

Academic Calendar Year: 2023-24

**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			
						IA-I	IA-II	IA-III	Remarks
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
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, Thorntwaite (1955) and Oliver	5	RG				

Academic Calendar Year: 2023-24**P.N.Das College
Department of Geography SEM-III(HONS)****GEOACOR05P –CLIMATOLOGY****GEOACOR05P, 2 Credits, 25 Marks [60 classes]**

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						IA-I	IA-II	IA-III	Remarks
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam-1 st week of January
		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				

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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
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
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: 2023-24

**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			
						IA-I	IA-II	IA-III	Remarks
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
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: 2023-24

**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			
						IA-I	IA-II	IA-III	Remarks
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
		1	Construction of data matrix with each row representing an areal unit (districts / blocks / <i>mouzas</i> / 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				

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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			
						IA-I	IA-II	IA-III	Remarks
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
		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: 2023-24

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			
						IA-I	IA-II	IA-III	Remarks
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
		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: 2023-24

**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			
						IA-I	IA-II	IA-III	Remarks
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam-1 st week of January
		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, , Bonne's 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 Methods in Geography	04	50	
		GEOACOR07P	Statistical Methods in Geography Lab	02	25	
	GE	XXXHGEC03T		06	75	One course of a subject (Eg. B) chosen from the list of subjects given in section 1.3
	SEC	GEOSSEC01M	Remote Sensing	02	25	Compulsory

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

Semester	Course	CourseCode	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

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P.N. Das College
Department of Geography SEM-I GEOA (HONS)
Introductory Level Course 1
Discipline Specific Major Courses for Geography

GEOADS01T – PHYSICAL GEOGRAPHY

3 Credits,Marks [45 Hours of Teaching]

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						IA-I	IA-II	IA-III	Remarks
						3rd week of September	3rd week of November	As per college schedule	Final Exam- 1st week of January
Unit: I Geotectonics and Geomorphology									
GEOADS01T		1	Internal structure of Earth based on Seismic Evidence.	4	CS				
GEOADS01T		2	Influence of lithology on landforms: Granite and Basaltic landforms.	4	DD				
GEOADS01T		3	Factors controlling landform development; endogenetic and exogenetic forces.	4	RG				
GEOADS01T		4	Evolution of landforms under fluvial process.	4	CS				
GEOADS01T		5	Nature and classification of hazards in Indian context.	4	RG				
Unit: II Climatology, Soil and Biogeography									
GEOADS01T		6	Nature, composition and layering of the atmosphere.	4	RG				
GEOADS01T		7	Distribution of pressure belts and planetary wind system, jet streams and index cycle.	4	CS				
GEOADS01T		8	Factors of soil profile.	2	DD				
GEOADS01T		9	Evolution of an ideal soil profile.	2	DD				
GEOADS01T		10	Concept of Ecosystem- basic ecological principles, ecotone, communities, niche, succession and habitat.	6	CS				
GEOADS01T		11	(Concept of Biomes: study of Tropical rainforest, Taiga, Savannah, Desert) , (Tundra and Temperate grassland.)	7	DD, RG				

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**P.N. Das College
Department of Geography SEM-I GEOA (HONS)
Introductory Level Course 1
Discipline Specific Major Courses for Geography**

GFOADS01P – PHYSICAL GEOGRAPHY (I AB)

2 Credits,Marks [60 Hours of Teaching]

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						IA-I	IA-II	IA-III	Remarks
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
GEOADS01P		1	Graphical construction of linear scales: Plain	12	DD				
GEOADS01P		2	Altimetric frequency distribution; Demarcation of broad physiographic zones.	14	CS				
GEOADS01P		3	Denoting drainage, geomorphic, settlement and transport attributes using sketches.	14	RG				
GEOADS01P		4	Identification of drainage and channel patterns from Survey of India 1:50,000 topographical maps.	12	CS				
GEOADS01P		5	Construction and interpretation of wind rose diagram.	8	RG				
GEOADS01P		6	Viva voce based on laboratory notebook.						

