COURSE OUTCOMES (NEP)

DEPARTMENT of GEOGRAPHY

**GEOADSE01T/1P(Physical Geography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | It analyze the fundamental concept of geomorphology and structural evolution of the interior of the earth. | PO 4 | PSO 4 | An |
| CO 2: | Explain and justify the different types of fault and folds and the knowledge of weathering, mass wasting and its resultant landforms. | PO 2,3,4,5 | PSO 1,5 | U,E |
| CO 3: | Develop an idea of river network and the formation of several landforms by rivers and landforms on different rocks of granites, basalts and limestones. | PO 4,6 | PSO 2 | C |
| CO 4: | It illustrates the formation of hazards and its classification in india. | PO 3,5 | PSO 3 | Ap |
| CO 5: | It describes an overview and critical appraisal of atmosphere, Identifies different factors of soil formation, ideal soil profile too and It analyses the concept of ecosystem and biomes. | PO 1,2,3,4 | PSO 3,4 | U,R,An |

R= remembering, U = understanding, Ap = applying, An = analysing, E = evaluating, and C = creating

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**GEOADSE02T/2P(Human Geography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| **CO1:** | Understand and recognize the concept of elements and approaches to human geography. | PO 1,2,3 | PSO 1,,4 | U,R |
| CO 2: | Determine the evolution of human societies and different concepts of population ( like growth, distribution of population, population composition , migration and demographic transition model) | PO 4,5 | PSO 5 | E |
| CO 3: | Remember the different sectors of economy, different types of agriculture and analyze and the different types of agriculture different types of patterns of settlement | PO 1,4 | PSO 4 | R, An |
| CO 4: | Analyse growth rate, density of population and other economic data | PO 4 | PSO 4 | An |
| CO5: | understand and illustrate the identification of settlements and correlating physical and cultural attributes from survey of topographical maps. | PO 2,3,5 | PSO 1,3 | U, Ap |

**GEOADSE03T/3P( Geotectonics and Geomorphology)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | It analyze the fundamental concept of geomorphology and structural evolution of the interior of the earth. | PO 4 | PSO 4 | An |
| CO 2: | Explain and justify the different types of fault and folds and the knowledge of weathering, mass wasting and its resultant landforms. | PO 2,3,4,5 | PSO 1,5 | U,E |
| CO 3: | Develop an idea of river network and the formation of folded as well as uniclinal structure and landforms on different rocks of granites, basalts and limestones and It illustrates the formation and processes of several landforms produced by sea waves, glaciers, & wind. | PO 4,6,3,5 | PSO 2,3 | C,Ap |
| CO 4: | It describes an overview and critical appraisal of landform development models. Identifies different rocks and minerals and It analyses the geological maps with unconformity and intrusions on uniclinal and folded structure | PO 1,2,3,4 | PSO 3,4 | U,R,An |
| CO 5: | It describes an overview of topographical map and analyses several morphometric analysis from the topographical map of survey of India. | PO 2,3,4 | PSO 3,4 | U,An |

**GEOADSE04T &4P(Climatology)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Describe the nature of the atmosphere and other atmospheric phenomena and Analyze on the incoming solar radiation and its associated factors. | PO 2,4 | PSO 1,4 | U, An |
| CO 2: | Determine how the temperature is distributed both in vertically and horizontally and identify the causes, types and consequences of inversion of temperature. | PO 1,4,5 | PSO 4,5 | E, R |
| CO 3: | Develop the knowledge of how the effects of greenhouse gas occur, the importance of ozone layer and to discuss the atmospheric phenomena like condensation, fronts, airmass, weather stability, instability ,and different types of cyclones, monsoon circulation | PO 2,3,6 | PSO 1,2,3 | C, U |
| CO 4: | Apply the climatic classification of Koppen and Thornthwaite and explain the preparation of weather map, hythergraph, wind rose, and climograph and their interpretations. | PO 3,5 | PSO 1,3 | Ap, U |

**GEOADSE05T(Economic Geography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | To understand the meaning, and to illustrate approaches to Economic Geography and determine different concepts of Economic Geography. | PO 2,3,4,5 | PSO 1,3,5 | U, Ap,E |
| CO 2: | identify and analyze the different factors of economic activities, to create knowledge on agricultural systems and on international trade. | PO 1,4, 6 | PSO 2,4 | R, An, C |

