# M.SC GEOGRAPHY

## 2021 SYLLABUS ONWARDS

## COURSE OUTCOMES

### SEMESTER – I

### ADVANCED GEOMORPHOLOGY

**Course Code: P21GET11**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | After this lesson the students will have knowledge of physical geography in relation to its nature and scope, the concepts of origin and evolution of topography. | **K2** |
| **CO2** | The students will be able to describe scientific ideas and theories about the development of the landscapes. | **K3** |
| **CO3** | The students will be able to explain the position of geomorphology in physical geography along with the divisions of geomorphology in relation to structural, fluvial, arid, glacial, coastal or tropical morphology. | **K4** |
| **CO4** | The students will be evaluating the impacts of human activities on natural environments. | **K5** |
| **CO5** | The students will be able to apply the knowledge about global issues to local circumstances to evaluate the local effects of the issues. | **K5** |

### SEMESTER – I

### APPLIED CLIMATOLOGY

**Course Code: P21GET12**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | The learners will have the basic concepts of climatology and its geographical significance along with knowledge of earth's atmosphere in respect to structure, composition and characteristics. | **K2** |
| **CO2** | Know something of the way various human activities are increasing emissions of the natural greenhouse gases | **K4** |
| **CO3** | They aware of the difficulties involved in the detection of any unusual global warming and background noise of natural variability. | **K2** |
| **CO4** | Understand that although a growing scientific consensus has become established through the IPCC, for the climate. | **K2** |
| **CO5** | Understand the mean global atmospheric circulations and disturbances, world climate systems, climatic variability and change. | **K4** |

**SEMESTER – I**

## HYDROLOGY AND OCEANOGRAPHY

**Course Code: P21GET13**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | At the end of the course students will different physical aspects of water and the ocean as a natural resource. | **K2** |
| **CO2** | They will learn some strategies of water resource management and conservation of water. | **K2** |
| **CO3** | Students will be able to understand the variations of the global hydrological cycle and emphasizing the significance of groundwater quality and its circulation. | **K2** |
| **CO4** | They will have knowledge of the bottom relief of oceans, their waves and current in relation to origin, type, characteristics and impact of ocean waves and current on the environment. | **K4** |
| **CO5** | Students also will be learning about why physical oceanography is important in the earth system and learn about the interactions with other components of the system, particularly the atmosphere. | **K2** |

**SEMESTER – I**

## ELECTIVE –GEOGRAPHY OF INDIA

**Course Code: P21GET14**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Identifying and explaining the Indian Geographical Environment, from global to local scales. | **K2** |
| **CO2** | Applying geographical knowledge to everyday living. | **K3** |
| **CO3** | They understand the Mineral and Power Resources of India. | **K2** |
| **CO4** | Showing an awareness and responsibility for the environment and India. | **K4** |
| **CO5** | Evaluating the impacts of human activities on natural environments special reference to India. | **K5** |

**SEMESTER – I**

## PRACTICAL I – TERRAIN AND CLIMATIC DATA ANALYSIS

**Course Code: P21GEP11**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Students will learn about the profiles, Smith, Wentworth and Robinson Methods. | **K4** |
| **CO2** | Students will understand the climatic diagram. | **K2** |
| **CO3** | Students will gain a level of understanding about Drainage basin analysis such as drainage density and shape of drainage basin. | **K2** |
| **CO4** | Students will understand the rainfall distribution, rainfall dispersion and rainfall variability. | **K4** |
| **CO5** | Students will be exposed to the Water balance. | **K5** |

**SEMESTER – I**

## SUPPORTIVE COURSE I – COMPUTER SKILLS FOR WEB DESIGNING AND VIDEO EDITING

**Course Code: P21CSS11**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Enrich Fundamentals of Computers, Components of a Computer System and Software. | **K4** |
| **CO2** | Drafting of Letters and reducing. Insertion of Objects: Equation Editor, Organizational Chart. | **K2** |
| **CO3** | Representation of Financial/numeric data in Spreadsheet | **K2** |
| **CO4** | Understand the basics Database Management | **K4** |
| **CO5** | Emphasis on New Video Project. | **K5** |

