

Course Outcome for Post Graduate Programme in Geography

Post-Graduate Department of Geography
Krishnagar Govt. College

Two-year GEOGRAPHY PG (M. A and M. Sc) Course
(Semester System with Credit and course)

COURSE OUTCOME

SEMESTER I

Course Code	Course Title	Credit	Course Outcome
GEO/CC/T-101	Geotectonics, Geomorphology and Hydrology	6	<ul style="list-style-type: none">○ Gain knowledge about the Earth's interior○ Understand the tectonic and structural influence on the evolution of the Earth.○ Develop an idea about the concept of plate tectonics and resultant landforms.○ Acquire knowledge about coastal morphodynamics and periglacial landforms.○ Will be able to recognize basin hydrology.○ Avail the knowledge on drought management and watershed management.
GEO/CC/T-102	Climatology	4	<ul style="list-style-type: none">○ Develop clear concepts on different components and elements of climate.○ Develop a greater understanding of the nature of climate change and its impacts○ Acquire knowledge of the impact of global warming at the local, regional, and global levels
GEO/CC/T-103	Soil and Biogeography	4	<ul style="list-style-type: none">○ Understand various processes of soil formation.○ Know about the character and profile of different soil types○ Understand the impact of man as an active agent of soil degradation and conservation○ Understand the concepts of adaptation, succession, and climax in plant ecology○ Know the issues and challenges of biodiversity○ Identify national parks, biosphere reserves, and sanctuaries in India.
GEO/CC/T-104	Geographical Thought	6	<ul style="list-style-type: none">○ Acquire concepts of geographical thoughts through ancient, medieval, and modern periods;○ Know the recent trends and paradigms shift in geography

			<ul style="list-style-type: none"> ○ Develop philosophical and historical aptitude in the evolution and development of geographical ideas ○ Acquaint with the philosophers of different schools of thought. ○ Understands the basic theme and ideas of feminist, welfare, and postmodern geography
GEO/CC/P-105	Morphometric Analysis and Surveying	6	<ul style="list-style-type: none"> ○ Know quantitative and qualitative estimation and geomorphic analysis of a selected drainage basin ○ Able to draw geomorphological maps and measure some selected fluvial parameters ○ Learn to analyze and measure fluvial properties of a drainage basin. ○ Develop knowledge on the use of survey instruments Transit Theodolite ○ Acquire the concept of GNSS and Total Station
GEO/AECC/P-106	Perception Survey	2	<ul style="list-style-type: none"> ○ Learn to construct a questionnaire for socioeconomic and Geotectonics, Geomorphology and hydrology survey ○ Able to prepare perception survey reports based on primary surveys.

SEMESTER II

GEO/CC/T-207	Population and Settlement Geography	4	<ul style="list-style-type: none"> ○ Know the demographic studies related to trends, patterns, and measures of population dynamics ○ Acquire knowledge to analyze data from the primary and secondary sources ○ Gain the knowledge on age-sex pyramid, fertility, and mortality ○ Develop the idea of migration and its importance ○ Know the rural-urban dichotomy and interaction, with types, patterns, and segregation of rural settlements in India ○ Develop the concepts of urbanization in India, and urban renewal in the Indian context ○ Acquire the idea of theories and models of settlement study
--------------	-------------------------------------	---	--

GEO/CC/T-208	Research Methodology	4	<ul style="list-style-type: none"> ○ Will acquire the skill to identify the research problems. ○ know about the techniques of writing a scientific report based on a field survey. ○ Will have the ability to select an area, field techniques and tools to write a field report. ○ Develop expertise in quantitative and quantitative analysis, ○ Learn to handle logistics and other emergencies outside the classroom environment.
GEO/CC/T-209	Cartography and Geoinformatics Theory	4	<ul style="list-style-type: none"> ○ Develop the concept of geoid. spheroids with special reference to Everest and WGS-84 ○ Know about the resolution of satellite data, remote sensing platforms, and sensors in Landsat, IRS, and Sentinel series ○ Acquire knowledge of Digital Elevation Model types and sources, analytical modeling in GIS, GNSS-GIS integration ○ Know digital Image Processing – radiometric correction, georeferencing, and mosaicking ○ Able to FCC preparation and Image Classification.
GEO/CC/P-210	Remote Sensing and GIS Practical	6	<ul style="list-style-type: none"> ○ Gain knowledge on remote Sensing of the environment, elements of Visual Image Interpretation for Mapping ○ Can assess the scientific principles of Remote Sensing Techniques and observe and apply satellite-based remote sensing data ○ Able to map relief characteristics using digital elevation model – relief; slope; aspect; contour with QGIS software ○ Know the calculation of indices NDVI and NDWI ○ Capable of integration of spatial and non-spatial data and preparation of thematic maps using software.
GEO/CC/P-211	Project using Remote Sensing and GIS Practical	2	<ul style="list-style-type: none"> ○ Learn to prepare an individual project using Remote Sensing and GIS techniques by QGIS software following broad areas like physical environment, socio-cultural Environment, etc.

