P.N.DAS COLLEGE

Department of Geography

COURSE & PROGRAM OUTCOMESOF

GEOGRAPHY HONOURS (B.A. & B.SC.)UNDER CBCS

Geography is the study of places and the relationships between people andtheir environments. Geographers explore both the physical properties of Earth's surface and the human societies spread across it. They also examine how human culture interacts with the natural environment and the way those locations and places can have an impact on people. Geography seeks to understand where things are found, why they are there, and how they develop and change over time. The study of the diverse environments, places, and spaces of Earth's surface and their interactions. It seeks to answer the questions of whythings are as they are where they are. The modern academic discipline of geography is rooted in ancient practice, concerned with the characteristics of places, in particular their natural environments and peoples, as well as the relations between the two.

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

Semester	Course	CourseCode	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) chosenfromthe list ofsubjectsgivenin section 1.3
	AECC	ENGSAEC01M	Communicative English	02	25	Compulsory
	Core	GEOACOR03T	Human Geography	06	75	Compulsory
	Core	GEOACOR04T	Cartograms and Thematic Mapping	04	50	Compulsory
		GEOACOR04P	Cartograms and Thematic Mapping	02	25	Compulsory

II			(Lab)			
	GE	XXXHGEC02T		06	75	Second course of the same subject (A) taken as XXXHGEC01T
	AECC	ENVSAEC02T	Environment Studies	02	25	Compulsory
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) chosenfromthe list ofsubjectsgivenin section 1.3
	SEC	GEOSSEC01M	Remote Sensing	02	25	Compulsory

IV	Core	GEOACOR08T	Regional Planning and Development	06	75	Compulsory
	Core	GEOACOR09T	Economic Geography	06	75	Compulsory
	Core	GEOACOR10T	Environmental Geography	04	50	Compulsory
		GEOACOR10P	Environmental Geography (Lab)	02	25	
	GE	XXXAGEC04T		06	75	Second course of the same subject (B) taken as XXXHGEC03T
	SEC	GEOSSEC02M	Advanced Spatial Statistical Techniques	02	25	Compulsory
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	
VI	Core	GEOACOR13T	Evolution of Geographical Thought	06	75	Compulsory
	Core	GEOACOR14T	Disaster Management	04	50	Compulsory
		GEOACOR14P	Disaster Management (Lab)	02	25	Compulsory
	DSE	GEOADSE04T	Hydrology and Oceanography	06	75	Compulsory
		GEOADSE05T	Social Geography	06	75	Students to choose any one of the two courses (05T or 06T)
	DSE	GEOADSE06T	Resource Geography	06	75	

Distribution of Courses across semesters for Geography General (B.A./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
II	Core (DSC 1B)	GEOGCOR02T	Human Geography	06	75	From Geography
	Core (DSC 2B)	XXXGCOR02T		06	75	Subject 2 apart from Geography
	Core (DSC 3B)	XXXGCOR02T		06	75	Subject 3 apart from Geography
	AECC	ENVSAEC02T	Environment Studies	02	25	Shared course
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

IV	Core (DSC 1D)	GEOGCOR04T	Environmental Geography	06	75	From Geography
	Core (DSC 2D)	XXXGCOR04T		06	75	Subject 2 apart from Geography
	Core (DSC 3D	XXXGCOR04T		06	75	Subject 3 apartfrom Geography
	SEC2	XXXSSEC02M	Advanced Spatial Statistical Techniques	06	75	Shared course
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
VI	DSE1B	GEOGDSE04P	Project Report Based on Field Work	06	75	Compulsory from Geography
	DSE2B	XXXGDSE01T		02	25	Subject 2 apart from Geography
	DSE3B	XXXGDSE01T		06	75	Subject 3 apart from Geography
	SEC3			06	75	Shared course

COURSE OUTCOMES

The course outcomes of the different papers offered are presented below. After completion of the course the student will be able to:

	Course Title		Course Outcomes
	Geotectonics and Geomorphology		• Understand the theories and fundamental concepts of Geotectonic and Geomorphology. Understand earth's tectonic and structural evolution. Gain knowledge about earth's interior. Develop an idea about concept of plate tectonics, and resultant landforms. • Acquire knowledge about types of folds and faults and earthquakes, volcanoes and associated landforms. • Understanding crustal mobility and tectonics; with special emphasis on their role in landform development. • Overview and critical appraisal of landform development models. • Ablity to record temperature, pressure, humidity and rainfall • Develop the skills of identification of features and correlation between them. • Do field surveys using appropriate techniques. • Identification of rocks and minerals.
	Cartographic Techniques		• Understand and prepare different kinds of maps. • Recognize basic themes of map making. • Development of observation skills.
	Human Geography		• Gain knowledge about major themes of human Geography. • Acquire knowledge on the history and evolution of humans. • Understand the approaches and processes of Human Geography as well as the diverse patterns of habitat and adaptations. • Develop an idea about space and society