**SEMESTER – II**

## AGRICULTURAL GEOGRAPHY

**Course Code: P21GET21**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | The students shall get to know about the spatial organization of agricultural activities in world and India. | **K2** |
| **CO2** | They knowledge about the origin, location, distribution of the agriculture and its dynamics and impact of climate change and economic liberalization on agricultural pattern and process. | **K4** |
| **CO3** | Students will apply appropriate theories to analyze and modify communication. | **K3** |
| **CO4** | Students will be learning about land use and agriculture. | **K4** |
| **CO5** | To demonstrate the ability to analyze data and appropriate statistical conclusions. | **K5** |

**SEMESTER – II**

## URBAN GEOGRAPHY

**Course Code: P21GET22**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | After the lesson students will able to knowledge development of urbanization. | **K2** |
| **CO2** | Student will be understand the world demographic structure of cities | **K2** |
| **CO3** | Students will learn and explain the functional classification towns, and basic and non-basic concept. | **K2** |
| **CO4** | Student will be understands the urban settlements and hierarchy of urban centers, central place theory. | **K4** |
| **CO5** | Students will learn urban problems, types of and pattern, distribution acquisition and characteristics. | **K5** |

**SEMESTER – II**

# MEDICAL GEOGRAPHY

**Course Code: P21GET23**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | The focus of medical Geography is on the geographical patterns of health and diseases from the view point of the populations. | **K2** |
| **CO2** | Medical Geography seeks to improve our understanding of the various factors which affect the health of the population. | **K3** |
| **CO3** | Medical Geography helps researchers to understand the power of mapping their study data and understanding health and disease. | **K3** |
| **CO4** | Understanding of the health problems based on the various geographic factors influencing them. | **K4** |
| **CO5** | It focuses on the topics of disease diffusion and human ecology, role of geographical information systems for health and healthcare disparities and various methods for analyzing health/disease data. | **K5** |

**SEMESTER – II**

# MEDICAL GEOGRAPHY

**Course Code: P21GET23**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | The focus of medical Geography is on the geographical patterns of health and diseases from the view point of the populations. | **K2** |
| **CO2** | Medical Geography seeks to improve our understanding of the various factors which affect the health of the population. | **K3** |
| **CO3** | Medical Geography helps researchers to understand the power of mapping their study data and understanding health and disease. | **K3** |
| **CO4** | Understanding of the health problems based on the various geographic factors influencing them. | **K4** |
| **CO5** | It focuses on the topics of disease diffusion and human ecology, role of geographical information systems for health and healthcare disparities and various methods for analyzing health/disease data. | **K5** |

**SEMESTER – II**

## TRANSPORT GEOGRAPHY

**Course Code: P21GET24**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Students shall learn about the significance of transport in multifaceted development. | **K2** |
| **CO2** | Students will be learning the significance of various models. | **K2** |
| **CO3** | Students will understand the role of theories related to transport networks. | **K3** |
| **CO4** | They will be able to grasp the techniques for Accessibility, connectivity and measures transportation network. | **K4** |
| **CO5** | Students will be applying the various approaches of transport in daily life. | **K5** |

**SEMESTER – II**

## PRACTICAL II – SOCIO ECONOMIC DATA ANALYSIS

**Course Code: P21GEP22**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Apply statistical techniques to a variety of socio economic data | **K2** |
| **CO2** | Demonstrate understanding of basic concepts of Transport analysis and statistics embedded in their courses. | **K2** |
| **CO3** | Interpret statistical output to the agricultural data analysis aid in decision making in the Agricultural activities | **K3** |
| **CO4** | Evaluating the impacts of human activities and the industries activities | **K4** |
| **CO5** | Applying the knowledge of global issues to a unique scientific problem of agricultural data analysis | **K5** |