GEO/GEC/T-212	Elements of Geography (Open Course)	4	<ul style="list-style-type: none"> ○ This is an open-choice course opted by post-graduate students of other disciplines of the college. ○ They can develop the knowledge of the geographical spectrum of the Earth. ○ Know the layering of the earth with special reference to the crust, fluvial processes, and landforms ○ Acquire the concept of Indian monsoon and types of agriculture ○ know about crisis, conservation, and management of resources and sustainable development ○ Learn concepts and types of scale and map, land survey instruments and their uses ○ Able to know the concept and classification of hazards and hazards in West Bengal.
SEMESTER III			
GEO/CC/T-313	Social Geography, Cultural Geography, and Economic Geography	4	<ul style="list-style-type: none"> ○ Know the society in terms of elements, structure, and processes; Social exclusion and inclusion ○ Acquire the knowledge of technology in the evolution of culture, Cultural landscape, and Cultural diffusion ○ Gain in-depth knowledge of the concepts of migration and diaspora. ○ Acquire knowledge of the fundamental and modern issues in Economic Geography ○ Develop knowledge of international trade, the role of GATT in the LPG Economy ○ Able to know the role of export processing zone, Special Economic Zone; Exclusive Economic Zone
GEO/CC/T-314	Political Geography and Historical Geography	4	<ul style="list-style-type: none"> ○ Develop the concept of state after Ratzel and Marx ○ know about Colonialism, Imperialism, and Federalism; Core-periphery concept ○ Will have the ability to get the idea of politico-economic blocs. ○ Develop the Concept of electoral geography. Historical Geography, and territorial organization in India. ○ Will know the basic perspective of political geography, and state concept of frontiers and boundaries ○ Acquire knowledge of Postcolonial

			urbanization in India
GEO/CC/T-315	Geography of Hazards and Disasters	4	<ul style="list-style-type: none"> ○ Understand the nature and types of hazards and disasters. ○ Assess the risk, perception, and vulnerability of hazards and disasters ○ Develop the concept of preparedness, resilience, and capacity building for hazards ○ Acquire knowledge on Arsenic contaminations in deltaic Bengal and Fluoride contaminations in the western part of West Bengal.
GEO/DSE/UG/T-316	Urban Geography-I (Special Paper)	4	<ul style="list-style-type: none"> ○ Develop a deeper understanding of Urban geography ○ Know the spatial and temporal basis of urban studies with special reference to India ○ Patterns and process of urbanization in Independent India ○ Acquaint with the origin and classification of urban settlements by Mumford, J.M. Houston, G. Taylor, C.D. Haris and Nelson ○ Able to know the concepts of metropolis, megalopolis, ecumenopolis, conurbation, ○ megacity, sister towns, green cities, urban-rural continuum.
GEO/DSE/FG/T-316	Fluvial Geomorphology-I (Special Paper)	4	<ul style="list-style-type: none"> ○ Understand Hydraulics of channel flow, types of flow; type of links, number of links ○ Recognize Channel initiation and evolution of channel pattern, importance of headward extension and branching, lateral expansion ○ Gain an appreciation of geomorphic processes of erosion, deposition, and transportation. ○ Acquire knowledge of nature and characteristics, flood plain and deltaic plain deposits
GEO/CC/P-317	Quantitative Techniques in Geography	6	<ul style="list-style-type: none"> ○ Able to apply comprehensive knowledge of statistics for the analysis of geographical data ○ Know correlation and regression among spatio-temporal data ○ Learn Spatial Analysis and quantitative measurement of spatial data. ○ Can measure probability and became expert in techniques for analysis of data in research.

