular and linear systems of measurement	8	DD				
GEOACOR02T		7	Map projections: Classification, properties and uses	10	RG				

P.N.Das College, 2020-21
Department of Geography SEM-I (GENERAL) GEOG

GEOGCOR01T–Physical Geography
6 Credit, 75 Marks [90 classes]

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
	Unit I:		**Unit I: Geotectonics and Geomorphology**						
GEOGCOR01T		1	Physical Geography –Definition and Scope, Components of Earth System.	8	DD				
GEOGCOR01T		2	Internal Structure of Earth based on Seismic Evidence, Plate Tectonics and its associated Features	9	DD				
GEOGCOR01T		3	Influence of rocks on topography**:** Limestone and Granite	9	DD				
GEOGCOR01T		4	Evolution of landforms under fluvial process, Normal Cycle of Erosion of Davis	10	DD				
GEOGCOR01T		5	Formation of erosional and depositional landforms by coastal and aeolian processes	12	DD				
	Unit II:		**Unit II: Climatology and Oceanography**						
GEOGCOR01T		6	Insolation and Heat Balance.	8	RG				
GEOGCOR01T		7	Horizontal and Vertical distribution of temperature and pressure	8	RG				
GEOGCOR01T		8	Planetary wind system, characteristics of Monsoon and Tropical Cyclone	10	CS				
GEOGCOR01T		9	Climatic Classification: Köppen	5	CS				
GEOGCOR01T		10	11. Hydrological Cycle, Ocean Bottom Relief Features, ocean currents.	11	CS				

Academic Calendar Year: 2020-21

P.N.Das College

Department of Geography SEM-I (HONS)

GEOACOR02P –Cartographic Techniques (Lab)

2 Credits, 25 Marks [90 classes]

PAPER	UNIT-II	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
GEOACOR02P		1	Graphical construction of scales: Plain, comparative, diagonal and vernier	15	CS,DC				
GEOACOR02P		2	Construction of projections: Polar Zenithal Stereographic, Simple Conic with two standard parallels, Bonne's, Cylindrical Equal Area, and Merc	15	RG				
GEOACOR02P		3	Delineation of drainage basin from Survey of India topographical map. Construction and interpretation of relief profiles (superimposed, projected and composite), relative relief map, slope map (Wentworth), and stream ordering (Strahler) on a drainage basin.	15	DD				
GEOACOR02P		4	Correlation between physical and cultural features from Survey of India topographical maps using transect chart.	15	DC				

Distribution of Courses across semesters for Geography Honours (B.Sc.)

Semester	Course	Course Code	Title	Credit	Marks	Remarks
I	Core	GEOACOR01T	Geotectonics and Geomorphology	04	50	Compulsory
		GEOACOR01P	Geotectonics and Geomorphology (Lab)	02	25	Compulsory
	Core	GEOACOR02T	Cartographic Techniques	04	50	Compulsory
		GEOACOR02P	Cartographic Techniques (lab)	02	25	Compulsory
	GE	XXXHGEC01T		06	75	One course of a subject (Eg. A) chosen from the list of subjects given in section 1.3
	AECC	ENGSAEC01M	Communicative English	02	25	Compulsory

Distribution of Courses across semesters for Geography General (B.Sc.)

Semester	Course	Course Code	Title	Credit	Marks	Remarks
I	Core (DSC 1A)	GEOGCOR01T	Physical Geography	06	75	From Geography
	Core (DSC 2A)	XXXGCOR01T		06	75	Subject 2 apart from Geography
	Core (DSC 3A)	XXXGCOR01T		06	75	Subject 3 apart from Geography
	AECC	ENGSAEC01M	Communicative English	02	25	Shared course

Academic CalenderYears: 2021 March - (Red colour lines are not applicable for this year)

P.N.Das College
Department of Geography SEM-II(HONS)GEOACOR03T –Human Geography 6 Credits, 75 Marks [90 classes]

Unit I: Nature and Principles

Paper	UNIT	SL. NO.	Topic	No. of Lect.	Lecturer	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
GEOACOR03T	UNIT-I	1	Nature, scope and recent trends. Elements of Human Geography	5	DD				
GEOACOR03T	UNIT-I	2	Approaches to Human Geography; Resource, Locational, Landscape, Environmental	10	DD				
GEOACOR03T	UNIT-I	3	Concept and classification of race; ethnicity	10	CS				
GEOACOR03T	UNIT-I	4	Space, society and cultural regions (language and religion)	10	DD				
			Unit :II: Society, Demography and Ekistics						
GEOACOR03T	Unit :II	5	Evolution of human societies: Hunting and food gathering, pastoral nomadism, subsistence farming and industrial society	10	RG				
GEOACOR03T	Unit :II	6	Human adaptation to environment: Eskimo, Masai and Maori	10	DD				
GEOACOR03T	Unit :II	7	Population growth and distribution, composition; demographic transition	10	RG				
GEOACOR03T	Unit :II	8	Population–Resource regions (Ackerman)	8	CS				
GEOACOR03T	Unit :II	9	Types and patterns of rural settlements	7	CS				
GEOACOR03T	Unit :II	10	Morphology of urban settlements	10	RG				

Academic CalenderYears: 2021 March-

P.N.Das College
Department of Geography SEM-II(HONS)GEOACOR04T – Cartograms and Thematic Mapping

GEOACOR04T –Cartograms and Thematic Mapping ,4 Credits, 50 Marks [60 classes]