**SEMESTER – II**

## ELECTIVE - GEOGRAPHY OF INDIA FOR COMPETITIVE EXAMINATIONS

**Course Code: P21GEN21**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | The student will get familiarized with the geographic dimensions of India in terms of its political and administrative characteristics; aspects of its regional vitality; and formation of regions. | **K2** |
| **CO2** | The student will understand climatic condition and seasons in India. | **K3** |
| **CO3** | They understand globalization and Indian economy and also understand the regional distribution of resource. | **K2** |
| **CO4** | They understand the population problems in India. Access the population policies and reaction the countries. | **K4** |
| **CO5** | Applying the knowledge of global issues to a unique scientific problem. | **K5** |

**SEMESTER – II**

## SUPPORTIVE COURSE II - APPLICATIONS OF GIS & GPS

**Course Code: P21GES22**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Students will be understand data structure in GIS | **K2** |
| **CO2** | Acquire knowledge about Roster & Vector data Models, etc. | **K3** |
| **CO3** | Analyze geographical change analysis using geo processing tool | **K3** |
| **CO4** | Production of thematic maps in Arc GIS | **K4** |
| **CO5** | Collecting points and tracking the routes in GPS | **K5** |

**SEMESTER – III**

## GEOGRAPHICAL THOUGHT

**Course Code: P21GET31**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | This should enable the student to critically look at the contents of other courses at Postgraduate level as logically integrated with the broad currents of thought the subject has witnessed in the distant and recent past. | **K2** |
| **CO2** | Gain knowledge about development of geographical thought. | **K2** |
| **CO3** | They can understand the major current philosophical and theoretical debates in geography. | **K4** |
| **CO4** | Students will demonstrate an understanding of current research within the breadth of geography, as well as more in depth knowledge of research in their specialty areas. | **K2** |
| **CO5** | Students will develop a solid understanding of the concepts of ″space," ″place″ and ″region″ and their importance in explaining world affairs. | **K3** |

**SEMESTER – III**

## REMOTE SENSING GIS AND GPS

**Course Code: P21GET32**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Students will demonstrate knowledge of the foundations and theories of geographic information systems (GIS) and use the tools and methods of GIS. | **K2** |
| **CO2** | Students will demonstrate their competence to work individually and as a team to develop and present a client-driven GIS solution. | **K2** |
| **CO3** | Student will be familiar with modern techniques in Geography. | **K4** |
| **CO4** | Students will demonstrate their competence to work individually and as a team to develop and present a client-driven GIS solution. | **K2** |
| **CO5** | Students will be prepared to apply their skills in professional careers. | **K5** |

**SEMESTER – III**

## CARTOGRAPHY AND QUANTITATIVE METHODS

**Course Code: P21GET33**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Students will be acquiring knowledge about scope and development of cartography, Projections and compilation of maps | **K2** |
| **CO2** | Students will have ability to identify the different kinds of maps with using cartographic symbols, map design and layout procedures and photo printing process | **K3** |
| **CO3** | Students can evaluate the different techniques of hypothesis to justifying the various testing methods | **K4** |
| **CO4** | Students obtain the different kinds of data sources and analysis of various statistical methods. | **K4** |
| **CO5** | After complete the lesson they will get the capacity of statistical analysis with suitable software′s | **K5** |

**SEMESTER – III**

## POPULATION GEOGRAPHY

**Course Code: P21GET34**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | After this lesson the students can develop their understanding of the distribution of the population and its various characteristics including population growth, density, fertility, mortality, death rate, birth rate etc. | **K2** |
| **CO2** | They can understand the negative or positive effects of population distribution and growth in the society and can create awareness among the people of society regarding this. | **K2** |
| **CO3** | Students will be analyzing the global trend and patterns of population growth in developing countries and migration patterns. | **K4** |
| **CO4** | Students will be evaluating the population growth theory and migration theories. | **K4** |
| **CO5** | Students will understand the population policies and their importance in different countries. | **K5** |

