

Department of GEOGRAPHY

PROGRAM OUTCOMES (PO)

Upon completion of the Post Graduate programme, the students will be able to achieve the following outcomes:

- PO1: Profound Professional Knowledge:** Obtain proficiency to maneuver in diverse context of the advance subject knowledge.
- PO2: Critical Thinking and Analysis:** Attain the analytical expertise to create, analyse, formulate, and solve challenging problems.
- PO3: Environment and sustainability:** Understand the impact of the scientific solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO4: Research and Innovation:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5: Effective Communication:** Demonstrate skills such as effective communication, decision making, problem and adapt ability to create technical writing.
- PO6: Problem Solving:** Understand, interpret, explain, analyse and assess the tools, techniques, models and methodologies to solve problems.
- PO7: Employability:** Demonstrate skills for doctoral, post-doctoral education, professional development and employability.
- PO8: Advance tools and techniques:** Attain ability to work with advanced IT tools and techniques in their domain.
- PO9: Social Consciousness:** Acquire awareness towards gender, environment, sustainability, human values and professional ethics and understand the difference between acting, responding and reacting to various social issues
- PO10: Nation Building:** Introspect and evolve into dynamic and creative individuals capable of socially productive, constructive actions that positively impact our Nation and the World at large.

Programme Specific Outcome (PSO)

Upon completion of the programme, student will be able to:

- PO1:** Enhance the in-depth knowledge base regarding different branches of geography, modern and scientific tools, and techniques.
- PO2:** Apply the knowledge gained, for getting through various competitive examinations, especially in the areas of lectureship and civil service
- PO3:** Provide base for scientific and technological fields of Geo-informatics, Population dynamics, Meteorological and Hydrological studies and so on.
- PO4:** Create quality research ideas and undertake meaningful research based on systematic and scientific techniques.
- PO5:** Create an amicable and healthy living environment with human values, professional ethics, sustainable development, human rights, and gender sensitization.
- PO6:** Apply the knowledge gained for successfully getting through various competitive examinations, especially in the areas of lectureship and civil services and to increase their employability in Census, NIEPA, NCERT and Government Planning Section.

M.A SEMESTER – I

Course Code MGEO-CC101

Course Name Geomorphology

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Remember the processes of geomorphic formation of earth features.
- CO2:** Understand various evolutionary theories providing a concept base of physical geography.
- CO3:** Understand the geomorphic formation of different physical parts of India.
- CO4:** Apply the geomorphic concepts and ideas in practical and scientific pursuits.

M.A SEMESTER – I

Course Code: MGEO-CC102

Course Name: Climatology and Oceanography

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Develop basic idea about various climatic phenomena of earth's atmosphere.
- CO2:** Understand the current climate related issues like weather forecasting and climate change consequences.
- CO3:** Evaluate the geography of ocean and its features.
- CO4:** Understand the concept and distribution of marine resources.

M.A SEMESTER – I

Course Code: MGEO-CC103

Course Name: History of Geographical Thought

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Analyse the meaning of geography in context to science and social sciences.
- CO2:** Understand and remember the contributions of ancient and modern scholars in the growth and development of geography.
- CO3:** Evaluate various theories, concepts and ideologies that have shaped the growth of geography as a discipline.
- CO4:** Evaluate the contemporary and modern ideas prevalent in the field of geography.

M.A SEMESTER – I

Course Code: MGEO-CC104

Course Name: Representation and Analysis of Statistical Data

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the utility and significance of tools and techniques for graphical representation of statistical data.
- CO2:** Apply different statistical tools in geographical studies.
- CO3:** Evaluate the significance test to strengthen their argument with facts and Data.
- CO4:** Apply the knowledge in analysing multifarious data used in social science.

In the End Semester Examination questions will be set preferably from each unit out of which candidates are required to answer any three questions.

M.A SEMESTER – I

Course Code: MAECC - CC101(Ability Enhancement Compulsory Course)

Course Name: (A) Environmental Sustainability

(B) Swachha Bharat Abhiyan Activities

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the concept of environmental Sustainability.
- CO2:** Understand the concept and types of natural resources and environmental pollution.
- CO3:** Evaluate the anomalies created due to haphazard population growth and its impact on biodiversity and population.
- CO4:** Understand the concept of Swachha Bharat Abhiyan and importance of cleanliness.

