GEOGRAPHY

Programme Specific Outcomes (PSOs): Geography is the study of places in relations to people and environments. Geographers examine how human culture interacts with the natural environment and the way those spatial 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 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.

| Programme offered | Outcomes |
|--------------------------------|--|
| by the Department | |
| | On completion of the Programme, the students would be able to PSO1. Gain knowledge on philosophical base of the subject: Students can gain knowledges of the fundamental basis and historical progression of the subject. PSO2. Acquiring knowledge of physical and social interaction: Students will have a general understanding about the physical process in relation to space and time. They will be able to acquire the knowledge of social processes on various physical environment. Thus they will be capable to correlate the knowledge of physical geography with the human geography. |
| B.A./B.Sc Honours Programme | PSO3. Applications of modern technologies: They will be able to learn the applications of various modern tools and technologies including Remote Sensing & GIS which can help Regional Planning for societal development |
| | PSO4. Development of observation power: Students will be capable to develop their observation power through field experience and in future they will be able to identify the socio-environmental problems of a locality. |
| | PSO5. Development of Communication Skill and Interaction Power: After completion of the project works they will be efficient in their communication skill as well as power of social interaction. |

On completion of the Programme, the students would be able to

PSO1. Gain knowledge on philosophical base of the subject:

Students can gain knowledges of the fundamental basis and historical progression of the subject.

PSO2. Acquiring knowledge of physical and social interaction:

Students will have a general understanding about the physical process in relation to space and time. They will be able to acquire the knowledge of social processes on various physical environment. Thus they will be capable to correlate the knowledge of physical geography with the human geography.

B.A./B.Sc. Programme Course (General)

PSO3. Applications of tools and technologies:

They will be able to learn the applications of various modern tools, statistics and technologies which can help to apply these for planning purpose.

PSO4. Development of observation powers:

They will be capable to develop their observation power through field experience that enabled to identify the socio-environmental problems of a locality.

PSO5. Uunderstanding the environmental problems :

They will learn different environmental problems and enabled knowledge to mitigate the problems.

GEOGRAPHY

Course Outcomes

B.A./B.Sc Honours Programme

| Semester | Course Code | Course Title | Outcomes | |
|----------|----------------|-----------------|---|--|
| I | CC1 | Geotectonic | Understanding earth's tectonic and structural evolution with relation to geological time scale. Gain knowledge about earth's interior with the help of different indirect observations especially seismology and isostasy. Acquire knowledge about earth movements with mountain building theories, folds and faults and associated landforms. Develop an idea about concept of plate tectonics, continental drift and sea floor spreading and resultant landforms. Develop practical idea about scale and map projections. | |
| | CC2 | Geomorphology | Understanding Geomorphology as a discipline of Landform Studies along with its fundamental concepts. Gain knowledges on geomorphic processes: weathering, mass wasting and cycle of erosion. Examine the landform evolution processes in relation to of erosional and depositional activities: fluvial, aeolian, glacial, coastal and karst. Understanding the Slope development processes and theories of slope development (Davis, Penck and King). Develop practical ideas on rocks and minerals as key of landform evolution with topographical maps. | |
| II | CC3 | Human Geography | Understanding the discipline of Human Geography, its Scope and content. Develop knowledge base on space and society: cultural regions; race, language, religion and caste; Finding the temporal changes and spatial distribution of population and its composition with the theory of Malthus; Population Policy of India, 2000; | |

| | | | Finding population-resource relationship and Population resource regions of the world (Ackerman) Develop practical knowledge of presenting population data by diagrams and thematic maps. Finding the origin and historical growth of rural and urban settlements: types, patterns and |
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| | CC4 | Settlement Geography | morphology. 2. Tracing the trends and patterns of world urbanization from ancient to modern period. 3. Strengthened knowledge on theories of urban land use model. 4. Creating consciousness on the growing knowledge on Settlement Geography. |
| | CC5 | Climatology | Understanding the atmospheric composition and structure; insolation and temperature: factors and distribution, heat budget, temperature inversion. Finding out the relationships among atmospheric pressure, winds: planetary winds, circulation, jet streams. Gain knowledge on Monsoon, atmospheric moisture: evaporation, humidity, condensation, precipitation types and climatic regions of the world. Finding the origins of tropical cyclones and extra tropical cyclones. Strengthen knowledge base on explanation of Indian Daily Weather Reports and reading data from the instruments. |
| III | CC6 | Statistical Methods in Geography | Creating consciousness on growing importance of statistics as a tool in Geographical research. Learning various forms and sources of data collection in Geography: Learning modern statistical analysis techniques as means to problem solving tools; scales of measurement (nominal, ordinal, interval, and ratio); Sampling: purposive, random, systematic and stratified. Gain knowledge on theoretical concept and practical applications of probability distribution, Rank Correlation and Regression. |
| | CC7 | Geography of India | Gain extensive knowledge on different physical components and characteristics of India. Finding on economic resources of the country: mineral and power resources iron ore, coal, petroleum, gas; agricultural production industrial development: Automobile and Information Technology. |

