GE2T. Regional Development (Paper Cede - GEOEGE2)

On the successful completion of the course, students will be able to:

CO1: Identify notable lagging regions and solutions for their overall development
CO2: Have comprehensive understanding regarding the different regions and application of different models and theories for integrated regional development.
CO3: Select appropriate indicators for the measurement of socioeconomic regional development

Semester-III

C5T. Climatology (Paper Code - GEOHCC5)

On the successful completion of the course, students will be able to:

CO1: Understand different composition of air and the structure and layers of atmosphere including the variation of temperature.
CO2: Describe the atmospheric pressure belt and related wind flows and their circulation including the idea about jet stream.
CO3: Understand the atmospheric moisture and related climatic events and depend on this they can classify the different climatic regions.
CO4: Explain the different cyclonic events and their mechanism.

C6T. Statistical Methods in Geography (Practical) (Paper Code – GEOHCC6)

On the successful completion of the course, students will be able to:

CO1: Understand different statistical methods, data source and their tabulation including different scale of measurement in geography.
CO2: Tabulate and calculate different descriptive statistics and can measure the dispersion of the correlated data sets.
CO3: Understand the different techniques of sampling and the distribution of the data and based on this understanding they can associate or co-relate the data by several correlation methods.

C7T. Geography of India (Paper Code – GEOHCC7)

On the successful completion of the course, students will be able to:

CO1: Understand physiographic division of India in terms of natural vegetation, soil, drainage and climatic variation.
CO2: Understand the India's population growth, distribution and social structure.
CO3: Identify the major minerals and resources distributed throughout India including modern development. Explain the regional division of India in different perspectives.

SEC1T. Advanced Spatial Statistical Techniques (Paper Code - GEOHSE1)

On the successful completion of the course, students will be able to:

CO1: Understand the basics of data collection and, processing for the meaningful outcomes
CO2: Understand the selection of proper sampling techniques for the collection of data
CO3: Put into practice the results obtained for spatial analysis of results and to apply various statistical software for the study.

GE3T. Rural Development (Paper Code - GEOEGE3)

On the successful completion of the course, students will be able to:

CO1: Appreciate the concepts, needs and various approaches to rural development;

CO2: Understand the strong economic bases of rural areas of India;
CO3: Appreciate the area based and target group-based approaches and provision of services to rural development

Semester-IV

C8T. Economic Geography (Paper Code - GEOHCC8)

On the successful completion of the course, students will be able to:

CO1: Understand the concept of different economic activities and the theories which recognized the factors affecting the location of economic activity.
CO2: Classify economic activities including their spatial distribution in India and the roles in trade and commerce.

C9T. Environmental Geography (Paper Code – GEOHCC9)

On the successful completion of the course, students will be able to:

CO1: Understand the concept and scope of environmental geography and its interaction with human society and adaptation to environment.
CO2: Understand the structure and function of ecosystem and problems of different climatic ecosystems.
CO3: Be aware of the policies and regulation regarding the protection of natural environment.

C10T. Field Work and Research Methodology (Practical) (Paper Code – GEOHCC10)

On the successful completion of the course, students will be able to:

CO1: Understand the field work techniques and the case studies of different perspectives.
CO2: Build a proper interview questionnaire for filed survey.
CO3: Used different tools for field work and also designed proper filed report with definite objectives, methodology and conclusion.

SEC2T. Research Methods (Practical) (Paper Code - GEOHSE2)

On the successful completion of the course, students will be able to:

CO1: Conduct proper field work for the collection of primary data to bring out grass roots realities.
CO2: Make use of proper tools and surveying methods for measurement in context of collection and processing of data.
CO3: Prepare a report based on field data.

GE4T. Industrial Geography (Paper Code - GEOEGE4)

On the successful completion of the course, students will be able to:

CO1: Understand the factors responsible for location of an industry.
CO2: Differentiate various types of industries and industrial regions and policies of India.
CO3: Evaluate the socio, economic and environmental implications of various types of industries

Semester-V

C11T. Regional Planning and Development (Paper Code - GEOHCC11)

On the successful completion of the course, students will be able to:

CO1: Understand the regional concept and their types and necessity of regional planning.
CO2: Understand the different planning regions of India and regionalization pattern.

CO3: Concern about the theories and model given by many authors about regional planning. The ideas of development and underdevelopment economy and also know the indicators of economic development.

