

# **Bachelor of Arts (B.A)/ Science Programme In GEOGRAPHY**

## **SEMESTER – 1**

### **MJC-1 (T): GEOMORPHOLOGY**

Course Objectives:

- To understand the concept of various land forms and physical features.
- To examine and correlate information about geomorphic processes.
- To provide a theoretical and empirical framework for understanding landscapes evolution.

#### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Develop an idea of geomorphology and its fundamental concepts.

**CO2:** Understand various theories regarding the origin of the earth.

**CO3:** Understand various processes of natural and anthropogenic factors.

**CO4:** Understand the role of structure, process and stages in shaping the landforms.

**CO5:** Explain different types of geomorphic processes like weathering and cycle of erosion.

**CO6:** Understand the processes of erosion, deposition and resulting landforms.

## **SEMESTER – 1**

### **MJC-1 (P): GEOMORPHOLOGY**

Course Objectives:

- To understand the basic characteristics of Rocks and Minerals for their identification.
- To understand various land forms, relief and geomorphic process.
- To understand Topographical Maps through Conventional signs and Symbols.

#### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Understand the concept and properties of various types of Rocks and Minerals.

**CO2:** Identify various types of Rocks and Minerals.

**CO3:** Understand the various land forms and other geomorphic processes.

**CO4:** Understand and interpret Topographical maps.

## **SEMESTER – II**

### **MJC-2 (T): CLIMATOLOGY & OCEANOGRAPHY**

Course Objectives:

- To understand different layers and composition of atmosphere.
- To critically examine various aspects of climate and its classification.
- To understand oceanic relief features and composition of ocean water.

#### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Understand the structure and composition atmosphere.

**CO2:** Understand the various climatic change.

**CO3:** Understand causes of climate change.

**CO4:** Understand Ocean, its features and properties.

## **SEMESTER – 1**

### **MJC-2 (P): CLIMATOLOGY & OCEANOGRAPHY**

Course Objectives:

- To understand different weather phenomena through graph and diagrams.
- To get acquainted with different weather measuring instruments.
- To understand and analyze spatial weather conditions.

#### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Understand the various weather phenomena.

**CO2:** Interpret weather conditions of a place or region.

**CO3:** Understand the functions of various weather instruments.

## **SEMESTER – 1**

### **MIC-1 (T): GEOMORPHOLOGY**

Course Objectives:

- To understand the origin and internal structure of the Earth.
- To examine various geomorphic processes.
- To understand earth movements and related features.

#### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Understand the various geomorphic processes.

**CO2:** Understand the properties and types of Rocks.

**CO3:** Understand Earth movement and its resultant features.

## **SEMESTER – 1**

### **MIC-1 (P): GEOMORPHOLOGY**

Course Objectives:

- To study Topographical Maps with the help of conventional signs and symbols.
- To understand contour lines.
- To understand relief features.

#### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Understand the concept and properties of various types of Rocks and Minerals.

**CO2:** Identify various types of Rocks and Minerals.

**CO3:** Understand the various land forms and other geomorphic processes.

## **SEMESTER – II**

### **MIC-2 (T): CLIMATOLOGY & OCEANOGRAPHY**

Course Objectives:

- To understand atmospheric pressure and wind system.
- To understand the structure and composition of atmosphere.
- To develop understanding of relief and properties of Oceans.

### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Understand the concept of structure and composition of Atmosphere.

**CO2:** Understand global atmospheric pressure and wind system.

**CO3:** Understand Relief and Properties of Oceans.

## **SEMESTER – 1**

### **MIC-2 (P): CLIMATOLOGY & OCEANOGRAPHY**

Course Objectives:

- To understand the importance of weather maps.
- To understand the use of different weather instruments.
- To get acquainted with different weather conditions through diagrams and instruments.

### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Understand the various weather phenomena.

**CO2:** Interpret weather conditions of a place.

**CO3:** Understand the functions of various weather instruments.

## **Skill Enhancement Course (SEC)**

### **Course Title – Advance Spreadsheet Tools**

Learning Objectives

The Learning Objectives of this course are as follows:

- To enable the students to use Excel for advanced data analysis
- To equip the students to with automation skills on excel
- To enable the students to use excel for informed decision making.

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** By studying this course, students will be able to make meaningful representations of data in the form of charts and pivot tables.

**CO2:** By studying this course, students will be able to draw analysis on data using spreadsheets and use interpretation to make decisions.

**CO3:** By studying this course, students will be able to generate word documents with appropriate formatting, layout, proofing.

**CO4:** By studying this course, students will be able to manage data for generating queries, forms and reports in a database.

### **Course Title – Basic IT Tools**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To enable students develop IT skills that are a pre-requisite in today's work environment.
- To equip them with basic computing skills that will enhance their employability in general.
- To enable the students to analyse and present information in a meaningful manner.