| | Remote Sensing | | Gain knowledge on diverse social components of India and their spatial distribution e.g. race, caste, religion, language and tribes; Applications of the different scheme of Regionalization of India. Know the Remote Sensing and allied techniques. Gain knowledge on Satellite Remote Sensing: Principles, EMR Interaction with atmosphere and earth surface; satellites (Landsat and IRS); sensors; Visual Satellite Image Interpretation etc. Skill enhancement on Remote Sensing techniques and its applications of Remote Sensing in Land use/Land cover mapping. |
|------|----------------|-----------------------------------|--|
| SEC1 | | Rural Development | Know various concepts of Rural Development its basic elements, measures of level of rural development; Finding paradigms of rural development; from Gandhian approach to Lewis model of economic development. Gain knowledge about major Rural Development Programmes implemented in India: PMGSY, SJSY, MNREGA, Jan Dhan Yojana and NABARD; Panchayati Raj System and rural development policies. |
| | CC8 | Economic Geography | Understanding the economic activities and factors affecting location of economic activity with special reference to agriculture. Gain knowledge on various primary economic activities prevailing in the World. Gain knowledge on various secondary economic activities: Manufacturing (Cotton Textile, Iron and Steel), Special Economic Zones and Technology Parks; Gain knowledge on growing popularity of tertiary activities: transport, trade and services. Applications of indices to analyze transport accessibility. |
| IV | CC9 | Regional Planning and Development | Understanding the concepts of region and regional planning in the light of evolution and growth. Finding the Planning regions in the contemporary World and its relevance to regional planning. Gaining knowledge about the delineation of different planning regions and its application to regionalization of India. Understanding different theories and Models for regional planning. Finding the measures for development and their indicators: economic, social and environmental |

| | CC10 | Field Work and Research Methodology | Making awareness about the needs of Field work in Geographical studies. Establishing spatial relationships between physical and human components. Enhance technical base of Field study; comparing merits, demerits and selection of the appropriate technique; observation (participant and non-participant), questionnaires (open, closed, structured and non-structured); interview with special focus on focused group discussions. Identifying research problems; objectives and hypothesis which can generate knowledge for future research works. |
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| | SEC2 | Geographical Information System | Gaining knowledge on Geographical Information System (GIS). Gain knowledge on Global Positioning System (GPS), GIS Data Structures, GIS Data Analysis etc. Finding growing popularity and Application of GIS: Land use mapping; urban sprawl analysis, forests monitoring etc. |
| | SECZ | Tourism Management | Gaining knowledge on Tourism Management as growing discipline of Geography. Establishing the nature and scope, inter-relationships of tourism, recreation and leisure; geographical parameters of tourism. Finding different type and nature of tourism: Nature tourism, Cultural tourism, Medical tourism, Pilgrimage tourism and Ecotourism in the World. Focus on recent Trends of Tourism in India and World. |
| V | CC11 | Environmental Geography | Finding the historical progression of Environmental Geography. Finding the human-environment relationships: adaptation in different biomes (tundra, savanna and equatorial). Know the various ecosystem of the World and adaptation mechanism in special environmental conditions. Know global, national and regional environmental programmes and policies. Creating consciousness and perceptions by making project report on surrounding environmental problems. |
| | CC12 | Remote Sensing and GIS | Gaining knowledge on Remote Sensing and Geographical Information System (GIS) as popularly growing discipline of Planning and map making. Gain knowledge on Global Positioning System (GPS), GIS Data Structures, and GIS Data Analysis etc. |