Paper	UNIT 1	SL. NO.	Topic	No. of Lect.	Lecturer	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
GEOACOR04T		1	Concepts of rounding, scientific notation, logarithm and anti-logarithm, natural and log scales	8	DD				
GEOACOR04T		2	Diagrammatic representation of data: Line, Bar, Isopleths	8	RG				
GEOACOR04T		3	Representation of area data: Dots and spheres, proportional circles and Choropleth	8	CS				
GEOACOR04T		4	Preparation and interpretation of land use land cover maps	10	RG				
GEOACOR04T		5	Preparation and interpretation of socio-economic maps	8	CS				
GEOACOR04T		6	Bearing: Magnetic and true, whole-circle and reduced	8	RG				
GEOACOR04T		7	Basic concepts of surveying and survey equipment: Prismatic Compass, Dumpy Level, Theodolite	10	RG,CS,RG				
GEOACOR04P –Cartograms and Thematic Mapping (Lab), 2 Credits, 25 Marks [60 classes]									
GEOACOR04P	UNIT-1	1	Thematic maps:						
			Choropleth showing density of population	8	RG				

			Dots and Spheres diagram showing distribution of rural and urban population	8	CS				
			Proportional pie-diagrams representing economic data and land use data	8	CS				
GEOACOR04P	UNIT 2	2	Traverse survey using prismatic compass	18	RG				
			Profile survey using dumpy Level	18	CS				

Academic CalenderYears: 2021 March-

P.N.Das College

Department of Geography SEM-II(GEN)(GEOGCOR02T) –Human Geography, 6 Credits, 75 Marks [90 classes]

Unit- I Population and Social Geography

Paper	UNIT	SL. NO.	TOPIC	No. of Lect.	Lecturer	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
GEOGCOR02T	UNIT-I	1	Factors of Growth and distribution of world population. Demographic Transition Theory	9	DD				
GEOGCOR02T	UNIT-I	2	World Population Composition: Age, Gender and Literacy	9	DD				
GEOGCOR02T	UNIT-I	3	Migration**:** Types, causes and consequences.	9	DD				
GEOGCOR02T	UNIT-I	4	Space and Society: Cultural Regions; Race; Religion and Language	10	DD				
GEOGCOR02T	UNIT-I	5	Contemporary social issues: Illiteracy and Poverty	9					
Unit II Economic and Settlement Geography									
GEOGCOR02T	UNIT-II	6	Sectors of the economy: primary, secondary, tertiary and quaternary	9	RG				
GEOGCOR02T	UNIT-II	7	Types of agriculture: Intensive subsistence rice farming, Plantation agriculture (Tea and Coffee)	9	RG				
GEOGCOR02T	UNIT-II	8	Location, problems and prospects of Indian industries — Cotton textile, Petroleum refining, Locomotive	9	CS				
GEOGCOR02T	UNIT-II	9	Types and Patterns of Rural Settlements	8	CS				
GEOGCOR02T	UNIT-II	10	Classification of Urban Settlements; Trends and Patterns of World Urbanization	9	CS				

Academic Calendar Year: 2020-21

P.N.Das College

Department of Geography SEM-III(HONS)GEOA COR05T –Climatology

GEOACOR05T-4 Credits, 50 Marks [60 classes]

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
	Unit I:		**Elements of the Atmosphere**						
		1	Nature, composition and layering of the atmosphere	3	DD				
		2	Insolation: controlling factors. Heat budget of the atmosphere	3	DD				
		3	Temperature: horizontal and vertical distribution. Inversion of temperature: types, causes and consequences	4	CS				
		4	Greenhouse effect and importance of ozone layer.	3	RG				
	Unit II:		**Atmospheric Phenomena and Climatic Classification**						
		5	Condensation: Process and forms. Mechanism of precipitation: Bergeron-Findeisen theory, collision and coalescence. Forms of precipitation	5	CS				
		6	Air mass: Typology, origin, characteristics and modification	4	RG				
		7	Fronts: warm and cold; frontogenesis and frontolysis	6	DD				
		8	Weather: stability and instability; barotropic and baroclinic conditions	6	DD				
		9	Circulation in the atmosphere: Planetary winds, jet stream, index cycle	8	CS				
		10	Tropical and mid-latitude cyclones	7	RG				
		11	Monsoon circulation and mechanism with reference to India	6	CS				
		12	Climatic classification after Köppen, Thornthwaite (1955) and Oliver	5	RG				

Academic Calendar Year: 2020-21

P.N.Das College
Department of Geography SEM-III(HONS) GEOACOR05P –Climatology

GEOACOR05T 2 Credits, 25 Marks [60 classes]

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
		1	Interpretation of daily weather map of India (any two): Pre-Monsoon, Monsoon and Post-Monsoon	10	CS, DD, RG				
		2	Construction and interpretation of hythergraph and climograph (G. Taylor)	10	RG				
		3	Construction and interpretation of wind rose	10	RG				
		4	A Project File, comprising of one exercise from each of the following is to be prepared and submitted		CS RG DD				

Academic Calendar Year: 2020-21									
P.N.Das College **Department of Geography SEM-III(HONS)GEOA COR06T –Geography of India**									
6 Credits, 75 Marks [90 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						IA-I	**IA-II**	**IA-III**	**Remarks**
	Unit I:		**Geography of India**						
		1	Tectonic and stratigraphic provinces, physiographic divisions	6	RG				
		2	Climate, soil and vegetation: Characteristics and classification	6	RG				
		3	Population: Distribution, growth, structure and policy	10	RG				
		4	Tribes of India with special reference to Gaddi, Toda, Santal and Jarwa	5	DD				
		5	Agricultural regions. Green revolution and its consequences	6	DD				
		6	Mineral and power resources distribution and utilisation of iron ore, coal, petroleum and natural gas	5	CS				
		7	Industrial development: Automobile and information technology	10	DD				
		8	Regionalisation of India: Physiographic (R.L. Singh) and economic (P. Sengupta)	10	CS				
	Unit II:		**Geography of West Bengal**						
		9	Physical perspectives: Physiographic divisions, forest and water resources	10	RG				
		10	Resources: Agriculture, mining, and industry		DD				
		11	Population: Growth, distribution and human development	10	CS				