C12T. Remote Sensing and GIS (Practical) (Paper Code - GEOHCC12)

On the successful completion of the course, students will be able to:

CO1: Understand concept of remote sensing and GIS.
CO2: Know about aerial photography and satellite remote sensing and their principle.
CO3: Know the data structures their types and analysis including the image processing techniques and interpolation of this method into different applied perspectives.

DSE1T. Population Geography (Paper Code - GEOHDS1)

On the successful completion of the course, students will be able to:

CO1: Learn the role of demography and population studies as a distinct field of human geography
CO2: Have sound knowledge of key concept, different components of population along with its drivers
CO3: Examine population dynamics and characteristic with contemporary issues

DSE2T. Urban Geography (Paper Code - GEOHDS2)

On the successful completion of the course, students will be able to:

CO1: Understand the fundamentals and patterns of urbanization process
CO2: Learn the functional classification of cities and Central Place Theory
CO3: Know contemporary problems of Delhi, Mumbai, Kolkata and Chennai

Semester-VI

C13T. Evolution of Geographical Thought (Paper Code - GEOHCC13)

On the successful completion of the course, students will be able to:

CO1: Understand concept the evolution of geographical thought.
CO2: Concern about the pre-modern philosophical views and their shifting towards modern to post-modern period.
CO3: Understand the trend and debates in geographical thought and views.

C14T. Disaster Management based Field Project Work (Practical) (Paper Code - GEOHCC14)

On the successful completion of the course, students will be able to:

CO1: Prepare a project thesis on the basis of their understanding, field work and data analysis. Therefore, they can helpful for societal development.

DSE3T. Political Geography (Paper Code - GEOHDS3)

On the successful completion of the course, students will be able to:

CO1: Learn the concept of nation and state and geopolitical theories
CO2: Understand the different dimensions of electoral geography and resource conflicts
CO3: Have sound knowledge of politics of displacement, focusing on dams and SEZ

DSE4T. Hydrology and Oceanography (Paper Code – GEOHDS4)

On the successful completion of the course, students will be able to:

CO1: Understand the basic components of hydrological cycle and comprehend practices ofintegrated watershed management.

CO2: Evaluate the water balancing and river basin and water disputes,
CO3: Study the soil as a basic resource, focusing its distribution, problems and management.

Course Specific Outcomes (CSOs) for M.Sc. in Geography

Semester-I

GEO-101: GEOTECTONICS AND GEOMORPHOLOGY

After course completion the students will have the following learning outcomes:

CO1: Understand the beginning of the universe and its evolution.
CO2: They can learn the methods and techniques of geological dating,
CO3: Understand the plate dynamics of the earth and the resultant events like mountain building, earthquake and volcanism.
CO4: Know the key geomorphological concepts like base level, profile of equilibrium etc.
CO5: Understand the key geomorphological events like weathering and mass wasting and the resultant landforms.
CO6: They can apply their knowledge in different environmental management project.

GEO-102: OCEANOGRAPHY AND HYDROLOGY

After course completion the students will have the following learning outcomes:

CO1: Understand the different physical and ecological zones of the ocean, their physical and chemical properties, ocean wave, tides and their origin.
CO2: Understand the ocean composition, different oceanic landforms and features like lagoons, salt marsh, mangroves, coral reef etc.
CO3: They also understand the dynamics of the ocean, beach character, dunes, barriers ocean properties and laws.
CO4: Students may understand the hydrological cycle water potentiality, rainfall, surface runoff and their measurement techniques including the idea of ground water.

GEO-103: CLIMATOLOGY, SOIL AND AGRICULTURAL GEOGRAPHY

After course completion the students will have the following learning outcomes:

CO1: Understand the nature and subject matter of climatology and its several key ideas like cyclone, hazards, thunderstorm, wind blow system etc.
CO2: Classify the different climatic zones of the world, air circulation process and temperature variation.
CO3: Understand the reason of climate change and global warring and its impact on climate and weather.
CO4: Describe the different soil features and their properties and the impact on agriculture practice.
CO5: Understand the cropping pattern, mechanization of agriculture and institution's role on Indian agriculture.