GEO/CC/P-318	Field Work	2	<ul style="list-style-type: none"> ○ Know to prepare an individual field report following physical, socio-cultural, and politico-economic issues based on comprehensive fieldwork in a village/mouza/town/C.D. Block/drainage basin selecting a particular research problem.
SEMESTER IV			
GEO/DSE/UG/T-419	Urban Geography-II (Special Paper)	4	<ul style="list-style-type: none"> ○ Develop the concept of contemporary city ecology, planning region in Urban Arena ○ Acquire the idea of the role of urban hierarchy in regional planning in India ○ Learn urban morphology and the relevant models of the experts ○ Know social segregation in the city and social area analysis
GEO/DSE/FG/T-419	Fluvial Geomorphology-II (Special Paper)	4	<ul style="list-style-type: none"> ○ will learn about the classic themes in fluvial geomorphology as well as emerging topics in the discipline ○ Learn and master the fundamentals of hydraulic geometry, river channel pattern, and channel modification. ○ develop advanced knowledge in fluvial geomorphology which deals with the action of the flow of water in the development of landforms. Different mechanisms and processes both traditional and contemporary have been included to cover up the important aspects of the subject. ○ Ability to understand the process and mechanism involved in stream corridor management.
GEO/DSE/UG/T-420	Urban Geography-III (Special Paper)	4	<ul style="list-style-type: none"> ○ Develop the concept of urban space, CBD, neighborhood, and communities ⊖ Know the structure of a specific urban area and slums in Urban India ○ Know migration linkages in India during the post-independence phase ○ Learn about gentrification, the city's ecological footprint ○ Gain knowledge on urban development and planning in India, the concept of AMRUT, and Smart city ○ Know the application of remote sensing and GIS in urban planning and management in India

GEO/DSE/FG/T-420	Fluvial Geomorphology-III (Special Paper)	4	<ul style="list-style-type: none"> ○ Learn fluvial hydro system approach and hypsometric analysis of drainage basin and its significance ○ Can compute measures of topologically integrated channel network ○ Get knowledge on quantitative analysis of channel planforms, and meander indices. ○ Learn channel hydrology and hydrograph computation ○ Capable of measuring the vulnerability analysis of floods and riverbank erosion
GEO/DSE/UG/T-421	Urban Geography-IV (Special Paper)	4	<ul style="list-style-type: none"> ○ Develop the concept of air, water, soil, and noise pollution in Indian metropolis ○ Know sanitation and sewerage-related problems in Indian cities ○ Learn about poverty, crime, and juvenile delinquency in urban India ○ Identify the urban transport system and its associated problems in Indian megacities.
GEO/DSE/FG/T-421	Fluvial Geomorphology-IV (Special Paper)	4	<ul style="list-style-type: none"> ○ Identify fluvial hazards and Know flood and riverbank erosion in West Bengal ○ Gain knowledge on river discharge at Farakka Barrage and related issues ○ Have a focus on need and significance watershed management ○ Develop the concept of Tista megafan processes, ○ Sundarban processes, landforms, and hazards
GEO/DSE/UG/P-422	Urban Geography-V (Special Paper)	6	<ul style="list-style-type: none"> ○ Develop the practical concepts related to spatial analysis of geographical data, morphology of urban area, application of matrix, testing urban rank-size rule and its application ○ Acquire knowledge and training to collect and analyze data from primary and secondary sources ○ Apply requisite analytical and technical skills in diverse fields of urban geography ○ Analyse and construct spatial and temporal maps
GEO/DSE/FG/P-422	Fluvial Geomorphology-V (Special Paper)	6	<ul style="list-style-type: none"> ○ Able to know Quantitative and qualitative estimation and geomorphic analysis of a selected drainage basin along with Geomorphological mapping and measurements of some selected fluvial parameters ○ Develop skills on analysis and measurements of fluvial properties of a drainage basin. ○ Use the knowledge in further academic

			development.
GEO/DSE/UG/P-423	Urban Geography-VI (Special Paper)	6	<ul style="list-style-type: none"> ○ Know how to prepare an individual field report based on comprehensive fieldwork on any urban area with a particular research problem
GEO/DSE/FG/P-423	Fluvial Geomorphology-VI (Special Paper)	6	<ul style="list-style-type: none"> ○ Able to prepare an individual field report based on comprehensive field work on any river basin or aspects of fluvial system with a particular research problem