**SEMESTER – III**

## RESEARCH METHODOLOGY

**Course Code: P21GET35**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Students should be able to distinguish a purpose statement, a research question or hypothesis, a research objective and the utility of a hypothesis in scientific research. | **K2** |
| **CO2** | Students should be able to identify independent, dependent, features development of research and sampling design and its basic types. | **K2** |
| **CO3** | Students should be able to distinguish the interpretation, report-writing techniques and mechanics of writing of Report. | **K3** |
| **CO4** | Students should be able to design a good quantitative purpose statement and good quantitative research questions and hypotheses. | **K4** |
| **CO5** | Students will be able to understand the research problems, the link between quantitative research questions, data collection and how research questions are operationalized in educational practice. | **K5** |

**SEMESTER – III**

## CARTOGRAPHY AND GEO-INFORMATICS

**Course Code: P21GEP33**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Students will be identify the kinds of thematic maps and how to drawn point, line and area symbols in correctly in statistical method. | **K2** |
| **CO2** | Students will develop the skills about Indian Toposheet interpretation with help of interpretation keys | **K3** |
| **CO3** | Students will develop a solid understanding of the concepts of aerial and satellite image interpretation and their importance in explaining by their elements | **K3** |
| **CO4** | They got the capability of using various GIS software′s to analyze and processing the digital satellite images | **K4** |
| **CO5** | After complete the lesson they got the potential of mapping techniques and image interpretation with suitable software′s | **K5** |

**SEMESTER – IV**

**CHOICE -I**

## ELECTIVE – I - SOCIAL GEOGRAPHY

**Course Code: P21GEE411**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | After this lesson, the students will have acquired Knowledge about the spatial distribution of social groups, religions and language groups. | **K2** |
| **CO2** | Students will understand an overview of the culture complex, cultural heritage and cultural imperialism. | **K2** |
| **CO3** | Students will understand the factors affecting human health, disease and Planning. | **K3** |
| **CO4** | Students will have basic concepts about boundaries and frontiers. | **K2** |
| **CO5** | Students will learn about the political geography. | **K2** |

**SEMESTER – IV**

**CHOICE -II**

## ELECTIVE – I - CULTURAL GEOGRAPHY

**Course Code: P21GEE412**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Critically understand the key concepts of Social and Cultural Geography | **K2** |
| **CO2** | Apply concepts and evaluate emerging issues in contemporary cultural context | **K2** |
| **CO3** | Acquire a general understanding of the major concepts and approaches in the fields of social and cultural geography. | **K2** |
| **CO4** | Gain an appreciation for the role that social power plays in the formation of socio-spatial identities and the processes of place-making. | **K4** |
| **CO5** | Develop the ability to critically assess the material and symbolic aspects of cultural landscapes. | **K2** |

**SEMESTER – IV**

**CHOICE -III**

## ELECTIVE – I - REGIONAL PLANNING AND DEVELOPMENT

**Course Code: P21GEE413**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Understand the significance of decentralized planning. Understand the planning process at each level of Local Institutions. | **K2** |
| **CO2** | Evaluate role of the Local Governments in the planning. Comprehend the advantages of local level planning with peoples participation | **K5** |
| **CO3** | Create a spatial data base for local level planning. Describe how long-range transportation plans can be coordinated with local & regional land use goals | **K3** |
| **CO4** | Identify roles that MPOs and other regional. state agencies can take in creating coordinated regional transportation & land use plans | **K2** |
| **CO5** | Describe how to structure a process for creating a regional plan Identify effective tools to implement regional transportation & land use plans | **K2** |

**SEMESTER – IV**

**CHOICE –IV**

## ELECTIVE – I - GEOGRAPHY OF SETTLEMENTS

**Course Code: P21GEE414**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Understand the significance and recent trends in settlements geography. | **K2** |
| **CO2** | Access the functional classification of the settlements. | **K2** |
| **CO3** | To establish the relationship between house types with relief, climate, and building materials | **K3** |
| **CO4** | Evaluate the urban settlements and imphological Indian cities. | **K5** |
| **CO5** | Analyse the theories of urban settlements and selected Indian cities. | **K4** |