| | | Finding growing popularity and Application of GIS: Land use mapping; urban sprawl analysis, forests monitoring etc. Skill enhancement on Remote Sensing techniques and its applications of Remote Sensing in Land use/Land cover mapping. Practical experiencing on GIS software and data management. |
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| | Population Geography | Know the facts on population related parameters, problems and dynamics. Gaining knowledge on sources of population data distribution and growth of Population. Analyzing theories of population; (Malthusian Theory and Optimum Population Theory). Finding contemporary issues of Population Geography: ageing of population; declining sex ratio, HIV/AIDS etc. Gaining knowledge about future population growth with various statistical tools. |
| DSE1 | Resource Geography | Finding the natural distribution of different natural resources, their utilization, problems and management practices. Finding the distribution, utilization, problems and management of forests and energy resources. Making practices on conservation of natural resources, sustainable resource development. Skill enhancement to handle data on Computation of Human Development Index in national and local level. |
| DGE4 | Urban Geography | Expanding knowledges on Urban Geography. Finding the pattern of urbanization in developed and developing countries. Awareness on functional classification of towns and cities: quantitative and qualitative methods (F.S, Hudson, C.D. Harris and R. Ramachandran). Know the dark sides of Urban Issues: problems of housing, slums, civic amenities. |
| DSE2 | Agricultural Geography | Gain knowledge on Agricultural Geography and allied disciplines. Finding the determinants of Agriculture: Physical, technological and institutional. Identifying the Agricultural Regions of India for planning purpose: Agro-climatic, Agro-ecological & Crop Combination Regions. Expanding knowledge on Agricultural Systems of the world, Agricultural land use model and Agricultural revolutions in India: Green, White and Blue. |

| | | | 5. Experimenting different parameters for regionalization scheme of Agriculture. |
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| | CC13 | Evolution of Geographical Thoughts | Finding the philosophical base of Geographical ideas during the ancient period in Western world and India. Gain knowledge on evolution of geographical ideas during the medieval period in Western world and India. Examining the trends of modern geographical thinking in Germany, France, Britain, and United States of America. Experiencing Debates on Geographical themes: Environmental Determinism and Possibilism, Systematic and Regional. |
| | CC14 | Disaster Management | Gain extensive knowledge of hazards and disasters. Experiencing towards approaches to hazard study: Risk perception and vulnerability assessment. Finding cause-effect relationships of environmental hazards and mitigation practices. Application of knowledge to the human society for the betterment of livelihood. Trace the fundamentals of cartography, map making science. |
| VI | | Advanced Cartography | Trace the fundamentals of cartography, map making science. Know Survey techniques for map making purpose. Gain knowledge on various Map Projections: Derivation, Properties, advantages and limitations. Know the modern Cartographic tools: Remote Sensing and GIS Techniques. |
| | DSE3 | Political Geography | Finding the concepts, nature and scope of Political Geography. Know the Concept of nation, state and nation state, Attributes of states: frontiers and boundaries; geopolitics; theories (Heartland and Rimland). Gain knowledge on Political Geography of resource conflicts: water sharing disputes, conflicts related to forest rights in India. Know the Politics of displacement: Issues of relief, compensation and rehabilitation: with reference to dams in India. |
| | DSE4 | Hydrology and Oceanography | Gain knowledge on hydrological cycle and associated system. Gather information on human impact on the hydrological cycle; precipitation, interception, evaporation, evapo-transpiration, infiltration, ground-water, run off and over land flow; hydrological input and output. |

| | | | 3. Understand the bottom topography of oceanic surface.4. Gain knowledge base on water crisis and related problems with the help of management practices. |
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| | | Social Geography | Gain knowledge on Social Geography and continuous relevance of the discipline. Gain knowledge on human being as a workforce: Technological and occupational change of the people of India; migration; types, causes and consequences. Extend knowledge base on social elements, e.g. categories: caste, class, religion, race and gender and their spatial distribution. Promote welfare and wellbeing approach to learn societal changes: concept and components: healthcare, housing and education; slums. |
| 1/111 | GE PAPER Physical | | Understanding Origin and evolution of the earth with relation to scientific theories. Gain knowledge about earth's interior with the help of different indirect observations especially seismology and isostasy. Examine the major landform evolution processes in relation to of erosional and depositional activities: fluvial, Aeolian and glacial. Develop practical ideas on rocks and minerals as key of landform evolution with topographical maps. |
| II / IV | GE PAPER 2 | Geography Of India | Gain extensive knowledge on different physical components and characteristics of India. Finding on major economic resources of the country: agriculture and industry. Gain knowledge on diverse social components of India and their spatial distribution e.g. Race, caste, religion, language. Applications of the practical tools to understand micro-level topographic characteristics of India. |