GEO-104: GEOGRAPHY OF ENVIRONMENT AND ECOLOGY

After course completion the students will have the following learning outcomes:

CO6: Understand the idea of ecology and ecosystem and its elements, functions, energy flow, food chain, tropic levels and ecological stability,
CO7: Be able to explain the energy flow in the ecosystem, chemical cycles, and different ecosystems of the world.
CO8: Understand the concept of landscape ecology, its structure, functions and characteristics.
CO9: Analysis the human modification, landscape management through GIS mapping.

GEO-105: MAPPING TECHNIQUES IN PHYSICAL GEOGRAPHY

After course completion the students will have the following learning outcomes:

CO1: Understand hydrological techniques for run-off and evapotranspiration estimation
CO2: Know the different properties of soil and estimation
CO3: Field visit for soil profile mapping and estimation of soil parameters,
CO4: Prepare ecological micro zonation

GEO-106: BASIC STATISTICS IN GEOGRAPHY AND PRINCIPLES OF AERIAL PHOTOGRAPH AND REMOTE SENSING

After course completion the students will have the following learning outcomes:

CO1: know the basic statistics and measurement in geography,
CO2: basic principles of remote sensing and aerial photograph knowledge about the hypothesis testing and sampling strategies,
CO3: understand the process of physical and cultural features and its interpretation

Semester-II

GEO-201: ENVIRONMENTAL AND REGIONAL GEOGRAPHY OF INDIA

After course completion the students will have the following learning outcomes:

CO1: Manage the waste water in different processes.
CO2: Understand the reasons of air pollution, water pollution and noise pollution; they
CO3: Measure the intensity of pollutions and also can be known how the problems can be managed.
CO4: Learn the geomorphic features, evolution and character of Darjeeling Himalaya, Rajasthan desert and Indian rivers.
CO5: Understand the evolution of Ganga and Godavari delta and the tectonic movement and dynamics of Andaman Nicobar Islands.

GEO-202: POPULATION &DEVELOPMENT AND REGIONAL APPROACH IN GEOGRAPHY

After course completion the students will have the following learning outcomes:

CO1: Understand the pollution growth, resource relationship and their sustainable development.
CO2: Know the different theories of population growth, migration and its types, pattern and consequences.
CO3: Calculate HDI and GDI. Students can understand the concept of region in geography and its types, hierarchy and system of development.
CO4: Know the different formal and functional regions of India and also understand the planning region and its importance for development.

GEO-203: CONCEPTS IN SETTLEMENT GEOGRAPHY, SOCIAL AND POLITICAL GEOGRAPHY

After course completion the students will have the following learning outcomes:

CO1: Understand the concept and types of settlement.
CO2: Know the forms, pattern and characteristics of rural and urban settlement.
CO3: Illustrates the different models of urban morphology and also able to explain the rank size rule, city primacy and central place concept in urban centres.
CO4: Understand the concept of sociopolitical geography and its scope or subject matter.
CO5: Explain the processes of voting pattern, voting politics, and the geopolitical theories of political geography.
CO6: Know the states formation and federalism of India, water dispute and economic blocks of the world.

GEO-204: RESOURCE AND ITS MANAGEMENT AND EARTH SYSTEM SCIENCE

After course completion the students will have the following learning outcomes:

CO1: Understand the origin of the earth and its internal structure.
CO2: Know different slope evolution model and the atmospheric structure, layers and characteristics including the oceanic physical and chemical features.
CO3: Understand the idea of human geography and its content.
CO4: Know the population growth, migration, human settlement and social cultural integration under human geography.

GEO-205: THEMATIC MAPPING IN PHYSICAL AND HUMAN GEOGRAPHY

After course completion the students will have the following learning outcomes:

CO1: Measure the different morphometric features and their significance in geomorphology.
CO2: Analysis the soil texture, sedimentary fancies and its evolution and characteristics.
CO3: Measure the different social development indices like HDI, GDI, and Human Poverty Index including the perception analysis of the social indicators.