SEMESTER–II

Course Code: MGEO – CC205

Course Name: Regional Planning and Rural Development

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the basic concept and processes of regional planning.
- CO2:** Evaluate the approach to the rural planning and development process in the Indian context.
- CO3:** Apply the planning processes and mechanism in further useful geographical applications and case studies.
- CO4:** Apply the knowledge to start NGO or Self-Help Group or start-up.

SEMESTER-II

Course Code: MGEO – CC206

Course Name: Environment and Disaster Management

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the dynamics of environmentalism and related aspects of earth's environment.
- CO2:** Analyse the current environmental issues and problems.
- CO3:** Create an awareness regarding environmental hazards and disasters.
- CO4:** Use the action plan for the mitigation, adaptation and mapping of disasters.

SEMESTER-II

Course Code: MGEO – CC207

Course Name: Resource and Economic Geography

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the meaning of resources, and the concepts of resource and economic geography.
- CO2:** Evaluate the models and theories regarding agricultural location, agricultural regions, industrial location, and international trade.
- CO3:** Apply the usage of non-conventional energy resources and their management.

CO4: Apply the conservation and protection methods for natural resources, energy means and agricultural produce.

SEMESTER-II

Course Code: MGEO – CC208

Course Name: Geography of India

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the in-depth geography of India – its physical, socio-cultural and economic aspects
- CO2:** Understand the resource wealth and its application in the national economic growth and development.
- CO3:** Understand the ethnic and socio-cultural fabric of the country in terms of tribes, culture and language.
- CO4:** Evaluate the policies and programmes related to agricultural and industrial sectors.

SEMESTER-II

Course Code: MGEO – CC209

Course Name: Cartographic Techniques

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Remember the representation of mathematical and statistical data with the help of cartographic tools and techniques.
- CO2:** Understand the significance and relevance of cartograms, cartographic tools and map making in geographical studies.
- CO3:** Apply the cartographic techniques with accuracy and efficiency for geographical studies and research.
- CO4:** Articulate the Knowledge of modern cartographic technique.

SEMESTER-III

Course Code: MGEO – CC310

Course Name: Quantitative Techniques and Research Methodology

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the steps and techniques of social science research.
- CO2:** Understand the importance of quantitative tools and techniques in geographical research.
- CO3:** Apply and implement the correct methodology for a quality research work.
- CO4:** Create their own research ideas using proper methods and quantitative tools.

SEMESTER–III

Course Code: MGEO – CC311

Course Name: Remote Sensing and Geographical Information System

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the significance of Remote Sensing in geographical studies.
- CO2:** Understand the mechanism and stages of Remote Sensing – the platforms, sensors and resolutions.
- CO3:** Apply the GIS tool for geo-referencing, land information system, urban and disaster management.

SEMESTER–III

Course Code: MGEO – CC312

Course Name: Human and Social Geography

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the concept and approaches to human geography and human settlement.
- CO2:** Evaluate the processes, pattern, and composition of world population.

- CO3:** Evaluate the conceptual aspects of social geography and the related concepts.
- CO4:** Apply the human and social patterns to socio-cultural transformation and uplifting quality of social life.

SEMESTER–III

Course Code: MGEO – CC313

Course Name: Land Use and Agriculture Geography

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the meaning, concept and scope of land use and agricultural geography.
- CO2:** Understand and remember the models and classifications of land use of India and some other countries.
- CO3:** Evaluate the agricultural systems and patterns of the world with special reference to India.
- CO4:** Evaluate the modern agricultural technology, agricultural policies, and emerging problems.