		12	Regional Issues: Darjeeling Hills and Sundarban	10	CS				

ACADEMIC CALENDAR YEAR: 2020-21									
P.N.Das College **Department of Geography SEM-III(HONS)GEOACOR07T –Statistical Methods in Geography**									
4 Credits, 40 Marks [60 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						Test-I	**Test-II**	**Test-III**	**Remarks**
	Unit I:		Frequency Distribution and Sampling						
		1	Importance and significance of statistics in Geography	5	CS				
		2	Discrete and continuous data, population and samples, scales of measurement (nominal, ordinal, interval and ratio),	6	CS				
		3	Sources of geographical data for statistical analysis	5	RG				
		4	Collection of data and formation of statistical tables	5	DD				
		5	Sampling: Need, types, and significance and methods of random sampling	7	DD				
		6	Theoretical distribution: frequency, cumulative frequency, normal and probability	8	RG				
	Unit II:		Numerical Data Analysis						
		7	Central tendency: Mean, median, mode, partition values	4	CS				
		8	Measures of dispersion range: mean deviation, standard deviation, coefficient of variation	5	RG				

		9	Association and correlation: Rank correlation, product moment correlation	5	DD				
		10	Regression: Linear and non-linear	5	DD				
		11	Time series analysis: Moving average	5	RG				

ACADEMIC CALENDAR YEAR: 2020-21									
P.N.Das College **Department of Geography SEM-III(HONS)GEOACOR07P –Statistical Methods in Geography (Lab)**									
2 Credits, 25 Marks [60 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						Test-I	**Test-II**	**Test-III**	**Remarks**
		1	Construction of data matrix with each row representing an areal unit (districts / blocks / *mouzas* / towns) and corresponding columns of relevant attributes	10	DD				
		2	Based on the above, a frequency table, measures of central tendency and dispersion would be computed and interpreted using histogram and frequency curve	20	CS				
		3	From the data matrix a sample set (20%) would be drawn using, random, systematic and stratified methods of sampling and locate the samples on a map with a short note on methods used	15	CS				

		4	Based on the sample set and using two relevant attributes, a scatter diagram and linear regression line would be plotted and residual from regression would be mapped with a short interpretation	15	RG				

Academic Calendar Year: 2020-21									
P.N.Das College **Department of Geography SEM-III GEOSSEC01M –Remote Sensing (For both Honours and General courses)**									
Skill Enhancement Course (SEC)									
2 Credits, 25 Marks [30 classes]									
Paper	**UNIT**	**SL. NO.**	**Topic**	**No. of Lect.**	**Lecturer**	**Exam Schedule**			
						Test-I	**Test-II**	**Test-III**	**Remarks**
		1	Principles of Remote Sensing (RS): Classification of RS satellites and sensors	8	CS				
		2	Sensor resolutions and their applications with reference to IRS and Landsat missions, image referencing schemes and data acquisition.	7	DD				
		3	Preparation of False Colour Composites from IRS LISS-3 and Landsat TM and OLI data. Principles of image rectification and enhancement.	8	RG				

		4	Principles of image interpretation and feature extraction. Preparation of inventories of land use land cover features from satellite images.	7	CS				

ACADEMIC CALENDAR YEAR: 2020-21									
P.N.Das College Department of Geography SEM-III GEOHGEC03T –General Cartography									
4 Credits, 50 Marks [60 classes]									
PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
		1	Concept of map scale: Types and Application. Reading distances on a map.	15	DD				
		2	Map Projections: Criteria for choice of projections. Attributes and properties of: Zenithal Gnomonic Polar Case, Zenithal Stereographic Polar Case, Cylindrical Equal Area, Mercator' Projection, Bonne's, Concept of UTM projection Projection.	15	RG				
		3	Survey of India topographical maps: Reference scheme of old and open series. Information on the margin of maps.	15	CS				
		4	Representation of Data – Symbols, Dots, Choropleth, Isopleth and Flow Diagrams, Interpretation of Thematic Maps.	15	DD				

ACADEMIC CALENDAR YEARS: 2020-21									
P.N.Das College **Department of Geography SEM-III GEOHGEC03P –General Cartography**									
2 Credits, 25 Marks [60 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**EXAM SCHEDULE**			
						TEST-I	**TEST-II**	**TEST-III**	**REMARKS**
		1	Graphical construction of scales: Plain and comparative. [10]	10	DD				
		2	Construction of projections: Zenithal Gnomonic Polar Case, Zenithal Stereographic Polar Case,Cylindrical Equal Area, Mercator's[30] Projection,	30	RG				
		3	Construction and interpretation of relief profiles from Survey of India topographical map — superimposed, projected and composite, relative relief map, slope map (Wentworth), and Correlation between physical and cultural features from Survey of India topographical maps using transect chart.	20	CS				

Distribution of Courses across semesters for Geography Honours (B.Sc.)

Semester	Course	Course Code	Title	Credit	Marks	Remarks
III	Core	GEOACOR05T	Climatology	04	50	Compulsory
		GEOACOR05P	Climatology (Lab)	02	25	
	Core	GEOACOR06T	Geography of India	06	75	
	Core	GEOACOR07T	Statistical Methodsin Geography	04	50	
		GEOACOR07P	Statistical Methodsin Geography Lab	02	25	
	GE	XXXHGEC03T		06	75	One course of a subject (Eg. B) chosenfromthelist ofsubjects givenin section 1.3
	SEC	GEOSSEC01M	Remote Sensing	02	25	Compulsory

Distribution of Courses across semesters for Geography General (B.Sc.)