B.A./B.Sc Programme (General):

| Semester | Course Code | Course Title | Outcomes |
|----------|-------------|-----------------------------------|---|
| I | DSC1 | Physical Geography | Understanding Origin and evolution of the earth with relation to scientific theories. Gain knowledge about earth's interior with the help of different indirect observations especially seismology and isostasy. Examine the major landform evolution processes in relation to of erosional and depositional activities: fluvial, Aeolian and glacial. Develop practical ideas on rocks and minerals as key of landform evolution with topographical maps. |
| II | DSC2 | Human Geography | Understanding the discipline of Human Geography, its scope and content. Develop knowledge base on space and society: cultural regions; race, language, religion and caste; Finding the temporal changes and spatial distribution of population and its composition with the theory of Malthus; Population Policy of India, 2000; Finding population-resource relationship and Population resource regions of the world (Ackerman). Develop practical knowledge of presenting population data by diagrams and thematic maps. |
| III | DSC3 | Regional Development | Understanding the concept of Regional Development in relation to Regional planning. Finding root causes of Regional Imbalances and problems of functional regions. Examine the various Strategies models for Regional Planning and Growth Pole Model. Know the Problems Regions and Regional Planning and applications mechanism to eradicate such problems. Enhance participatory skills by doing project works. |
| IV | DSC4 | Spatial Information Technology | Know the historical progression of Spatial Information Technology as an important sub-discipline within the domain of Earth Sciences. Gain knowledges on functions of various Spatial information system: Information retrieval; Topological modelling; networks; overlay; data output. |

| | | | 3. Application of Spatial Information Technology. |
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| | DSE1 | Disaster Management | Gain extensive knowledge of hazards and disasters. Experiencing towards approaches to hazard study: Risk perception and vulnerability assessment. Finding cause-effect relationships of environmental hazards and mitigation practices. Application of knowledge to the human society for the betterment of livelihood. |
| V | | Sustainable Development | Gain extensive knowledge on sustainability and Sustainable Development. Know various approaches of Sustainable Development e.g. the Millennium Development Goals, Inclusive Development, the challenges of universal health coverage, policies and global cooperation for climate change. Implementation mechanisms of Sustainable Development policies and programmes. |
| | GE Paper 1 | Physical Geography | Understanding Origin and evolution of the earth with relation to scientific theories. Gain knowledge about earth's interior with the help of different indirect observations especially seismology and isostasy. Examine the major landform evolution processes in relation to of erosional and depositional activities: fluvial, Aeolian and glacial. Develop practical ideas on rocks and minerals as key of landform evolution with topographical maps. |
| VI | DSE2 | Climate Change: Vulnerability and Adaptation | Know the causes and consequences of Climate change. Identify the physical, social and economic vulnerability in relation to climate change. Finding the Impact of Climate Change: Agriculture and water; flora and fauna; human health. Know the mitigation approaches as a consequences of climate change with particular reference to India. |
| | | Rural Development | Know various concepts of Rural Development its basic elements, measures of level of rural development; Finding paradigms of rural development; from Gandhian approach to Lewis model of economic development. |

| | | | 3. Gain knowledge about major Rural Development Programmes implemented in India. |
|---------|---------------|------------------------------------|--|
| | GE Paper 2 | Geography of India | Gain extensive knowledge on different physical components and characteristics of India. Finding on major economic resources of the country: agriculture and industry. Gain knowledge on diverse social components of India and their spatial distribution e.g. Race, caste, religion, language. Applications of the practical tools to understand micro-level topographic characteristics of India. |
| | | Remote Sensing | Know the Remote Sensing and allied techniques. Gain knowledge on Satellite Remote Sensing: Principles, EMR Interaction with atmosphere and earth surface; satellites (Landsat and IRS); sensors; Visual Satellite Image Interpretation etc. Skill enhancement on Remote Sensing techniques and its applications of Remote Sensing in Land use/Land cover mapping. |
| III / V | SECP1 | Rural Development | Know various concepts of Rural Development its basic elements, measures of level of rural development; Finding paradigms of rural development; from Gandhian approach to Lewis model of economic development. Gain knowledge about major Rural Development Programmes implemented in India: PMGSY, SJSY, MNREGA, Jan Dhan Yojana and NABARD; Panchayati Raj System and rural development policies. |
| IV / VI | SECP2 | Geographical Information System | Gaining knowledge on Geographical Information System (GIS). Gain knowledge on Global Positioning System (GPS), GIS Data Structures, GIS Data Analysis etc. Finding growing popularity and Application of GIS: Land use mapping; urban sprawl analysis, forests monitoring etc. |
| | | Tourism Management | Gaining knowledge on Tourism Management as growing discipline of Geography. Establishing the nature and scope, inter-relationships of tourism, recreation and leisure; geographical parameters of tourism. |

| | 3. | Finding different type and nature of tourism: Nature tourism, Cultural tourism, |
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| | | Medical tourism, Pilgrimage tourism and Ecotourism in the World. |
| | 4. | Focus on recent Trends of Tourism in India and World. |