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** By studying this course, students will be able to use word-processor to generate documents with appropriate formatting, layout, review and referencing.

**CO2:** By studying this course, students will be able to manage data in worksheets and workbooks and analyze it using spreadsheet functions and inbuilt formulas.

**CO3:** By studying this course, students will be able to analysis on data using spreadsheets to make decisions.

**CO4:** By studying this course, students will be able to make meaningful representations of data in the form of charts and pivot tables.

**CO5:** By studying this course, students will be able to manage data in database tables and use the same for generating queries, forms and reports.

### **Course Title – Beginners Course to Calligraphy**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To teach students the art of Calligraphy.
- To make students better at handwriting and embellish the scripts.
- To help the students communicate with creativity.

#### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

**CO1:** Students will be skilled in calligraphy scripts.

**CO2:** Learning flourishing will help to develop good writing.

**CO3:** Practice sessions will further a project at the end of semester.

**CO4:** Will induce skills to set up a business, too.

### **Course Title – Big Data Analytics**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To Understand the Big Data Platform and its Uses
- Provide an overview of Apache Hadoop
- Provide HDFS Concepts and Interfacing with HDFS.
- Provide hands on Hadoop Eco System
- To understand spark framework

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** After studying this course, students will be able to identify Big Data and its Business Implications.

**CO2:** After studying this course, students will be able to list the components of Hadoop and Hadoop Eco-System.

**CO3:** After studying this course, students will be able to access and process data on distributed file system.

**CO4:** After studying this course, students will be able to manage job execution in Hadoop environment.

**CO5:** After studying this course, students will be able to develop Big Data Solutions using Hadoop Eco System.

### **Course Title – Business Communication**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To train students to enhance written as well as oral communication in the corporate world.
- To help students in understanding the principles and techniques of business communication.
- To understand the use of electronic media for communication.

### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

- CO1:** After studying this course, students will be able to explain the need for communication in management.
- CO2:** After studying this course, students will be able to appreciate the need of effective writing for communication.
- CO3:** After studying this course, students will be able to demonstrate the skill of effective report writing and summarizing annual reports.
- CO4:** After studying this course, students will be able to analyze business correspondence and e-correspondence.
- CO5:** After studying this course, students will be able to appreciate oral presentations.

### **Course Title – Communication in Everyday Life**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To lay down a basic foundation for basic communication that is a part of a student's everyday life.
- To inculcate the fundamentals of communication with the aim to enhance listening, speaking and writing skills.
- To hone practical skills that can be used in day-to-day affairs.

### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

- CO1:** After studying this course, students will be able to improve mediation skills.
- CO2:** After studying this course, students will be able to building human relationships.
- CO3:** After studying this course, students will be able to foster societal understanding & develop an independent perspective.
- CO4:** After studying this course, students will be able to enhance social Communication skills of students.

### **Course Title – Communication in professional Life**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To prepare the students for their upcoming professional fields.
- To inculcate the fundamentals of professional and business communication.

- To learn aspects of global communication.
- To enhance employability skills of the learners by enabling them to write effective resumes and face interviews with confidence.

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

- CO1:** After studying this course, students will be able to improve presentation skills to be learnt by effective use of verbal and non-verbal communication for the professional field.
- CO2:** After studying this course, students will be able to acquire practical employability skills to be disseminated through focused sessions on practical employable knowledge.
- CO3:** After studying this course, students will be able to enhance professional communication.
- CO4:** After studying this course, students will be able to improve persuasion and negotiation skills which will be useful for the professional field.

### **Course Title – Communication in Professional Life**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To build creative writing skills of students in the main in odes of creative writing vizpoetry, fiction (novel, short stories), non-fiction (life narratives, autobiographies and biographies) and drama.
- To inculcate practical skill in students by mapping their creative talent which be beneficial for employability too.
- To perform hands-on-activities to students to develop their creative skills through practical sessions.

### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

- CO1:** After studying this course, students will be able to sensitive to the texture of literary language.
- CO2:** After studying this course, students will be able to develop craft in creative writing.
- CO3:** After studying this course, students will be able to develop sense of expressing themselves through poetry/short biography.
- CO4:** After studying this course, students will be able to induce an understanding of their lationship between an individual and society.
- CO5:** After studying this course, students will be able to get into different fields and pursue versatile career opportunities.
- CO6:** After studying this course, students will be able to develop an understanding of theatre and performance through drama will also help them to develop observatory and behavioral skills.



**CO7:** After studying this course, students will be able to develop a critical thought process and a knack in putting it in words. Students may also utilize the learnings of proofreading and editing for their academic and professional growth.

**CO8:** After studying this course, students will be able to go for publishing their own work.

**CO9:** After studying this course, students will be able to write a book and submit.

### **Course Title – Digital Marketing**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To acquaint the students with the knowledge of growing integration between the traditional and digital marketing concepts and practices in the digital era.
- To familiarize the students with the tools and techniques used by the digital marketers for driving the marketing decisions to attain marketing objectives.

#### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

**CO1:** After studying this course, students will be able to understand the concept of digital marketing and its integration with traditional marketing.

**CO2:** After studying this course, students will be able to understand customer value journey in digital context and behaviour of online consumers.

**CO3:** After studying this course, students will be able to understand email, content and social media marketing and apply the learnings to create digital media campaigns.

**CO4:** After studying this course, students will be able to examine various tactics for enhancing a website's position and ranking with search engines.

**CO5:** After studying this course, students will be able to leverage the digital strategies to gain competitive advantage for business and career.

### **Course Title – Graphic Design and Animation**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To introduce the students to the skill of animation.
- To learn about the application of 2D and 3D animation.

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** After studying this course, students will be able to understand the importance of animation and graphics design.

**CO2:** After studying this course, students will be able to learn graphics design in 2D and 3D animation.

**CO3:** After studying this course, students will be able to learn the application of graphics design in 2D and 3D animation in advertising and other areas.

### **Course Title – Introduction to Cloud Computing (AWS)**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To learn about cloud computing through Amazon Web Services (AWS) platform.
- To learn about AWS cloud concepts, services, security and architecture to build an application.

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** After studying this course, students will be able to Understanding cloud computing platform.

**CO2:** After studying this course, students will be able to differentiate between on-premises, hybrid-cloud, and all-in cloud

**CO3:** After studying this course, students will be able to describe the basic global infrastructure of the AWS Cloud

**CO4:** After studying this course, students will be able to understanding the core AWS services, including compute, network databases and storage.

### **Course Title – Personal Financial Planning**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To familiarize students with different aspects of personal financial planning like savings, investment, taxation, insurance and retirement planning.
- To develop the necessary knowledge and skills for effective financial planning.

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** After studying this course, students will be able to understand the meaning and appreciate the relevance of financial planning.

**CO2:** After studying this course, students will be able to understand the concept of investment planning and its methods.

**CO3:** After studying this course, students will be able to examine the scope and ways of personal tax planning.

**CO4:** After studying this course, students will be able to analyze insurance planning and its relevance.

**CO5:** After studying this course, students will be able to develop insight into retirement planning and its relevance.

### **Course Title – Personality Development and Communication**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To develop inter personal and effective communication skills.
- To develop problem solving skills and understand its influence on behaviour and attitudes of individuals.

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** After studying this course, students will be able to understand the importance of oral and written communication in day-to-day working of the organization.

**CO2:** After studying this course, students will be able to develop inter personal skills and problem-solving skills.

**CO3:** After studying this course, students will be able to understand the rule of body language in effective communication.

### **Course Title – Prospecting E-waste for Sustainability**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To provide in-depth knowledge on the effective mechanisms to regulate the generation, collection and storage of e-waste
- To gain insights into the internationally/nationally acceptable methods of transport, import and export of e-waste within and between countries
- To develop a holistic view on recycling, treatment and disposal of e-waste and related legislative rules.

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** After studying this course, students will be able to holistically analyze the environmental impacts of e-waste

**CO2:** After studying this course, students will be able to apply the skills and various concepts for sustainable management of e-waste

**CO3:** After studying this course, students will be able to decipher the role of various national and international regulations for e-waste management

**CO4:** After studying this course, students will be able to provide specific recommendations for improved methods for handling e-waste at different stages such as generation, collection, storage, transport and recycling.

### **Course Title – Public Speaking in English Language and Leadership**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To impart leadership skills to students along with adequate communication skills to curate strong leaders in the emerging social, political and corporate world.
- To create leaders with ethics and resilience in industry-based fields as well as social fields.
- To allow students to realize their leadership skills and curate them through a hand-on practical approach which will be helpful in generating employable skills for them.

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** After studying this course, students will be able to learn effective communication through Public Speaking will instill leadership development among students.

**CO2:** After studying this course, students will be able to lead in different fields at the undergraduate level, be responsible citizens and employ leadership skills in their future endeavors too.

**CO3:** After studying this course, students will be able to strengthen their critical mindset, help them being assertive and put forward constructive viewpoints employing the skills learnt in the practice sessions.

### **Course Title – Statistical Software Package**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To familiarize students with data analysis using a statistical software package like SPSS or any equivalent.
- To provide skills for research analysis and increase employability.
- To lay a foundation for advance data analysis work and higher education.

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** After studying this course, students will be able to understand basic functions of statistical software package for managing variables and generate descriptive statistics to describe the data and analyze data through graphs and charts.

**CO2:** After studying this course, students will be able to test differences in sample means.

**CO3:** After studying this course, students will be able to identify relationships between variables and develop models for predicting dependent variables on the basis of independent variables.