Semester	Course	Course Code	Title	Credit	Marks	Remarks
III	Core (DSC 1C)	GEOGCOR03T	General Cartography	04	50	From Geography
		GEOGCOR03P	General Cartography (Lab)	02	25	
	Core (DSC 2C)	XXXGCOR03T		04	50	Subject 2 apart from Geography
	Core (DSC 3C)	XXXGCOR03T		06	75	Subject 3 apart from Geography
	SEC1	XXXSSEC01M	Remote Sensing	02	25	Shared course

Academic Calendar Year: 2021 March (Red colour lines are not applicable for this year)

P.N.Das College

Department of Geography SEM-IV(HONS)GEOA COR08T – Regional Planning and Development

GEOACOR08T - 6 Credits, 75Marks [90 classes]

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						I.A-I	I.A. -II	I.A. -III	Remarks
	Unit I:		Regional Planning						
		1	Concept of regions: Types of regions and their delineation	6	CS				
		2	Regional Planning: Types, principles, objectives, tools and techniques	8	CS				
		3	Need for regional planning in India multi - level planning in India	6	CS				
		4	Metropolitan concept and urban agglomerations	6	CS				
	Unit II:		Regional Development						
		5	Concepts of growth and development, growth versus development	8	DD				
		6	Indicators of development: Economic, social and environ mental	8	DD				
		7	Human development: Concept and measurement	8	DD				
		8	Theories and models for regional development: Cumulative causation (Myrdal)	8	DC				
		9	Theories and models for regional development: Stages of development (Rostow), growth pole model (Perroux)	8	RG				
		10	Concept and causes of under development	8	RG				
		11	Regional development in India: Disparity and diversity	8	RG				
		12	Need and measures for balanced development in India	8	RG				

Academic Calendar Year: 2021 march									
P.N.Das College Department of Geography SEM-IV(HONS) (GEOA) GEOACOR09T – Economic Geography									
GEOACOR09T –-6 Credits, 75Marks [90 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						Test-I	**Test-II**	**Test-III**	**Remarks**
	Unit I:		**Concepts**						
		1	Meaning and approaches to Economic Geography	6	CS				
		2	Concepts in Economic Geography: Goods and services, production, exc hange and consumption	8	CS				
		3	Concept of economic man, theories of choices	8	CS				
		4	Economic distance and transport costs	8	DD				
	Unit II:		**Economic Activities**						
		5	Concept and classification of economic activities	6	RG				
		6	Factors affecting location of economic activity with special referen ce to agriculture (Von Thünen), and industry (Weber)	8	RG				
		7	Primary activities: Agriculture, forestry, fishing and mining	8	RG				
		8	Secondary activities: Manufacturing (cotton textile, iron and steel), concept of manufacturing regions, special economic zones and technology parks	10	DC				
		9	Tertiary activities: Transport, trade and services	6	DD				
		10	Agricultural systems: Case studies of tea plantation in India and mixed farming in Europe	8	DD				
		11	Transnational sea-routes, railways and highways with reference to India	6	DD				
		12	International trade and economic blocs : WTO , GATT and BRICS: Evolution, structure and functions	8	DD				

Academic Calendar Year: 2021 march									
P.N.Das College Department of Geography SEM-IV (HONS) GEOACOR10T – Environmental Geography									
GEOACOR10T 4Credits, 50 Marks [60 classes]									
PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						IA-I	IA-II	IA-III	Remarks
	Unit I:		**Concepts**						
		1	Geographers' approach to environmental studies	7	DC				
		2	Concept of holistic environment and systems approach	7	DC				
		3	Ecosystem: Concept, structure and functions	8	CS				
		4	Space –time hierarchy of Environmental problems: Local, regional and global	8	CS				
	Unit II:		**Environmental problems and policies**						
		5	Environmental pollution and degradation: Land, water and air	7	RG				
		6	Urban environmental issues with special reference to waste management	8	RG				
		7	Environmental policies – National Environmental Policy, 2006, Earth Summits (Stockholm, Rio, Johannesburg)	8	DD				
		8	Global initiatives for environmental management (special reference to Montreal Protocol, Kyoto Protocol, Paris Climate Summit)	7	DD				

Academic Calendar Year: 2021 march									
P.N.Das College **Department of Geography SEM-IV(HONS GEOACOR10P - Environmental Geography (Lab)**									
GEOACOR10P 2 Credits, 25 Marks [60 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						Test-I	**Test-II**	**Test-III**	**Remarks**
		1	Preparation of questionnaire for perception survey on environmental problems	20	CS				
		2	Preparation of check - list for Environmental Impact Assessment of an urban / industrial project	20	DD				
		3	Interpretation of air quality using CPCB / WBPCB data	20	RG				

ACADEMIC CALENDAR YEAR: 2021 march									
P.N.Das College Department of Geography SEM-IV (HONS) GEOSSEC02M - Advanced Spatial Statistical Techniques									
Skill Enhancement Course , 2 Credits, 25 Marks [30 classes]									
PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
	Unit I:								
		1	Probability theory, probability density functions with respect to Normal, Binomial and Poisson distributions and their geographical applications	8	CS				
		2	Sampling: Sampling plans for spatial and non- spatial data, sampling distributions. Sampling estimates for large and small samples tests involving means and proportions.	8	CS				
		3	Correlation and Regression Analysis : Rank order correlation and product moment correlation; linear regression, residuals from regression, and simple curvilinear regression. Introduction to multi -variate analysis.	7	RG				
		4	Time Series Analysis: Time Series processes; Smoothing time series; Time series components	7	DD				