**SEMESTER – IV**

**CHOICE – I**

## ELECTIVE – II - GEOGRAPHY OF ECONOMIC ACTIVITIES

**Course Code: P21GEE421**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Students will gain factual knowledge about the primary, secondary, tertiary, and quaternary activities. | **K2** |
| **CO2** | Students will have an effective Understand the classification of industries, factors affecting location of industries and tourism industry potential and problems. | **K2** |
| **CO3** | Students will have the basic knowledge of the spatial interaction ideas of Edward Ullman, functional approach of M.E.Hurst, Models of transport and transport cost. | **K2** |
| **CO4** | Students will learn and understand the spatial flow models, gravity model and it′s variation and allocation models. | **K2** |
| **CO5** | Students will understand the World Trade Organizations, Globalization and Liberation and prospects of inter and intra-regional co-operation and trade. | **K2** |

**SEMESTER – IV**

**CHOICE – II**

## ELECTIVE – II - ENVIRONMENTAL GEOGRAPHY

**Course Code: P21GEE422**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Students will be learning about the Man and environment relationships, biosphere and multi-disciplinary approach. | **K2** |
| **CO2** | Students will be able to Ecosystem, classification and functioning of the ecosystem. | **K2** |
| **CO3** | Students will be able to discuss the natural hazards and Man's modifications of the biosphere. | **K4** |
| **CO4** | Able to apply principles and procedures. | **K3** |
| **CO5** | Able to apply Environment Governances. | **K5** |

**SEMESTER – IV**

**CHOICE – III**

## ELECTIVE – II - NATURAL DISASTER MANAGEMENT

**Course Code: P21GEE423**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Identify major natural disaster | **K2** |
| **CO2** | Analyze the causes and consequence of disaster | **K2** |
| **CO3** | Execute different preventing methods | **K3** |
| **CO4** | Connect real world with methods | **K4** |
| **CO5** | Students will be acquiring knowledge about the National and international policies for disaster management. | **K5** |

**SEMESTER – IV**

**CHOICE – IV**

## ELECTIVE – II - GEOGRAPHY OF TOURISM

**Course Code: P21GEE424**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Understand spatial distribution of resources in the evolution of tourism. | **K2** |
| **CO2** | Critique worldwide economic, cultural, political and technological exchanges and connections that tourism brings. | **K2** |
| **CO3** | Rate tourism as a key sustainable sector in country′s economic growth | **K4** |
| **CO4** | Design sustainable tourism management plan using GST for tourism development. | **K4** |
| **CO5** | Evaluate socio-cultural, economic and environmental impacts of tourism. | **K5** |

**SEMESTER – I**

## VALUE ADDED PROGRAM – I – THEMATIC CARTOGRAPHY

**Course Code: P21GEV11**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | The main outcome of the paper lies in the fact that it gives clear idea regarding different types of maps and different map making processes | **K2** |
| **CO2** | Students will become able to draw the map generalization and compilation | **K2** |
| **CO3** | Will acquire practical knowledge for construction and interpretation of relief, spot height, bench mark, triangulation and layer tinting | **K4** |
| **CO4** | Will be able to study and interpret the thematic maps | **K4** |
| **CO5** | Will become able to develop world demarcation maps based on British and US map | **K5** |

**SEMESTER – IV**

## VALUE ADDED PROGRAM – II – APPLICATION OF SPSS IN GEOGRAPHY

**Course Code: P21GEV41**

**Course Outcomes:**

*After the completion of the course, students will have ability to*

| | | |
|---|---|---|
| **CO1** | Modern science and technology have made tremendous progress in all possible fields. Geospatial technology has been emerged a new spatial information technology. | **K2** |
| **CO2** | Get knowledge about statistical methods. | **K3** |
| **CO3** | Another part helps students in developing their quantitative application in geographical study which gives more accuracy in any geographical enquiry which can further helps students in conducting research activities. | **K4** |
| **CO4** | Students will be able to create digital maps in formats reflecting the purpose, content and function of input data | **K4** |
| **CO5** | Students will be able to use GIS software to produce accurate, appropriate, convincing and creative maps and graphics | **K5** |