SEMESTER–III

Course Code: MGEO – CC314

Course Name: Instrumental Surveying, GIS and GPS

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the importance and use of field survey methods of geography.
- CO2:** Apply the survey instruments for preparation of ground plans and profiles.
- CO3:** Apply the digital methods of geo-referencing and map preparation
- CO4:** Prepare scientific and technically sound digital maps and plans using GIS/
GPS

SEMESTER-IV

Course Code: DSE401 (Discipline Specific Elective -01)

Course Name: (A) Urban Geography

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the meaning and scope of urban geography and functions of urban centres.
- CO2:** Understand the various concepts related to urban geography such as urban ecology, urban systems, urban morphology, City Region, umland and urban fringes.
- CO3:** Evaluate theories presented in the fields of urban land use.
- CO4:** Apply the knowledge into policy formulation for urban planning, slum improvement, eradication of urban poverty and development of smart cities.

SEMESTER-IV

Course Code: DSE401 (Discipline Specific Elective -01)

Course Name: B Political Geography

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the concepts and theories related to political geography, its approaches, and functional aspects.
- CO2:** Understand the global political strategies, geo-political issues, and nation-state dynamics in the context of world political order.
- CO3:** Apply the geo-political ideas for thinking on the lines of inter-state water disputes, border issues, regionalism problems etc.
- CO4:** Comprehend the knowledge as political analyst in electronic or print media.

SEMESTER-IV

Course Code: DSE401 (Discipline Specific Elective -01)

Course Name: C. Population Geography

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the nature and growth of population geography.
- CO2:** Evaluate the growth, distribution, composition, and migration of population in Indian context.
- CO3:** Apply the theories of population growth and demographic transition into current circumstances.
- CO4:** Apply the dynamics of population in determination and measurement processes of fertility, mortality, migration, and urbanization.

SEMESTER-IV

Course Code: DSE401 (Discipline Specific Elective -01)

Course Name: D. Geology of India

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the scope and functions of geology in context to stratigraphic scales.
- CO2:** Evaluate the geological history and lithology of different physical sections of India.
- CO3:** Evaluate the geological classifications of rock formations, minerals, and energy resources of India.
- CO4:** Apply the knowledge in higher studies and specialized knowledge.

SEMESTER-IV

Course Code: DSE401 (Discipline Specific Elective -01)

Course Name: E. Settlement Geography

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the meaning of settlement geography and development of settlements.
- CO2:** Evaluate the evolution, types, characteristic features, morphology and problems of rural settlements.
- CO3:** Evaluate the locations, functions, morphology and problems of urban settlements.
- CO4:** Apply the knowledge base in the settlement planning process for rural and urban areas.

SEMESTER-IV

Course Code: DSE401 (Discipline Specific Elective -01)

Course Name: F. Advance Cartography

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the principles of cartography for map making and field surveys.
- CO2:** Understand the techniques of photogrammetry and aerial photography.
- CO3:** Apply the computer-based cartography in preparation of thematic maps.
- CO4:** Apply the remote sensing techniques for interpretation of satellite imageries.

SEMESTER-IV

Course Code: DSE402 (Discipline Specific Elective -02)

Course Name: Dissertation / Project Work

Course Outcomes:

After completion of the course, the student will be able to:

- CO1:** Understand the methodology and design of social science research.
- CO2:** Understand and learn the techniques of data collection, sampling, and household surveys

CO3: Evaluate and interpret the primary data with cartographic/ statistical treatment.

CO4: Create and prepare a detailed report in the form of dissertation.

SEMESTER-IV

Course Code: MGEO – GE401 (Generic Elective – 01)

Course Name: A. Regional Planning and Rural Development

Course Outcomes:

After completion of the course, the student will be able to:

CO1: Understand the basic concept and processes of regional planning.

CO2: Evaluate the approach to the rural planning and development process in the Indian context.

CO3: Apply the planning processes and mechanism in further useful geographical applications and case studies.

CO4: Apply the knowledge to start NGO or Self-Help Group or start-up.

SEMESTER-IV

Course Code: MGEO – GE401 (Generic Elective – 01)

Course Name: B. Geography of Bihar

Course Outcomes:

After completion of the course, the student will be able to:

CO1: Understand the physical characteristics of Bihar.

CO2: Comprehend the climatic variations of the State.

CO3: Analysis the Flood and Drought problems of the State.

CO4: Evaluate the current scenario of agriculture, industries and population of the State.