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**P.N. Das College
Department of Geography SEM-I GEOHM (GENERAL)
Minor Courses for Major/Honours Students of Others Disciplines offered by Geography/ Core
Courses for the 3- year Multidisciplinary Undergraduate Programme offered by Geography**

GEOHM01T/ GEOMC01T – PHYSICAL GEOGRAPHY □

5 Credits,Marks [75 Hours of Teaching]

PAPER	UNIT	SL.	TOPIC	NO. OF	LECTURER	Exam Schedule			
						IA-I	IA-II	IA-III	Remarks

		NO.		LECT.		3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
Unit: I Geotectonics and Geomorphology									
GEOGDS01T		1	Internal structure of Earth based on Seismic Evidence.	7	CS				
GEOGDS01T		2	Influence of lithology on landforms: Granite and Basaltic landforms.	7	DD				
GEOGDS01T		3	Factors controlling landform development; endogenetic and exogenetic forces.	7	RG				
GEOGDS01T		4	Evolution of landforms under fluvial process.	8	CS				
GEOGDS01T		5	Nature and classification of hazards in Indian context.	7	RG				
GEOGDS01T									
GEOGDS01T		6	Nature, composition and layering of the atmosphere.	6	RG				
GEOGDS01T		7	Distribution of pressure belts and planetary wind system, jet streams and index cycle.	6	CS				
GEOGDS01T		8	Factors of soil profile.	6	DD				
GEOGDS01T		9	Evolution of an ideal soil profile.	6	DD				
GEOGDS01T		10	Concept of Ecosystem- basic ecological principles, ecotone, communities, niche, succession and habitat.	6	CS				
GEOADS01T		11	Concept of Biomes: study of Tropical rainforest, Taiga, Savannah, Desert, Tundra and Temperate grassland.	9	DD				

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P.N. Das College

Department of Geography SEM-I GEOSE (HONS. and GENERAL)

SKILL ENHANCEMENT COURSES OFFERED BY GEOGRAPHY

GEOSE-01M – REMOTE SENSING

3 Credits,Marks [45 Hours of Teaching]

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						IA-I	IA-II	IA-III	Remarks
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
GEOSE-01M		1	Principles of Remote Sensing (RS): Classification of RS satellites and sensors	10	DD				
GEOSE-01M		2	Sensor resolutions and their applications with reference to IRS and Landsat missions, image referencing schemes and data acquisition.	10	DD				
GEOSE-01M		3	.Preparation of False Colour Composites from IRS LISS-3 and Landsat TM and OLI data. Principles of image rectification and enhancement.	12	RG				
GEOSE-01M		4	Principles of image interpretation and feature extraction. Preparation of inventories of land use land cover features from satellite images.	13	CS				

4 YEARS UNDER GRADUATE PROGRAM – HONOURS
SEMESTER -I

SEMESTER	MAJOR(DSC)	MINOR	MDC	AEC	SEC	VAC	INTERNSHIP	TOTAL CREDITS
I	DS- 1 (5)	MA-1(5), MB-1(5),	MD-1(3)	AE-1(3)	SE-1 (3)	VA-1(3)	27
Subject Code	GEOADS01T/1P – PHYSICAL GEOGRAPHY				GEOSE-01M – REMOTE SENSING			

3 YEARS MULTIDISCIPLINARY UNDER GRADUATE PROGRAM – GENERAL
SEMESTER - I

SEMESTER	CORE COURSE (A)	CORE COURSE (A)	CORE COURSE (A)	AEC	VAC	TOTAL CREDITS
I	MA-1(5)	MB-1(5)	MC-1(5)	AE-1(3)	VA-1(3)	21
Subject Code	GEOHM01T/ GEOMC01T Physical Geography					

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**P.N.Das College
Department of Geography SEM-V(HONS)**

GEOA COR11T – FIELD WORK 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
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
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: Landscapes 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 CALENDER 2023-24

**P.N.Das College
Department of Geography SEM-V (HONS)**

GEOA COR11P –FIELD WORK 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
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
			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				
			Students will select either on rural area (<i>mouza</i>) or on urban area (municipal ward) for the study, with the primary objective of evaluating the relation between physical and cultural landscape	10	CS,RG,DD				
			The field work should be completed within seven days.	7	CS,RG,DD				
			The report should be hand written in English on A4 size paper in candidate's own words within 5,000 words (Introductory Chapter:1000 words; Physical Aspects:1500words; Socio-economic Aspects: 1500 words; Concluding Chapter: 500 words, approximately) excluding tables, photographs, ,maps, diagrams, references and appendices.	15	CS,RG,DD				
			Maps and diagrams should not exceed 15 pages.		CS,RG,DD				
			All sections of the report should contain relevant maps, diagrams and photographs using primary and secondary data, clearly citing sources.	20	CS,RG,DD				
			A copy of the bound report, duly signed by the concerned teacher, will be submitted during examination.		CS,RG,DD				