	Thematic Mapping and Surveying		• Comprehend the concept of scales and representationof data through cartograms. • Interpret geological and weather maps. • Learn the usages of survey instruments. • Brings direct interaction of different types of surveying instruments like Dumpy level and Theodolite with environment. • Develop an idea about different types of thematic mapping techniques.
	Climatology		• Understand the elements of weather and climate, different atmospheric phenomena and climate change. • Learn to associate climate with other environmentaland human issues. Approaches to climate classification. • To analyze the dynamics of the Earth's atmosphere and global climate. Assessing the role of man in global climate change. • Prepare various climatic maps and charts and interpret them. • Learn to use of various meteorological instruments. • Learn the interaction between the atmosphere and the earth's surface. Understand the importance of the atmospheric pressure and winds. • Understand how atmospheric moisture works.
	Hydrology and Oceanography		• Analyse the concepts of Hydrology and Oceanography • Emphasizing the significance of groundwater quality and its circulation • Evaluate the role of the global hydrological cycle. • Studying the behavior and characteristics of the global oceans. • Realize the importance of water conservation. • Identify marine resources and characteristics of ocean waters. • Interpret hydrological and rainfall dispersion graphsand diagrams.

	Statistical Methods in Geography		e Learn the significance of statistics in geography. Understand the importance of use of data in geography Recognize the importance and application of Statistics in Geography Interpret statistical data for a holistic understanding of geographical phenomena. Know about different types of sampling. Develop an idea about theoretical distribution. Learn to use tabulation of data. Gain knowledge about association and correlation.
	Economic Geography		Understand the concept of economic activity, factors affecting location of economic activity. Gain knowledge about different types of Economic activities Assess the significance of Economic Geography, the concept of economic man and theories of choice. Analyze the factors of location of agriculture and industries. Understand the evolution of varied types of economic activities. Map and interpret data on production, economic indices, transport network and flows.
	Regional Planning and Development		Understand and identify regions as an integral part of geographical study. Appreciate the varied aspects of development and regional disparity, in order to formulate measures of balanced development. Analyzing the concept of regions and regionalization. Studying typical physiographic, planning, arid and biotic regions of India. Understanding the detailed geography of India.

	Regional Planning andDevelopment		• Gain knowledge about definition of region, evolution and types of regional planning. Develop an idea about choice of a region for planning. • Build an idea about theories and models for regional planning. Know about measuring development indicators. • They can know about delineation of formal regions by weighted index method and also delineation of functional regions by breaking point analysis. • Gain knowledge about measuring inequality by Location Quotient, and also measuring regional disparity by Sopher Index
	Soil and Biogeography		□ Have knowledge about the character and profile of different soil types. □ Understand the impact of man as an active agent of soil transformation, erosion and degradation. □ Recognize land capability and classify it. □ Explaining the Pedological and Edaphological Approaches to Soil Studies - Processes of soil formation, types of soil, and principles of soil and land classification; and management. □ Understand the varied ecosystems and classify them. □ Recognize the significance of biogeochemical cycles and biodiversity. □ Comprehend the devastating impact of deforestation. □ Identify soil types and derive their pH.
	Rural Development		• Rural Development: Concept, basic elements, measures of level of rural development [5] • 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] • Area based approach to rural development: Drought prone area programmes, PMGSY, SJSY, MNREGA, Jan Dhan Yojana [10]

			• Rural Governance: Panchayati Raj System and rural development policies and Programmes in India [5]
	Research Methodology and Fieldwork		• Have expertise in identification of area of study, methodology, quantitative and quantitative analysis, and conclusions to be drawn about the area – fundamental to geographical research. • Handle logistics and other emergencies on field. • Develop skills in photography, mapping and video recording.
	Remote Sensing, GIS and GNSS		• Have knowledge of the principles of remote sensing, sensor resolutions and image referencing schemes.
			• Interpret satellite imagery and understand the preparation of false color composites from them. • Training in the use Geographic Information System (GIS) software for contemporary mapping skills. • Analyzing and interpreting remotely sensed satellite images and aerial photographs in order to understand topographical and cultural variations on the Earth's surface. • Conducting field excursions and preparation of field report on research on problem in different areas of India • Apply GIS to the preparation of thematic maps. • Use GNSS.

	Evolution of Geographical Thought		• Perceive the evolution of the philosophy of Geography. • Appreciate the contribution of the thinkers in Geography. • Give power point presentations on different schools of geographical thought. • Discussing the evolution of geographical thought from ancient to modern times. • Establishing relationship of Geography with other disciplines and man-environment relationships. • Analyzing modern and contemporary principles of Empiricism, Positivism, Structuralism, Human and Behavioral Approaches in Geography
	Hazard Management		• Understand the nature of hazards and disasters. • Assess risk, perception and vulnerability with respect to hazards. • Prepare hazard zonation maps. • Assessing the nature, impact and management of major natural and man-made hazards affecting the Indian subcontinent.