**CO4:** After studying this course, students will be able to understand data structures and identify clusters in data.

**CO5:** After studying this course, students will be able to identify principal components that are relevant from a host of variables.

### **Course Title – Sustainable Ecotourism and Entrepreneurship**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To train students in concepts and principles of sustainable ecotourism leading to a new generation of entrepreneurs
- To inculcate field-based practical skills in translating ecological systems into wealth generation while conserving natural resources
- To transform local biological wealth into a hub of global attraction and generate a scientific basis of Indian traditional knowledge

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** After studying this course, students will be able to develop next-generation ecological entrepreneurs.

**CO2:** After studying this course, students will be able to evolve eco-literate society by integrating market-based instruments with eco-cultural knowledge of traditional societies.

**CO3:** After studying this course, students will be able to practice ecological knowledge for wealth generation, environmental conservation and popularization of Indian traditional knowledge.

### **Course Title – Visual Communication and Photography**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To synthesize a comprehensive view of principles involved in Visual Communication.
- To appreciate and express the cultural significance of photography art and understand its evolution and purposes.
- To develop an awareness of compositional and organizational strategies for the effective deployment of formal elements of visual art.
- To read visual texts with a deep knowledge of visual history and theory.
- To create an ability of situating the content and form of the visual representation of thematic context.

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

- CO1:** After studying this course, students will be able to acquire knowledge of the cultural and historical importance of the visual medium.
- CO2:** After studying this course, students will be able to explore the fundamentals and underlying theories of Visual Communication.
- CO3:** After studying this course, students will be able to develop a thorough knowledge of concepts and skills in creating photographs.
- CO4:** After studying this course, students will be able to learn to identify and analyze semiotics in photographs.
- CO5:** After studying this course, students will be able to develop a craftsmanship in creating aesthetically pleasing photographs.

### **Course Title – पटकथा लेखन**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- पटकथा लेखन का परिचय कराना।
- विद्यार्थी की लेखन-क्षमता और भाषा-कौशल को बढ़ावा देना।
- विद्यार्थी की लेखन में रोजगार सम्बन्धी क्षेत्रों के लिए तैयार करना।

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

- CO1:** पटकथा लेखन तथा उसके तकनीकी शब्दों से विद्यार्थी अवगत हो सकेगा।
- CO2:** पटकथा लेखन की जानकारी मिलने के उपरान्त विद्यार्थी के लिए रोजगार की संभावनाएँ बनेंगी।
- CO3:** विद्यार्थी भाषायी सम्प्रेषण को समझते हुए लेखन से सम्बन्धित विभिन्न पक्षों से अवगत हो सकेगा।
- CO4:** विद्यार्थी में अभिव्यक्ति कौशल का विकास हो सकेगा।

### **Course Title – रंगमंच**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- हिन्दी रंगमंच का परिचय कराना।
- नाट्य-प्रस्तुति की प्रक्रिया की जानकारी देना।
- अभिनय के विभिन्न पक्षों से अवगत करना।
- रंगमंच के खेलों और गतिविधियों से अवगत कराना।

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** नाट्य-प्रस्तुति की प्रक्रिया से विद्यार्थी अवगत हो सकेगा।

**CO2:** रंगमंच की जानकारी मिलने के उपरान्त इस क्षेत्र में विद्यार्थी के लिए रोजगार की संभावनाएँ बनेंगी।

**CO3:** रंगमंचीय गतिविधियों से विद्यार्थी के व्यक्तित्व का विकास हो सकेगा।

**CO4:** विद्यार्थी में अभिव्यक्ति कौशल का विकास हो सकेगा।

### **Course Title – रचनात्मक लेखन**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- विद्यार्थियों के मौखिक और लिखित अभिव्यक्ति कौशल को विकसित करना।
- उनमें कल्पनाशीलता और रचनात्मकता का विकास करना।
- साहित्य की विविध विधाओं और उनकी रचनात्मक शैली का परिचय कराते हुए लेखन की ओर प्रेरित करना।
- प्रिंट एवं इलेक्ट्रॉनिक माध्यमों के लिए लेखन प्रवृत्ति को विकसित करना।

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** मौखिक और लिखित अभिव्यक्ति कौशल को विकसित होने में मदद मिलेगी।

**CO2:** उसमें कल्पनाशीलता और रचनात्मकता का विकास हो सकेगा।

**CO3:** साहित्य की विधि विधाओं और उनकी रचनात्मकता शैली का परिचय होगा जिससे वे स्वयं भी विधाओं में लेखन की अग्रसर हो सकेंगे।

**CO4:** प्रिंट एवं इलेक्ट्रॉनिक माध्यमों के लिए लेखन की ओर भी अग्रसर होंगे।

**Course Title – Arts of Beign****Happy****Learning Objectives**

The Learning Objectives of this course are as follows:

- To synthesize the insights developed by Human Development experts, Psychologists, Anthropologists on one hand, and the intellectual traditions of Vedantic Philosophy and Indology on the other towards the experience of happiness.
- To illustrate various factors that determine the subjective experience of happiness in a cross cultural context.

**Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

- CO1:** The students shall be able to evaluate the factors contributing to the phenomenon of happiness in the personal, familial and community life of an individual in different cultures in the Indian context.
- CO2:** They will be able to develop healthy interpersonal relationships and wellbeing, cherishing the values of Indian culture and philosophy.
- CO3:** They will be able to relate to the global phenomenon of sustainable development and become sensitive to the needs of the planet.
- CO4:** They will be able to apply the experience of Aananda at a personal level.

**Course Title – Ayurveda and Nutrition****Learning Objectives**

The Learning Objectives of this course are as follows:

- To introduce the basic principles of nutrition in Ayurveda.
- To link the Ayurvedic nutrition with modern dietary practices for health.
- To analyze basic tenets of traditional diets and health recipes.
- To understand the contemporary food habits in everyday life.

**Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

- CO1:** Awareness of traditional food cultures of India.
- CO2:** Evaluate changing food patterns and lifestyle over the years.



**CO3:** Understand Indian Knowledge Systems (IKS) and key Vedic principles with respect to Food and Nutrition.

**CO4:** Apply basic tenets of traditional diets for health and disease.

**CO5:** Prepare selected healthy recipes based on Ayurvedic principles.

### **Course Title – Constitutional Values and Fundamental Duties**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- Enrich students with knowledge and relevance of the Constitution.
- Develop awareness about Duties and Values.
- Inculcate a sense of Constitutionalism in thought and action.

#### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

**CO1:** Understand the Constitution and its relevance.

**CO2:** Appreciate the values and goals embedded in the Constitution.

**CO3:** Recognize the importance of Fundamental Duties enshrined in the Constitution.

**CO4:** Apply the spirit of fundamental values and duties in everyday national life.

### **Course Title – CULTURE AND COMMUNICATION**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To focus on traditional values disseminated from Indian cultural heritage.
- To understand the interconnections between the legacy of our past and needs of our contemporary society.
- To learn to adapt interact and celebrate our diversity and pluralistic culture.
- To develop communication skills in speaking listening reading and writing and apply them in our quotidian life as young citizens of contemporary India.
- To integrate ethical values and life skills.

#### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

**CO1:** Students will be able to appreciate the relevance of ancient Indian wisdom and core ethical values in our contemporary life.

**CO2:** Students will be able to engage in a dialogue between the past and the present and inculcate the best principles towards a meaningful life.

**CO3:** Students will be encouraged to involve themselves in team work and group activities to address challenges faced in metropolitan cities.

**CO4:** Students will be able to develop communication skills, that is, analytical reading, empathetic listening, considerate speaking as well as informed writing.

**CO5:** Extension activities will equip the students, drawn from diverse backgrounds, with life skills and confidence to integrate with a multicultural environment and work towards an inclusive community.

**CO6:** Students will be encouraged to envisage and work towards an ethically robust society and there by strengthen the nation.

### **Course Title – Digital Empowerment**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- Understand the digital world and need for digital empowerment
- Create awareness about Digital India.
- Explore, communicate and collaborate in cyberspace.
- Building awareness on cyber safety and security.

#### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

**CO1:** Use ICT and digital services in daily life.

**CO2:** Develop skills to communicate and collaborate in cyber space using social platforms, teaching/learning tools.

**CO3:** Understand the significance of security and privacy in the digital world.

**CO4:** Evaluate ethical issues in the cyber world.

### **Course Title – Emotional Intelligence**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- Introduce the concept of emotional intelligence, its models and components.
- Understand the significance of emotional intelligence in self-growth and building effective relationships.
- Identify the measures of emotional intelligence.

#### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

**CO1:** Self-Awareness, Self-Management, Social Awareness & Relationship Management.

**CO2:** Discover personal competence and techniques of building emotional intelligence.

**CO3:** Gain insights into establishing positive relationships.

### **Course Title – Ecology and Literature**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To raise awareness among students towards the urgent predicament of Environmental and Ecological crisis and the need for reducing our carbon footprint upon fast depleting ravaged ecological reserves.
- To develop a heightened ecological consciousness among students, leading to more responsible ecological behavior.
- To view environmental concerns as raised through plays stories and poems.

#### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

**CO1:** The course will highlight the urgency of environmental crisis making students conscious and aware of the role each one of us plays into environmental sensitivity and responsible ecological behavior.

**CO2:** Students will be encouraged to respond to incidents of habitat destruction deforestation etc. and realize the need for our urgent intervention.