GEOACOR11P – FIELDWORK AND RESEARCH METHODOLOGY (LAB)

2 Credits, 25 Marks [60 classes]

The course will have two parts:

A. Literature Review

The students will do a literature review on a specific topic/ issue decided by the college. The review will be based on at least 10 literatures (published books/ journal articles/ reports/monographs etc.). It will be completed within ten (10) A4 pages including references/ bibliography.

B. Field Report

1. Each student will select either one rural area (mouza) or an urban area (municipal ward) for the study and prepare a report based on secondary data collected from different sources.
2. Students will collect secondary data both from topographical sheets, Google Earth images and other online available sources (census data, municipality data, agricultural statistical hand book, working plan of different government agencies, pollution control board's website data etc.).
3. The primary objective of the report will be to evaluate the relation between physical and cultural landscape.
4. College will decide and provide the mouza or ward map and scanned portion of the corresponding topographical sheet (if possible).
5. Students will prepare maps and diagrams based on the above data. Maps and diagrams should not exceed 10 pages and students will clearly mention sources of data.
6. The report should be in English in candidate's own words between 3000 and 3500 words (containing sections on: Introduction, Physical Aspects, Socio-economic Aspects, Conclusion), excluding tables, maps, diagrams and references. The report should not exceed 20 pages.

- ❖ Both the Literature Review and the Field Report should be handwritten. The scanned Literature Review and the scanned complete Field Report (including maps and diagrams) are to be submitted online in PDF format to the Head via e-mail (provided by the concerned department/ college).
- ❖ In case of online examination the PDF files of Field Report, duly certified by the Head/ concerned teacher will be submitted by the Head to the Examiner. In case there is regular examination, the same should be printed, bound and submitted during viva.
- ❖ Marks division: Field Report evaluation = 10, Literature Review = 12, Attendance = 3 (Following the stipulated guideline). Here the evaluation of Literature Review to be treated as continuous evaluation.

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P.N.Das College Department of Geography SEM-V (HONS)

GEOA COR12P – REMOTE SENSING AND GIS (LAB)
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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
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
		1	Geo-referencing 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).						

GEOA COR12T -REMOTE SENSING AND GIS

GEOACOR12T Academic Calendar Year: 2023-24
 P.N.Das College

PAPER	UNIT	SL. NO.	TOPIC	NO. OF LECT.	LECTURER	Exam Schedule			
						I.A-I	I.A.-II	I.A.-III	Remarks
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam-1 st week of January
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 Land-sat missions.	7	RG				
		3	Preparation of False Colour Composites from IRS LISS- 3 and Land-sat TM and OLI data.	7	DD				
		4	Principles of image correction and interpretation. Preparation of inventories of land use 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				

GEOADSE01T-SOIL AND BIO-GEOGRAPHY

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
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
	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, Eco tone, 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 world fauna.	8	CS				
		12	Measures for conservation of bio-diversity in India: Man and Biosphere Programme	8	RG				

Department of Geography SEM-V(HONS)

GEOADSE02T –SETTLEMENT GEOGRAPHY

GEOADSE02T – 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
						3 rd week of September	3 rd week of November	As per college schedule	Final Exam- 1 st week of January
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 centers.	9	RG				

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 or03T)
GEOADSE03T		Population Geography	06	75		

Distribution of Courses across semesters for Geography General (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

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
						3 rd week of September	2 nd week of November	1 st week of December	Final Exam- 1 st week of January
	Unit I:		Soil Geography						
		1	Factors of soil formation.	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	Principles of soil classification: Genetic and USDA. Concept of land capability and its classification.	11	CS				
	Unit II:		Bio-geography						
		5	Concepts of biosphere, ecosystem, biome, eco-tone, community, niche and succession.	12	CS				
		6	Concepts of food chain and food web. Energy flow in eco-systems.	10	RG				
		7	Geographical extent and characteristic features of: Tropical rain forest and Grass land biomes.	12	DD				
		8	Bio-geo chemical cycles with special reference to carbon-dioxide and nitrogen.	11	DD				