COURSE OUTCOMES

[DISCIPLINE SPECIFIC ELECTIVES]

	Course Title	Credits	Course Outcomes
	Resource Geography		• Understand the concept and classification of resources • Understand the approaches to resource utilization • Appreciate the significance of resources • Assess the pressure on resources • Analyze the problems of resource3 depletion with special reference to forests, water and fossil fuels • Understand the concept of Sustainable Resource development • Understand the distribution, utilization, problems and management of metallic and non-metallic mineral resources • Analyze the contemporary energy crisis and assess the future scenario • Understand the concept of Limits to Growth, resource sharing and sustainable use of resources • Develop the skill of mapping forest cover from satellite images • Develop the skill of mapping water bodies from satellite images • Analyze the decadal changes in state-wise production of coal and iron ore • Learn to compute HDI

	Cultural and Settlement Geography		• Understand the scope and content of cultural geography • Trace the development of cultural geography in relation to allied disciplines • Understand the concept of cultural hearth and realm, cultural diffusion, diffusion of religion • Develop an understanding of cultural segregation and cultural diversity, technology and development • Learn about the various races and racial groups of the world • Identify the cultural regions of India • Acquire knowledge about Rural settlements- Definition, nature and characteristics • Analyze the morphology of rural settlements • Learn the rural house types, census categories of rural settlements and idea of social segregation • Learn the census definition and categories of urban settlements • Analyze the urban morphology models of Burgess, Hoyt, Harris and Ullman • Differentiate between city-region and conurbation • Analyze the functional classification of cities • Develop the skill of mapping language distribution of India • Learn to plot proportional squares to illustrate housing distribution • Acquire the skill of identifying rural settlement types from topographical sheet • Understand Social Area Analysis of a city based on Shevky and Bell

	Urban Geography		• Understand the nature, scope, approaches and recent trends in Urban Geography • Temporal analysis of urban growth using census data • Trace the origin of urban places over time and analyze the factors, stages and characteristics of these places • Analyze the theories of urban evolution and growth, Hierarchy of urban settlements • Understand the various aspects of urban place : location, site and situation; Rank-size rule and Law of primate city • Understand the concept of urban hierarchies • Understand the patterns of urbanization in developed and developing countries • Understand the ecological processes of urban growth; urban fringe; city-region • Analyze the models on city structure • Identify and analyze the problems of housing, slums and civic amenities • Understand the patterns and trends of urbanization in India • Assess the policies on urbanization in post-liberalized India • Study the changing land use of Delhi, Kolkata and Chandigarh • Learn the technique to plot Rank-Size Rule and establish a hierarchy of urban settlements • Assess state-wise variation and trends of urbanization • Learn to analyze census data to measure urban growth • Develop a skill to prepare urban land use map from satellite images

PROGRAMME SPECIFIC OUTCOMES

(PSO)

- PSO 1 - Student will gain the knowledge of physical geography. They will gather knowledge about the fundamental concepts of Geography and will have a general understanding about the geomorphologic and geotectonic process and formation. Imbibing knowledge, skills and holistic understanding of the Earth, atmosphere, oceans and the planet through analysis of landform development; crustal mobility and tectonics, climate change.

- PSO 2 – Associating landforms with structure and process; establishing man-environment relationships; and exploring the place and role of Geography vis-a-sis other social and earth sciences. Students can easily correlate the knowledge of physical geography with the human geography. They will analyze the problems of physical as well as cultural environments of both rural and urban areas. Moreover they will try to find out the possible measures to solve those problems

- PSO 3 – Understanding the functioning of global economies, geopolitics, global geostrategic views and functioning of political systems

- PSO 4 – Developing a sustainable approach towards the ecosystem and the biosphere with a view to conserve natural systems and maintain ecological balance.

- PSO 5 –The physical environment, human societies and local and/or global economic systems are integrated to the principles of sustainable development

- PSO 6 – Inculcating a tolerant mindset and attitude towards the vast socio-cultural diversity of India by studying and discussing contemporary concepts of social and cultural geography. Explaining and analyzing the regional diversity of India through interpretation of natural and planning regions.

- PSO 7 – Analyzing the differential patterns of the human habitation of the Earth, through studies of human settlements and population dynamics. Understanding and accounting for regional disparities, poverty, unemployment and the impacts of globalization

- PSO 8 – Understanding the history of the subject; over viewing ancient and contemporary geographical thought and its relationship with modern concepts of empiricism, positivism, radicalism, behaviouralism , idealism etc.

- PSO 9 – Sensitization and awareness about the hazards and disasters to which the subcontinent is

vulnerable; and their management.

- PSO 10 – As a student of the Course they will enrich their observation power through field experience and in future this will be helpful for identifying the socio- environmental problems of their community.

- PSO 11 – Training in practical techniques of mapping, cartography, software, interpretation of maps, photographs and images etc; so as to understand the spatial variation of phenomena on the Earth's surface. They will learn how to prepare map based on GIS by using the modern geographical map making techniques.