Academic Calendar Year: 2021 march									
P.N.Das College Department of Geography SEM IV(general)-GEOGCOR04T – Environmental Geography									
6 Credits,75 Marks [90 Classes]									
Paper	UNIT	SL. NO.	Topic	No. of Lect.	Lecturer	Exam Schedule			
						Test-I	Test-II	Test-III	Remarks
	UNIT-I		**Concepts**						
		1	Environmental Geography: Concepts and Approaches	10	CS				
		2	Human-Environment Relationship in equatorial, desert, mountain and coastal regions	13	CS				
		3	Concept of holistic environment and system approach	10	RG				
		4	Ecosystem: Concept, structure and functions	12	RG				
	UNIT-II		**Environmental problems and policies**						
		5	Environmental Problems and Management: Air Pollution; Water pollution Biodiversity Loss; Solid and Liquid Waste.	13	DD				
		6	Environmental problems and management: Desertification and soil erosion	10	DD				
		7	Environmental Programmes and Policies: Developed Countries; Developing Countries	12	DC				
		8	New Environmental Policy of India.	10	DC				

Academic Calendar Year: 2020-21									
P.N.Das College Department of Geography SEM-V(HONS)GEOA COR11T – Fieldwork and Research Methodology									
GEOACOR11T – 4 Credits, 50Marks [60 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						I.A-I	**I.A.-II**	**I.A.-III**	**Remarks**
	Unit I:		**Research Methodology**						
		1	Research in Geography: Meaning, types and significance	6	CS				
		2	Literature review and formulation of research design	6	CS				
		3	Defining research problem, objectives and hypothesis.	6	CS				
		4	Research materials and methods	6	CS				
		5	Techniques of writing scientific reports: Preparing notes, references, bibliography, abstract and keywords	6	DD				
	Unit II:		**Fieldwork**						
		6	Fieldwork in Geographical studies: Role and significance. Selection of study area and objectives. Pre-field academic preparations. Ethics of fieldwork	6	DD				
		7	Field techniques and tools: Observation (participant, non participant), questionnaires (open, closed, structured, non-structured). Interview	6	RG				
		8	Field techniques and tools: Landscape survey using transects and quadrants, constructing a sketch, photo and video recording	6	DD				
		9	Positioning and collection of samples. Preparation of inventory from field data.	6	RG				
		10	Post-field tabulation, processing and analysis of quantitative and qualitative data	6	CS				

Academic Calendar Year: 2020-21									
P.N.Das College **Department of Geography SEM-V (HONS)GEOA COR11P – Fieldwork and Research Methodology (Lab)**									
GEOACOR11P – 2Credits, 25Marks [60 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC** **Every students needs to participate in Fieldwork and prepare a field report according to the following guidelines, failing which he/she will not be evaluated for core -P11.**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						I.A-I	**I.A. -II**	**I.A.- III**	**Remarks**
		1	Each student will prepare a report based on primary data collected from field survey and secondary data collected from different sources.	8	CS,RG,DD				
		2	Students will select either one rural area (*mouza*) or an urban area (municipal ward) for the study, with the primary objective of evaluating the relation between physical and cultural landscape	10	CS,RG,DD				
		3	The fieldwork should be completed within seven days.	7	CS,RG,DD				
		4	The report should be handwritten in English on A4 size paper in candidate's own words within 5,000 words (Introductory Chapter: 1000 words; Physical Aspects: 1500 words; Socio-economic Aspects: 1500 words; Concluding Chapter: 500 words, approximately) excluding tables, photographs, maps, diagrams, references and appendices	15	CS,RG,DD				
		5	Maps and diagrams should not exceed 15 pages.		CS,RG,DD				
		6	All sections of the report should contain relevant maps, diagrams and photographs using primary and secondary data, clearly citing sources.	20	CS,RG,DD				
		7	A copy of the bound report, duly signed by the concerned teacher, will be submitted during examination.		CS,RG,DD				

Academic Calendar Year: 2020-21									
P.N.Das College Department of Geography SEM-V(HONS) GEOA COR12T – **Remote Sensing and GIS**									
GEOACOR12T – 4 Credits, 50Marks [60 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						I.A-I	**I.A.-II**	**I.A.-III**	**Remarks**
	Unit I:		**Remote Sensing**						
		1	Principles of Remote Sensing (RS): Types of RS satellites and sensors	7	CS				
		2	Sensor resolutions and their applications with reference to IRS and Landsat missions.	7	RG				
		3	Preparation of False Colour Composites from IRS LISS-3 and Landsat TM and OLI data	7	DD				
		4	Principles of image correction and interpretation. Preparation of inventories of landuse land cover (LULC) features from satellite images	7	CS				
	Unit II:		**Geographical Information Systems and Global Navigation Satellite System**						
		5	Concept of GIS and its applicability; GIS data structures: types: spatial and non-spatial, raster and vector	8	RG				
		6	Principles of preparing attribute tables and data manipulation and overlay analysis	8	DD				
		7	Principles of GNSS positioning and waypoint collection	8	DD				
		8	Transferring waypoints to GIS. Area and length calculations from GNSS data	8	DD				

Academic Calendar Year: 2020-21									
P.N.Das College **Department of Geography SEM-V (HONS) GEOA COR12P – Remote Sensing and GIS (Lab)**									
GEOACOR12P – 2Credits, 25Marks [60 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						I.A-I	**I.A.-II**	**I.A.-III**	**Remarks**
		1	Georeferencing of maps and images using Open Source software	20	CS				
		2	Preparation of FCC and identification of features using standard FCC and other band combinations	20	DD				
		3	Digitisation of features. Data attachment, overlay and preparation of annotated thematic maps (choropleth, pie chart and bar graphs).	20	RG				
		4	Note: All exercises to be done using QGIS (2.10 and above)						