GEO-206: COMPUTER APPLICATIONS IN GEOGRAPHICAL DATA ANALYSIS AND REMOTE SENSING & GEOGRAPHIC INFORMATION SYSTEM

After course completion the students will have the following learning outcomes:

CO1: Understand the data and the algorithms, basic logic in computer application.
CO2: Execute the different statistical techniques like Rank, Central tendency, deviation etc in excel or SPSS.
CO3: Able to geo-reference of any map and prepare false colour images
CO4: Classify and interpreted different satellite images with different GIS analysis techniques

Semester-III

GEO-301: ECONOMIC ZONES & DEVELOPMENT PROGRAMMES IN INDIA AND GEOGRAPHY OF GLOBALIZATION

After course completion the students will have the following learning outcomes:

CO1: Know the world economic geography in the era of globalization,
CO2: understand different rural and urban development program like poverty alleviation, transport and industrial development,
CO3: Know the cultural transformation and future global challenge

GEO-302: ENVIRONMENTAL ETHICS AND REGULATIONS AND TRANSPORT GEOGRAPHY:

After course completion the students will have the following learning outcomes:

CO1: Know the concept of environment ethics and philosophy,
CO2: Understand global environment problems and environmental planning in India
CO3: Understand transport systems and planning for public transportation

GEO-303: SPECIAL PAPERS (COASTAL GEOGRAPHY/URBAN GEOGRAPHY/REMOTE SENSING AND GIS)

After course completion the students will have the following learning outcomes:

CO1: Specialized in different field with in-depth study and its significance,
CO2: Understand urban system in metropolitan areas and different urban issues,
CO3: Know the principles of remote sensing and aerial photograph

GEO-304: EMERGING ISSUES AND ENVIRONMENTAL HAZARDS AND DISASTER MANAGEMENT IN GEOGRAPHY

After course completion the students will have the following learning outcomes:

CO1: Know the global climate change and politics of water,
CO2: Understand the processes of natural and man-made hazards with reference to India
CO3: Know the international laws and national policy to deal the hazards and disasters

PAPER-GEO-305: MAP TRANSFORMATION & GEODESY AND SPATIAL ANALYSIS IN GEOGRAPHY

After course completion the students will have the following learning outcomes:

CO1: Know the basics of map transformation and co-ordinate systems,
CO2: Understand the use and construction of different types of map projection
CO3: Know the transport network analysis

GEO-306: RESEARCH METHODOLOGY AND RESEARCH EXERCISE IN GEOGRAPHY

After course completion the students will have the following learning outcomes:

CO1: know the concept of research ethics and paradigm shift in geographical research,
CO2: Understand the framework of research writing and methods of data collection,
CO3: Prepare field report of research exercise

Semester-IV

GEO-401: SCHOOLS IN GEOGRAPHICAL THOUGHT AND CONTEMPORARY DISCOURSES IN GEOGRAPHY

After course completion the students will have the following learning outcomes:

CO1: Distinguish the paradigms in geography discipline through time
CO2: Understand the geographical thinking in different regions of world
CO3: Appreciate the past and future trends of world geography in general and Indian geography in particular

GEO- 402: LAND AND WATER RESOURCE MANAGEMENT

After course completion the students will have the following learning outcomes:

CO1: Know the distribution of land and water resource,
CO2: Understand the problems and management of both the resources
CO3: Appreciate the application of remote sensing and GIS in land mapping and sustainable management

GEO- 403 FOREST RESOURCE AND BIODIVERSITY MANAGEMENT

After course completion the students will have the following learning outcomes:

CO1: Know the distribution of forest and biodiversity,
CO2: Understand the value and ethics of biodiversity
CO3: Appreciate the participation of people for community forest development

GEO -404: SPECIAL PAPERS

Option- 2: Urban and Regional Planning

After course completion the students will have the following learning outcomes:

CO1: Know the changing approach and methods in urban regional planning,
CO2: Understand the theories of previous planning in present context,

CO3: Acquainted with modern strategies of Indian Government for sustainable urban and regional development

Option-3: Remote Sensing and Geographic Information System

After course completion the students will have the following learning outcomes:

CO1: Know the concepts and application of advanced remote sensing,
CO2: Know the modern trend of GIS and its integration with remote sensing
CO3: Built capability to handle with different data structures and image processing

GEO-405 Advanced Quantitative Methods and Geographic Information System

After course completion the students will have the following learning outcomes:

CO1: Knowledge about the advance level statistics with multivariate analysis,
CO2: Understand the basic operation of matrix and determinants,
CO3: Use of GPS traversing both in manually and computer plotting.

Geo-406: Special Paper Based Practical and Field Report

After course completion the students will have the following learning outcomes:

CO1: Know the significance of specialization and its application in various sphere
CO2: Know the application of models and theories
CO3: Hands-on with different software and models for urban and environmental problems management,
CO4: Conduct proper field work for the collection of primary data to bring outgrassrootsrealities.