**GEOADSE06T(Geography of India and West Bengal)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | *identify* different geographical elements of India like physiographic divisions, nature and characteristics of climate, soil, vegetation, the agricultural region and green revolution | PO 1 | PSO 4 | R |
| CO 2: | *analyze* the socio-economic elements like distribution of population growth, structure and policy | PO 4 | PSO 4 | An |
| CO 3: | *Design* the Distribution and utilization minerals, iron ore, petroleum are analyzed. | PO 4,6 | PSO 2 | C |
| CO 4: | *determine*  the different aspects of West Bengal like physiography, and different resources like forest, water, agriculture, and mining. | PO 4,5 | PSO 5 | E |
| CO5: | To *illustrate the* population growth, distribution and human development and *explain* regional issues of Darjeeling and Sundarbans are analyzed. | PO3,4 | PSO 3,4 | An, U |

**GEOADSE07T & 7P( Cartographic Techniques and Thematic Mapping)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | understand the concept of scientific notation, rounding, logarithm, anti-logarithm ,and natural log scales. | PO 2,3 | PSO 1,3 | U |
| CO 2: | generate the concept and the apply of the representation of different types of area data, socio-economic data. | PO 3,4,6 | PSO 2,3 | C, Ap |
| CO 3: | identify the basic concept of different types of surveying instruments like Dumpy level, prismatic compass and theodolite. | PO 1 | PSO 4 | R |
| CO 4: | Determine and Analyze the graphical construction of scales, projection and different types of thematic maps. | PO 4,5 | PSO 4,5 | E, An |

**GEOADSE08T (Population Geography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Analyze the concept of population geography and to determine a relation between population geography and demography | PO 4,5 | PSO 4,5 | An,E |
| CO 2: | Design and recognize the different parameters of population geography like population distribution, growth, density and so on. | PO 1,4,6 | PSO 2,4 | C,R |
| CO 3: | Understand the models related with population geography rather the growth and distribution of population geography | PO 2,3 | PSO 1 | U |
| CO4: | Determine the different concept of population and development like migration, urbanization and so on. | PO 3,5 | PSO 3 | Ap |

**GEOADSE09T & 09P( Environmental Geography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | To evaluate the different concepts of environmental geography | PO 4,5 | PSO 5 | E |
| CO 2: | To understand and analyze the different environmental problems and policies | PO 2,3, 4, | PSO 1,4 | U, an |
| CO 3: | To formulate the questionnaire of environmental problems and to label the check-list for environmental assessment. | PO 1,6 | PSO 2,4 | C, R |
| CO 4: | To apply the interpretation of air-quality by different wbpcb and cpcb | PO 3,5 | PSO 3 | Ap |

**GEOADSE10T(Soil and Biogeography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Develop knowledge about the nature and different profiles of soil like laterite, podzol and chernozem. | PO 4,6 | PSO 2 | C |
| CO 2: | understand the significance of soil properties like soil structure and soil texture | PO 2,3 | PSO 1,3 | U |
| CO 3: | recognize the factors and mitigation of soil erosion, principle of soil classification, and concept of land capability. | PO 1 | PSO 4 | R |
| CO4: | determine the concept of biosphere, and different terms associated with ecosystem | PO 4,5 | PSO 5 | E |
| CO5: | analyze and apply of the geographical extent and characteristics of different biomes, the bio-geochemical cycle, phytogeographic regions and deforestation. | PO 3,4,5 | PSO 3,4 | An, Ap |

**GEOADSE11T & 11P (Remote Sensing, GIS and GNSS)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | To describe and determine the principles, types of remote sensing, different sensors, principles of image corrections and interpretations | PO 2,,4,5 | PSO 1,3,5 | U,,E |
| CO 2: | To create and analyze the concept of GIS, GIS data structure, preparation of attribute tables, data manipulation, overlay analysis and GNSS | PO3, 4, 6 | PSO 2,4 | C, An |
| CO 3: | To identify and apply the georeferencing of maps, preparation of FCC and digitization of features and collection of waypoints from GNSS | PO 1,3,5 | PSO 2,3 | R,Ap |