Academic Calendar Year: 2020-21									
P.N.Das College Department of Geography SEM-V(HONS) GEOADSE01T– Soil and Biogeography									
GEOADSE01T – 6 Credits, 75 Marks [90 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						I.A-I	**I.A.-II**	**I.A.-III**	**Remarks**
	Unit I:		**Soil Geography**						
		1	Factors of soil formation. Man as an active agent of soil transformation	7	RG				
		2	Soil profile. Origin and profile characteristics of Lateritic, Podzol and Chernozem soils	7	RG				
		3	Definition and significance of soil properties: Texture, structure and moisture,	7	DD				
		4	Definition and significance of soil properties: pH, organic matter and NPK	8	DD				
		5	Soil erosion and degradation: Factors, processes and mitigation measures	8	CS				
		6	Principles of soil classification: Genetic and USDA. Concept of land capability and its classification	8	CS				
	Unit II:		**Biogeography**						
		7	Concepts of biosphere, ecosystem, biome, ecotone, community, niche, succession and ecology	7	CS				
		8	Concepts of trophic structure, food chain and food web. Energy flow in ecosystems	7	RG				
		9	Geographical extent and characteristic features of: Tropical rain forest, Taiga and Grassland biomes	7	DD				
		10	Bio-geochemical cycles with special reference to carbon dioxide and nitrogen	8	DD				

		11	Spatial distribution of worldfauna	8	CS				
		12	Measures for conservation of bio-diversity in India: Man and Biosphere Programme	8	RG				

P.N.Das College

Department of Geography SEM-V(HONS) GEOADSE02T –Settlement Geography

GEOADSE02T – 6 Credits, 75 Marks [90 classes]

Academic Calendar Year: 2020-21

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						I.A-I	I.A.-II	I.A.-III	Remarks
	Unit I:		Rural Settlement						
		1	Scope and content of Settlement Geography; rural, urban and peri-urban areas	9	CS				
		2	Rural Settlement: Definition, nature and characteristics	9	CS				
		3	Morphology of rural settlements: site and situation, layout-internal and external	9	DD				
		4	Rural house types with reference to India, Social segregation in rural areas; Census categories of rural settlements.	9	DD				
		5	Problems and policies related to rural infrastructure with reference to India	9	RG				
	Unit II:		Urban Settlement						
		6	Urban Settlements :Census definition (Temporal) and categories in India	9	CS				
		7	Urban morphology: Classical models: Burgess, Homer Hoyt, Harris and Ullman Metropolitan concept.	9	RG				
		8	City-region and Conurbation , Functional classification of cities: Harris, Nelson and McKenzie	9	DD				
		9	Aspects of urban places: Location, site and situation, Size and spacing of cities: the rank size rule, the law of the primate city	9	CS				
		10	Urban hierarchies : Central Place Theory; August Löch's theory of market centres	9	RG				

P.N.Das College

Department of Geography SEM-V(HONS) GEOADSE03T – Population Geography

GEOADSE03T – 6 Credits, 75 Marks [90 classes]

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						I.A-I	I.A.-II	I.A.-III	Remarks
	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.	8					
		2	Population distribution: density and growth. Classical and modern theories in population distribution and growth, Demographic transition model.	8					
		3	World patterns determinants of population distribution and growth. Concept of optimum population.	7					
		4	Population distribution, density and growth profile in India.	7					
	Unit II:		Population and Development						
		5	Concepts of Age-Sex Composition; Rural and Urban Composition; Literacy and education	8					
		6	Measurements of fertility and mortality. Concept of cohort and life table	7					
		7	Population composition of India: Urbanisation and Occupational structure	7					
		8	Migration: Causes and types	7					
		9	National and international patterns of migration with reference to India.	7					

		10	Population and development: population-resource regions. Concept of human development index and its components.	7					
		11	Population policies in developed and less developed countries. India's population policies, population and environment, implication for the future.	8					
		12	Contemporary Issues – Ageing of Population; Declining Sex Ratio; Population and environment dichotomy, HIV/AIDS.	8					

GEOACOR14T – Disaster Management

4 Credits, 50 Marks [60 classes]

Unit I: Concepts

1. Classification of hazards and disasters. **RG**
2. Approaches to hazard study: Risk perception and vulnerability assessment. Hazard paradigms. **RG**
3. Responses to hazards: Preparedness, trauma and aftermath. Resilience and capacity building. **DD**
4. Hazards mapping: Data and geospatial techniques (for hazards enlisted in Unit II and Core 14P) **DD**

Unit II: Hazard-specific Study with focus on India

5. Earthquake: Factors, vulnerability, consequences and management **CS**
6. Landslide: Factors, vulnerability, consequences and management **CS**
7. Tropical Cyclone: Factors, vulnerability, consequences and management **CS**
8. Riverbank erosion: Factors, vulnerability, consequences and management **RG**
9. Radioactive fallout: Factors, vulnerability, consequences and management **DD**

GEOACOR14P – Disaster Management

2 Credits, 25 Marks [60 classes]

An individual Project Report is to be prepared and submitted based on any one case study among the following disasters of West Bengal incorporating a preparedness plan ***CS, RG, DD***

1. Thunderstorm
2. Landslide
3. Flood
4. Coastal / riverbank erosion
5. Fire
6. Industrial accident
7. Structural collapse

One case study will be done by a group of five students. Different groups may choose different case studies from any one or different types of disasters. The report should be prepared on secondary data and handwritten on A4 page in candidates' own words not exceeding 2000 words excluding references. The report should contain a proper title. The report should incorporate relevant tables, maps, diagrams and references not exceeding five pages. Photographs are not required. A copy of the stapled report in a transparent front file, duly signed by the concerned teacher, will be submitted during examination. Without the report the candidates will not be evaluated for Core P14.