### **Course Title – Ethics and Culture**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- The course aims to help students explore ethical and cultural dimensions of their lives.
- The course provides a forum for students to pause, revisit their assumptions and beliefs and becomes mindful of their thoughts, emotions and actions.
- It gives the students an opportunity to express themselves and inquire into their decision making processes. This will enable them to cultivate ethical values and participate in the creation of a society based on acceptance, compassion and justice.

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** Explore perspectives on ethics in thoughts, words and actions

**CO2:** Evolve ethics decision making practices

**CO3:** Understand the need for an ethical society and culture

**CO4:** Introspect, become conscious of and assess one's stance in life

**CO5:** Cultivate empathy, tolerance and compassion

**CO6:** Apply the values learnt in the course to everyday life.

### **Course Title – Ethics and Values in Ancient Indian Traditions**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To understand the rich cultural traditions relating to discourses on life and its purpose, instilling of values relating to ethical and moral propriety.
- To make students more engaged with the past traditions of the country.
- To introduce students to early epics: Puranic, Buddhist and other traditions.

#### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** Students will develop an overview of indigenous philosophies.

**CO2:** Understanding the richness of Indian heritage leading to greater sensitivity.

**CO3:** Inspiration from history to deal with contemporary issues.

**CO4:** Appreciate the traditions of diversity, discussions, debates and knowledge transmission.

### **Course Title – Financial Literacy**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- Familiarity with different aspects of financial literacy such as savings, investment, taxation and insurance.
- Understand the relevance and process of financial planning
- Promote financial well-being Learning Outcomes
- Develop proficiency for personal and family financial planning
- Apply the concept of investment planning
- Ability to analyze banking and insurance products
- Personal tax planning

## **Course Title – Fit India**

### **Learning Objectives**

The Learning Objectives of this course are as follows:

- Encourage physical activity through engaging the students in sports and yoga.
- Understand the importance of a balanced diet.
- Build skills for self-discipline, self-confidence, cooperation and teamwork.
- Promote fitness as a joyful activity.

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** Adopting a healthy lifestyle.

**CO2:** Knowledge of nutrition, diet and psycho-physiological aspects of fitness.

**CO3:** Develop self-esteem, Self-confidence, Self-discipline and team spirit as indicators of fitness.

## **Course Title – Gandhi and Education**

### **Learning Objectives**

The Learning Objectives of this course are as follows:

- Seek inspiration from Gandhi's thoughts on education.
- Analyse Gandhian education philosophy for moral and character development.
- Understand Gandhi's Idea on Self-reliant education (Swavalambi Shiksha).
- Relate Gandhi's educational thoughts to NEP 2020

### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

**CO1:** Value Gandhi and perspective on education.

**CO2:** Appreciate the significance of education in Indian languages

**CO3:** Evaluate the application of Gandhi an thoughts in NEP 2020

**CO4:** Realize the principles of NEP 2020 in vocational and skill oriented education.

## **Course Title – Panchakosha: Holistic Development of Personality**

### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To introduce Five Koshas – five levels of mind-body complex – Annamaya, Pranayama, Manomaya, Vigyanamaya and Anandamaya Kosha; for a holistic development of personality.
- To generate awareness about physical and mental wellbeing through the Indian concept of Panchkosha.
- To develop a positive attitude towards self, family and society amongst students.
- To guide students build personalities based on the understanding of Panchkosha.

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** Enhanced physical and mental health.

**CO2:** Coping with peer pressures and stress.

**CO3:** Improved concentration leading to better overall performance.

**CO4:** Manage life situations through a balanced and mature approach.

## **Course Title – Social and Emotional Learning**

### **Learning Objectives**

The Learning Objectives of this course are as follows:

- This course aims to develop social and emotional awareness in students and initiate them towards better personal and social well-being.
- To create an awareness towards self, others, the environment and their harmonious coexistence.

### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

**CO1:** Students will be able to become aware of oneself and the society.

**CO2:** Make informed lifestyle choices and extend the self in the joy of giving.

**CO3:** Develop empathy, compassion, connect with nature and evolve emotionally to create a more harmonious society.

**CO4:** Cultivate sensitivity towards discriminatory practices and explore possible solutions.

## **Course Title – Sports for Life**

### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To imbibe the significance of sports to promote health, fitness and wellness in life.
- To understand the values of teamwork, tolerance, goal-setting and decision making.
- To learn the strategies and tactical moves while playing a sport.
- To understand the importance of physical activity in reference to 3S: strength, speed and suppleness.

### **Course Outcomes (COs)**

The Course Outcomes of this course are as follows:

- CO1:** Acquire values of cooperation, team spirit, determination, and endurance.
- CO2:** Acquire good health and psychological well-being through sports participation.
- CO3:** Apply the decision making-ability and goal-setting skills acquired through sports participation in everyday life.
- CO4:** Acquire skills for engaging in moderate or vigorous physical activity and sports participation.
- CO5:** Reduce exposure to screen time on electronic gadgets and channelizing energy through sports participation.