**GEOADSE12T (Evolution of Geographical Thought)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | To describe and define the nature of Pre-modern of Geography like contributions of Greek Chinese geographers, and Arab geographers. | PO 1,2,3 | PSO 1,4 | U,,R |
| CO 2: | To evaluate and illustrate the foundations of modern geography and the recent trends like the evolution of geographical thoughts in Germany, France To evaluate and illustrate the foundations of modern geography and the recent trends like the evolution of geographical thoughts in Germany, France, Britain and United States. | PO 4 | PSO 4,5 | E,An |
| CO 3: | Determine and develop the contribution of Humbolt, Ritter, to know the behavioral geography, humanistic geography, and to focus on the changing concept of time space in geography | PO 3,4,5,6 | PSO 2,3 | Ap.C |

**GEOADSE13T/13P(Hazard Management)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | To explain and analyze the different concepts of disaster management like classification of hazard, disaster, approaches to hazard study, responses to hazard, and hazard mapping | PO 2,3,4 | PSO 1,4 | U,An |
| CO 2: | To create and apply the hazard specific study on India like earthquake, landslide, riverbank erosion, tropical cyclone, and bio-hazards | PO 3,4,5,6 | PSO 2,3 | C,Ap |
| CO 3: | To determine and identify the knowledge of disasters of thunderstorm, landslide, flood, coastal / riverbank erosion, fire, industrial accident and so on with the help of a project report. | PO 1,4,5 | PSO 4,5 | E,R |

**GEOADSE14T(Social Geography)**

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| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Discuss and recognize the concept, origin, nature and scope of social geography. | PO 1,2,3 | PSO 1,3,4 | U,R |
| CO 2: | Evaluate and determine different terms associated with social geography like space, social behaviour, social stratification, social groups and so on. | PO 3,4,5 | PSO 3,5 | E, Ap |
| CO 3: | Create and analyze various concept of social well-being and planning | PO ,4,6 | PSO 2,4 | C, An |

**GEOADSE15**P **(Surveying techniques and fieldwork)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Determine and Analyze the different types of surveying instruments like Dumpy level, prismatic compass, theodolite and abney level. | PO 4,5 | PSO 4,5 | E, An |
| CO 2: | To create and understand report on fieldwork based on primary and secondary data. | PO 2,6 | PSO 23 | C,U |

**GEOADSE16T (Hydrology and Oceanography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Develop and generate the nature and different aspects of hydrology and Apply Darcy's Law to understand groundwater flow dynamics. | PO 4,5 | PSO 2,3,4 | C,U, Ap, R, An |
| CO 2: | Determine the major relief features of ocean floor and the characteristics of ocean water, resources, temperature, salinity as well. | PO 4,5 | PSO 5 | E |
| CO 3: | Illustrate and recognize the types and causes of sea level change. | PO 1,4 | PSO 4 | An, R |
| CO4: | Demonostrate the application of T-S diagram in determining the nature of water mass. | PO 3,5 | PSO 3 | Ap |
| CO5: | Analyze air-sea interactions and describe the formation and classification of coral reefs.  . |  |  |  |

**GEOADSE17T & 17P (Statistical Methods in Geography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Understand and apply different types of data, sample and population. | PO 2,5 | PSO 1,3 | U, Ap |
| CO 2: | *analyze* the sources of geographical data  And *justify* the collection of data and formation of statistical table | PO 4, 5 | PSO 4,5 | An, E |
| CO 3: | To *generate* the collection of different methods of sampling and the theoretical distribution of frequency, cumulative frequency, normal and probability. | PO 4,6 | PSO 2 | C |
| CO 4: | To *identify* different numerical data analysis like central tendency, regression, measure of dispersion, and time series analysis and to *apply* the data matrix with relevant attributes and hypothesis tests to make informed decisions. | PO 1,5 | PSO 4,5 | R, An,E |
| CO5: | To create frequency distribution table based on  the data matrix and to analyze sample set  based on the data matrix and regression and  scatter diagram would be plotted according to  the sample set. | PO 4,6 | PSO 2,4 | C, An |