Distribution of Courses across semesters for Geography Honours (B.Sc.)

Semester	Course	Course Code	Title	Credit	Marks	Remarks
V	Core	GEOACOR11T	Field Work and Research Methodology	04	50	Compulsory
		GEOACOR11P	Field Work and Research Methodology (Lab)	02	25	
	Core	GEOACOR12T	Remote Sensing and GIS	04	50	Compulsory
		GEOACOR12P	Remote Sensing and GIS (Lab)	02	25	
	DSE	GEOADSE01T	Soil and Biogeography	06	75	Compulsory
	DSE	GEOADSE02T	Settlement Geography	06	75	Students to choose any one of the two courses (02T or 03T)
		GEOADSE03T	Population Geography	06	75	

Distribution of Courses for Geography General across semesters (B.Sc.)

Semester	Course	Course Code	Title	Credit	Marks	Remarks
V	DSE1A	GEOGDSE01T	A. Soil and Biogeography			Any one course among A, B and C from Geography
		GEOGDSE02T	B. Regional Development			
		GEOGDSE03T	C. Disaster Management			
	DSE2A	XXXGDSE01T				Subject 2 apart from Geography
	DSE3A	XXXGDSE01T				Subject 3 apart from Geography
	SEC3					Shared course

Academic Calendar Year: 2020-21									
P.N.Das College **Department of Geography SEM-V(General) GEOGDSE01T – Soil and Biogeography (DSE)**									
6 Credits, 75 Marks [90 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						I.A-I	**I.A.-II**	**I.A.-III**	**Remarks**
	Unit I:		**Soil Geography**						
		1	Factors of soilformation.	10	RG				
		2	Soil profile. Origin and profile characteristics of Lateritic and Chernozem soils	12	RG				
		3	Definition and significance of soil properties: Texture, structure and moisture, pH and organic matter	12	DD				

		4	Principlesofsoilclassification:GeneticandUSDA.Conceptofland capabilityanditsclassification	11	CS				
	Unit II:		**Bio-geography**						
		5	Concepts of biosphere, ecosystem, biome, ecotone, community, niche and succession.	12	CS				
		6	Concepts of food chain and food web. Energy flow in ecosystems	10	RG				
		7	Geographical extent and characteristic features of: Tropical rain forest and Grassland biomes	12	DD				
		8	Bio-geochemical cycles with special reference to carbon dioxide and nitrogen	11	DD				

P.N.DAS COLLEGE, PALTA

SEMESTER- VI HONOURS, DEPARTMENT OF GEOGRAPHY, ACADEMIC CALENDER 2021 (Red colour lines are not applicable for this year)

GEOACOR13T – Evolution of Geographical Thought { 6 Credits, 75Marks [90 classes] }

Paper	Unit	Sl. No.	Topic	No. Of Lectures	Lecturer	Exam Schedule			
						IA- I	IA- II	IA- III	Remarks
13 T	Unit I: Nature of Pre Modern Geography	1	**Development of Geography: Contributions of Greek and Chinesegeographers**	9	DD				
		2	**Impact of 'Dark Age' in Geography and Arab contributions**	8	RG				
		3	**Geography during the age of 'Discovery' and 'Exploration' (contributions of Columbus, Vasco da Gama, Magellan, Thomas Cook)**	9	CS				
		4	**Transition from cosmography to scientific Geography (contributions of Bernard Varenius and Immanuel Kant). Dualism and Dichotomies (Ideographic vs. Nomothetic, Physical vs. Human, Regional vs. Systematic, Determinism vs. Possibilism,)**	12	CS				
	Unit II: Foundations of Modern Geography and Recent Trends	5	**Evolution of Geographical thoughts in Germany, France, Britain and United States of America**	9	DD				

		6	**Contributions of Humboldt and Ritter**	8	RG				
		7	**Contributions of Richthofen, Hettner, Ratzel and Vidal deLaBlaché**	9	DD				
		8	**Trends of geography in the post-World War-II period: Quantitative Revolution, systems approach.**	9	RG				
		9	**Evolution of Critical Geography: Behavioural, humanistic and radical.**	9	CS				
		10	**Changing concept of time-space in geography in the 21st Century**	8					

P.N.Das College, Academic Calendar Year: 2021 March Department of Geography SEM-VI (HONS) GEOA COR14T – Remote Sensing and GIS									
GEOACOR14T – 4 Credits, 50Marks [60 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						I.A-I	**I.A.-II**	**I.A.-III**	**Remarks**
	Unit I:		**Remote Sensing**						
		1	Principles of Remote Sensing (RS): Types of RS satellites and sensors	7	CS				
		2	Sensor resolutions and their applications with reference to IRS and Landsat missions.	7	RG				
		3	Preparation of False Colour Composites from IRS LISS-3 and Landsat TM and OLI data	7	DD				
		4	Principles of image correction and interpretation. Preparation of inventories of landuse land cover (LULC) features from satellite images	7	CS				
	Unit II:		**Geographical Information Systems and Global Navigation Satellite System**						
		5	Concept of GIS and its applicability; GIS data structures: types: spatial and non-spatial, raster and vector	8	RG				
		6	Principles of preparing attribute tables and data manipulation and overlay analysis	8	DD				
		7	Principles of GNSS positioning and waypoint collection	8	DD				
		8	**Transferring waypoints to GIS. Area and length calculations from GNSS data**	8	DD				