## **Course Title – Swachh Bharat**

### **Learning Objectives**

The Learning Objectives of this course are as follows:

- To understand the developmental challenges with reference to sanitation infrastructure and practices.
- To build values of cleanliness, hygiene and waste management in diverse socio-economic contexts.
- To understand planning of social policy and programmes.
- To use waste management techniques at community level.
- To instill a sense of service towards society and the Nation.

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

- CO1:** Understanding the significance of the Swachh Bharat Abhiyan.

**CO2:** Ability to analyse and predict the sanitation challenges of India.

**CO3:** Determine the link between sanitation and development.

**CO4:** Contribute to the Swachh Bharat Abhiyan through real time projects/fieldwork.

### **Course Title – Vedic Mathematics**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- Foster love for math's and remove its fear through Vedic Mathematics
- Enhance computation skills in students through Vedic Mathematics
- Develop logical and analytical thinking
- Promote joyful learning of Mathematics
- Discuss the rich heritage of mathematical temper of Ancient India.

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** Overcome the fear of Math's.

**CO2:** Improved critical thinking

**CO3:** Familiarity with the mathematical underpinnings and techniques

**CO4:** Ability to do basic Math's faster and with ease.

**CO5:** Appreciate the Mathematical advancements of Ancient India.

### **Course Title – भारतीय भक्ति परंपरा और मानव मूल्य**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- भारतीय भक्ति की महान परंपरा, प्राचीनता और इसके अखिल भारतीय स्वरूप से छात्रों का परिचय कराना
- भारतीय भक्ति परंपरा के माध्यम से छात्रों में मानव मूल्यों और गुणों को जगाकर उनका चारित्रिक विकास करना और एक अच्छे मनुष्य का निर्माण करना।
- छात्रों को भारतीय नैतिक, सांस्कृतिक और समाजिक मूल्यों के प्रति जागरूक करना।
- भारतीय भक्ति परंपरा के माध्यम से राष्ट्रीयता और अखिल भारतीयता की भावना जागृत करना।



### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

- CO1:** भारतीय भक्ति परंपरा के माध्यम से छात्रों में मानव मूल्यों और गुणों का विकास होगा और वे एक अच्छे और चरित्रवान मनुष्य बन सकेंगे।
- CO2:** भारतीय भक्ति परंपरा के सांस्कृतिक और सामाजिक पक्षों की जानकारी हो सकेगी।
- CO3:** भक्ति की प्राचीनता और अखिल भारतीय स्वरूप की जानकारी से राष्ट्रीयता और अखिल भारतीयता की भावना जागृत और मजबूत होगी।
- CO4:** प्रमुख भक्त कवियों का परिचय और उनके विचारों की जानकारी हो सकेगी।

### **Course Title – सृजनात्मक लेखन के आयाम**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- सृजनात्मक और भाषायी कौशल का संक्षिप्त परिचय कराना
- विचारों का प्रभावी प्रस्तुति करण करना
- सृजनात्मक चिंतन और लेखन क्षमता को विकसित करना
- मीडिया लेखन की समझ विकसित करना पाठ्यक्रम अध्ययन के परिणाम

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

- CO1:** सृजनात्मक चिंतन और लेखन क्षमता का विकास हो सकेगा
- CO2:** लेखन और मौखिक अभिव्यक्ति की प्रभावी क्षमता विकसित हो सकेगी
- CO3:** मीडिया लेखन की समझ विकसित होगी
- CO4:** विद्यार्थी में अपने परिवेश, समाज तथा राष्ट्र के प्रति संवेदनशीलता का विकास होगा

### **SEMESTER – III**

#### **MJC-3 (T): ECONOMIC GEOGRAPHY**

Course Objectives:

- To understand the concept and spatial distribution of economic activities in the world.
- To analyze the factors affecting the economics activity focusing on Von Thune and Weber theory.
- To describe in the details the regionalization of different economic activities.

**Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Distinguish to different types of economic activities and their significance.

**CO2:** Identify the factors responsible for the location and distribution of activities.

**CO3:** Examine the significance and relevance of various locational theories.

**SEMESTER – III**

**MJC-4 (T): CARTOGRAMS, MAP PROJECTION AND SURVEYING**

Course Objectives:

- Develop an understanding for construction of maps through cartographic conventions.
- Develop an understanding of the concepts regarding map projections to suit map purposes.
- Better understanding of survey and surveying.

**Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Explain how maps work, conceptually and technically and will be able to understand science and art of cartography.

**CO2:** Recognize the benefits and limitations of some common map projections and their uses.

**CO3:** Develop an understanding and importance of surveying.

**SEMESTER – III**

**MJC-4 (P): CARTOGRAMS, MAP PROJECTION AND SURVEYING**

Course Objectives:

- Learning to construct maps through cartographic conventions.
- Develop an understanding of the concepts regarding scale, map projections to suit map purposes.