**GEOADSE18T (Advanced Geomorphology)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Discuss and recognize different geomorphological principles | PO 2,1 | PSO 1,4 | U,R,An |
| CO 2: | Apply systems analysis to geomorphological studies, including feedback mechanisms and ideas of equilibrium and develop the principles of planetary geomorphology with a special focus on Mars | PO 5,4 | PSO 2,5 | C,E |
| CO 3: | Understand the basic principles of tectonic geomorphology and develop the significance of process studies in understanding geomorphological phenomena. | PO 2,4 | PSO 1,2 | U, C |
| CO4: | Explain the significance of the drainage basin as a geomorphic unit and Understand the types of streamflow and the factors affecting stream velocity and resistance. | 2,4 | 2,3 | C,U,Ap |
| CO5: | Describe the processes involved in the evolution of periglacial landforms, karst processes and coastal landforms and Understand the emergence and relevance of applied and anthropogenic geomorphology. | 2,4 | 1,4 | U, R, An |

**GEOACOR19T (Regional Development and Planning)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Understand the holistic concept of region and and Apply the theories and models for regional development and stages of development and the need balanced development in India. | PO 2,3 | PSO 1,3 | U |
| CO 2: | Analyze the concept of growth and development, indicators of development, human development, and underdevelopment | PO 4 | PSO 4 | An |
| CO 3: | Identify the concept of regional planning and approaches | PO 1 | PSO 4 | R |
| CO 4: | Evaluate the need for multilevel planning in india, planning issues in hilly areas and city regions. | PO 4, 5 | PSO 5 | E |
| CO5: | Apply the planning strategies with participatory planning and governance. | PO 3,5 | PSO 3 | Ap |

**GEOADSE20T(Advanced Climatology)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | understand and recognize the nature, concept of atmospheric temperature, gases, moisturizer and equations of pressure, Coriolis force and winds. | PO 1,2,3 | PSO 1,,4 | U,R |
| CO 2: | evaluate tropical wet, dry , weather hazard and mechanism of Indian monsoon. | PO 4,5 | PSO ,5 | E, |
| CO 3: | determine the theories of climatic change, climate cycle and climate trends. | PO 3,5 | PSO 3 | Ap |
| CO4: | analyze the human comfort in relation to climate and synoptic climatology. | PO 4 | PSO 4 | An |
| CO 5: | Apply the concept of urban climatology and weather forecast in India. | PO 5 | PSO 5 | E |

**GEOADSE21T(Rural and Urban Geography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | understand and recognize the concept of paradigms approaches of rural development. | PO 1,2,3 | PSO 1,,4 | U,R |
| CO 2: | Evaluate rural employment policies, 73rd constitutional amendment of India and participatory rural planning. | PO 4,5 | PSO ,5 | E, |
| CO 3: | determine the approaches, origin of urban places in different periods and patterns of urbanization. | PO 3,5 | PSO 3 | Ap |
| CO4: | analyze the urban issues, poverty, crime and civic amenities. | PO 4 | PSO 4 | An |

**GEOHM01T/GEOMCO1T(Physical Geography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | determine the internal structure based on seismic evidence | PO 3,5 | PSO 3 | Ap |
| CO 2: | evaluate the formation of different landforms by fluvial, aeolian and coastal processes | PO 4,5 | PSO 5 | E |
| CO3: | analyze the nature and classification of hazards in india | PO 4 | PSO 4 | An |
| CO 4: | develop and recognize the different aspects of climatology, and evolution of soil and the concept of ecosystem. | PO1, 4,6 | PSO 2,4 | C,R |

**GEOHM02T/GEOMCO2T(Human Geography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| **CO1:** | Understand and recognize the concept of elements and approaches to human geography. | PO 1,2,3 | PSO 1,,4 | U,R |
| CO 2: | Determine the evolution of human societies and different concepts of population ( like growth, distribution of population, population composition , migration and demographic transition model) | PO 4,5 | PSO 5 | E |
| CO 3: | Remember the different sectors of economy and different types of agriculture | PO 1 | PSO 4 | R |
| CO 4: | Analyze the different types of agriculture | PO 4 | PSO 4 | An |
| CO5: | understand and illustrate the types patterns and classification of rural and urban settlements | PO 2,3,5 | PSO 1,3 | U, Ap |

**GEOHM03T /GEOMC03T& 3P(General Cartography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Understand the concept of map scale, its types and application. | PO 2,3 | PSO 1,3 | U |
| CO 2: | Analyze and apply the construction of map projection and topographical map of survey of India and the representation of data. | PO 3,4,5 | PSO 3,4 | An, Ap |
| CO 3: | Develop the construction of the map projections, map scales and the relief profiles of topographical map from survey of India. | PO 4,6 | PSO 2 | C |