Academic Calendar Year: 2020-21									
P.N.Das College Department of Geography SEM-VI (HONS) GEOA COR14P – Remote Sensing and GIS (Lab)									
GEOACOR14P – 2Credits, 25Marks [60 classes]									
PAPER	**UNIT**	**SL. NO.**	**TOPIC**	**NO. OF LECT.**	**LECTURER**	**Exam Schedule**			
						I.A-I	**I.A.-II**	**I.A.-III**	**Remarks**
		1							
		2	Preparation of land use and land cover map from standard FCC and its interpretation.	20	RG				
		3	Representation of raster and vector data format.	20	CS				
		4	Area and length calculation of from GNSS data.	20	DD				

P.N.DAS COLLEGE, PALTA

SEMESTER- VI HONOURS, DEPARTMENT OF GEOGRAPHY

GEOADSE04T – Hydrology and Oceanography {6 Credits, 75 Marks [90 classes] }

Paper	Unit	Sl. No.	Topic	No. Of Lectures	Lecturer	Exam Schedule			
						IA- I	IA- II	IA- III	Remarks
GEOADSE04T	Unit I: Hydrology	1	Systems approach in hydrology. Global hydrological cycle: Its physical and biological role	9	CS				
		2	Run off: controlling factors. Infiltration and evapotranspiration. Run off cycle	9	RG				
		3	Drainage basin as a hydrological unit. Principles of water harvesting and watershed management	9	DD				
		4	Groundwater: Occurrence and storage. Factors controlling recharge, discharge and movement	9	CS				
	Unit II: Oceanography	5	Major relief features of the ocean floor: characteristics and origin according to plate tectonics	9	RG				
		6	Physical and chemical properties of ocean water	9	DD				
		7	Water mass, T–S diagram	9	RG				

		8	Ocean temperature and salinity: Distribution and determinants	9	CS				
		9	Marine resources: Classification and sustainable utilisation	9					
		10	Sea level change: Types and causes	9					

P.N.DAS COLLEGE, PALTA									
SEMESTER- VI HONOURS, DEPARTMENT OF GEOGRAPHY									
GEOADSE05T – Social Geography { 6 Credits, 75 Marks [90 classes] }									
Paper	**Unit**	**Sl. No.**	**Topic**	**No. Of Lectures**	**Lecturer**	**Exam Schedule**			
						IA- I	**IA- II**	**IA- III**	**Remarks**
GEOADSE05T	Unit I: Society, Identity and Crisis	1	Social Geography: Concept, Origin, Nature and Scope	7					
		2	Concept of Space, Social differentiation and stratification; social processes	8	CS				
		3	Social Categories: Caste, Class, Religion, Race and Gender and their Spatial distribution in India.	8	RG				
		4	Basis of Social region formation; Evolution of social-cultural regions of India	8	DD				
		5	Peopling Process of India: Technology and Occupational Change; Migration.	7					
		6	Social groups, social behaviour and contemporary social environmental issues with special reference to India	7	CS				
	Unit II: Social	7	Concept of Social Well-being, Quality of Life,	8	RG				

	Wellbeing and Planning		Gender and Social Well-being						
		8	Measures of Social Well-being: Healthcare, Education, Housing, Gender Disparity	7	DD				
		9	Social Geographies of Inclusion and Exclusion, Slums, Gated Communities, Communal Conflicts and Crime	8	DD				
		10	Social Planning during the Five Year Plans in India	7					
		11	Social Policies in India: Education and Health	7					
		12	Social Impact Assessment (SIA): Concept and importance	8	CS				

P.N.DAS COLLEGE, PALTA									
SEMESTER- VI HONOURS, DEPARTMENT OF GEOGRAPHY									
GEOADSE06T – Resource Geography { 75 Marks, 6 Credits [90 classes]}									
Paper	**Unit**	**Sl. No.**	**Topic**	**No. Of Lectures**	**Lecturer**	**Exam Schedule**			
						IA- I	**IA- II**	**IA- III**	**Remarks**
GEOADSE06T	Unit I: Resource and Development	1	Natural Resources: Concept and classification						
		2	Approaches to Resource Utilization: Utilitarian, Conservational, Community based adaptation						
		3	Significance of Resources: Backbone of Economic growth and development						

		4	Pressure on resources. Appraisal and Conservation of Natural Resources						
		5	Problems of resource depletion—global scenario (forest, water, fossil fuels).						
		6	Sustainable Resource Development						
	Unit II: Social Wellbeing and Planning	7	Distribution, Utilisation, Problems and Management of Mineral Resources: Bauxite and Iron Ore.						
		8	Distribution, Utilisation, Problems and Management of Energy Resources: Conventional and NonConventional						
		9	Contemporary Energy Crisis and Future Scenario						
		10	Limits to Growth and Sustainable Use of Resources; Concept of Resource sharing: Water						

GEOGDSE04P – Project Report based on Field Work (CS, RG, DD)

6 Credits, 75 Marks

Project work is compulsory for completing B.Sc. Course in Geography. Project Work is intended to provide an opportunity to the candidate to field test the learning.

The Project report should be based on field work on some specified topics as suggested by the Department.

Each student will prepare an individual report based on primary and secondary data collected during field work.

The duration of the field work should not exceed 10 days.

The word count of the report should be about **8000** excluding figures, tables, photographs, maps, references and appendices.

The report should include an introduction, literature review, project aims and objectives, methodology, results and discussion and references.

It should not exceed 20 to 25 pages (A4 pages) including maps, diagrams, and photographs etc. One copy of the report on A 4 size paper should be submitted prior to examination.