**GEOMC04T (Environmental Geography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Determine and analyze the different concepts and approaches of environmental geography | PO 2,3 | PSO 1,3 | E, An |
| CO 2: | Recognize and explain the environmental problems, management and policies | PO 3,4,5 | PSO 3,4 | R, U |

**GEOMC05T(Soil and Biogeography)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Develop knowledge about the nature and different profiles of soil like laterite, podzol and chernozem. | **PO 4,6** | **PSO 2** | **C** |
| CO 2: | understand the significance of soil properties like soil structure and soil texture | **PO 2,3** | **PSO 1,3** | **U** |
| CO 3: | recognize the principle of soil classification, and concept of land capability. | **PO 1** | **PSO 4** | **R** |
| CO4: | determine the concept of biosphere, and different terms associated with ecosystem | **PO 4,5** | **PSO 5** | **E** |
| CO5: | analyze and apply of the geographical extent and characteristics of different biomes. And , the bio-geochemical cycle, bio-diversity and man and biosphere programme. | **PO 3,4,5** | **PSO 3,4** | **An, Ap** |

**GEOMC06T (Regional Development)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Understand the holistic concept of region and regional planning | PO 2,3 | PSO 1,3 | U |
| CO 2: | Evaluate the need for regional planning and strategies for planning | PO 4,5 | PSO 5 | E |
| CO3: | Illustrate the concept of regional development in terms of indicators of development and regional disparities. | PO 4 | PSO 4 | An |

**GEOHSM01P(Project Report Based on Field Work)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Create and analyze a project work based on primary and secondary data suggested by the specific department | PO 2,3 | PSO 1,3 | C, An |
| CO 2: | Explain and identify the relationship between man and nature through the project based on field work. | PO 4,5 | PSO 5 | U, R |

**GEOSE01M (Remote Sensing**

**)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | understand and analyze the principles, classification and sensors of remote sensing and the sensor resolution and their applications | PO 2,3,4 | PSO 1,3, 4 | U, An |
| CO 2: | . Evaluate and identify the preparation of false colour composition and interpretation of image from landuse and landcover map | PO 1,3, 4,5 | PSO 1, 4, | E,R |

**GEOSE-02M(Advanced Spatial Statistical Techniques)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Develop and explain the probability theory, its function and their geographical application. | PO 3,4 | PSO 1,2,3 | C, U |
| CO 2: | . Analyze and apply the different sampling, co-relation, regression analysis and time series analyze and its components | PO 3,4,5 | PSO 3,4 | An, Ap |

**GEOSE-03M (Research Methodology)**

**Course Outcomes:**

After completion of this course the student will be able to

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| --- | --- | --- | --- | --- |
| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | To identify and evaluate the different concepts of research methodology like literature review, research problems, research materials, methods etc | PO 1,4,5 | PSO 4,5 | R,E |
| CO 2: | To analyze and apply the significance of fieldwork in geographical studies, field techniques , tools and samples. | PO3, 4, 5 | PSO 3,4 | An,Ap |
| CO 3: | To create and understand report on fieldwork based on primary and secondary data. | PO 2,6 | PSO 23 | C,U |

**GEOMD-01M(Geomatics and Spatial Analysis)**

**Course Outcomes:**

After completion of this course the student will be able to

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| **CO No.** | **Course Outcomes:** | **PO Addressed** | **PSOs Addressed** | **Cognitive Level** |
| CO 1: | Build knowledge and relate the concept of different types of scales and projections | PO 4,5,6 | PSO 2,5 | C, E |
| CO 2: | It analyse and use the surveying and survey equipments with their capabilities | PO 3,4,5 | PSO 3,4 | An, Ap |
| CO 3: | Describe a concept of remote sensing and principles of preparing standard false colour composites | PO 2,3 | PSO 1 | U |
| CO 4: | Develop an idea about the GIS data and principles of preparing attributes tables, data manipulation and overlay. | PO 6 | PSO 2 | C |
| CO 5: | Define skill to construct different types of landuse and landcover features from standard FCCs with identifying the change detection of riverbank or coastline shift from multi-dated maps and images. | PO 1 | PSO 4 | R |