- Better understanding of the techniques for interpretation of Prismatic Compass Survey.

#### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Construct maps and various Diagrams.

**CO2:** Learn the construction and use of some common map projections.

**CO3:** Understand and perform Prismatic Compass Survey.

### **SEMESTER – IV**

#### **MJC-5 (T): Human Geography**

Course Objectives:

- To understand the concept of human communities, culture and its relationship with environment.
- To examine the Contemporary relevance of environmental thoughts.
- To provide an in-depth knowledge of Indian races and tribes.
- To give a detailed eye-view on migration and settlement pattern.

#### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Get a complete idea of space and place.

**CO2:** Able to know the types and distribution of tribes in India and Bihar with reference to Census data.

**CO3:** Conceptualize the trends and pattern of Migration and settlement types.

### **SEMESTER – IV**

#### **MJC-6 (T): Geography of India and Bihar**

Course Objectives:

- To acquire the student's basic facts and figures about the spatial distribution of the country.
- To appreciate the vastness and diversity of India as a Nation.

- To know the rich physical and cultural resource of India.

#### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Get an overview of Geography of India and Bihar.

**CO2:** Learn the India's rich minerals and industrial assets.

**CO3:** Understand the current economic development of India.

**CO4:** Gain comprehensive knowledge about Bihar with facts and figures.

### **SEMESTER – IV**

#### **MJC-7 (T): Statistical Methods in Geography**

Course Objectives:

- Enable the student to differentiate between quantitative and qualitative information.
- To understand the various data sets, its sources and methods of data collection.
- To enhance the study of Geography in quantitative terms with the use of statistical methods.

#### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Know the various types of data and its sources.

**CO2:** Present data in graphical and pictorial form.

**CO3:** Produce various types of data tabulation.

### **SEMESTER – IV**

#### **MJC-7 (P): Statistical Methods in Geography**

Course Objectives:

- To enable the students to differentiate between quantitative and qualitative information.

- To enable students with the nature of various data, different sources and methods of data collection.
- To apply the sampling methods for data collection.

### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Present statistical data in diagrammatic and graphical form.

**CO2:** Distinguish between dependent and independent variable.

## **SEMESTER – IV (AEC-4)**

### **Course on NCC**

#### **Learning Objectives**

The Learning Objectives of this course are as follows:

- Provide knowledge about the history of NCC, its organization, and incentives of NCC for their career prospects.
- Inculcate spirit of duty and conduct in NCC cadets.
- Provide understanding about different NCC camps and their conducts.
- Provide understanding about the concept of national integration and its importance.
- Provide understanding about the concept of self-awareness and emotional intelligence
- Provide understanding about the concept of critical & creative thinking.
- Provide understanding about the concept of decision making & problem solving.
- Provide understanding about the concept of team and its functioning.
- Provide understanding about the concept and importance of Social service.

### **Course Outcomes ( COs )**

The Course Outcomes of this course are as follows:

**CO1:** Understand the basic concept of NCC.

**CO2:** Respect the diversity of different Indian culture.

**CO3:** Practice togetherness, team work and empathy in all walks of their life.

**CO4:** Do their own self-analysis and will work out to overcome their weakness for better performance in all aspects of life.

**CO5:** Critically think and analyse.

## **SEMESTER – V**

## **MJC-8 (T): ENVIRONMENTAL GEOGRAPHY**

Course Objectives:

- To understand the Environmental Geography – Its concepts and Components.
- To critically examine Environmental degradation and pollution.
- To provide a theoretical and empirical frame work for understanding environmental law.

### **Course Outcome (COs)**

After the completion of the course students will be able to:

**CO1:** Develop an idea about Environment and different fundamental concepts.

**CO2:** Understand its environmental degradation and various types of pollutions.

**CO3:** Assess the role of anthropogenic activities producing pollution.

**CO4:** Explain different types of environmental crisis and bio-diversity.

**CO5:** Understand the processes of natural hazards and disasters.

## **SEMESTER – V**

### **MJC-9 (T): CARTOGRAPHIC TECHNIQUES**

Course Objectives:

- Create professional and aesthetically pleasing maps through thoughtful application of cartographic conventions.
- Develop an understand of the concepts regarding scale, map projections to suit map purposes.
- Better understanding of the techniques for interpretation of topographical and weather maps.

### **Course Outcome (COs)**

This is a practical, hands-on course; when students complete it, they will be able to:

**CO1:** Explain how maps work, conceptually and technically and will be able to understand science and art of cartography.

**CO2:** Recognize the benefits and limitations of some common map projections and their use.

**CO3:** Understand and perform interpretation of topographical maps and weather maps.

## **SEMESTER – V**

### **MJC-9 (P): CARTOGRAPHIC TECHNIQUES**

Course Objectives:

- Create professional and aesthetically pleasing maps through thoughtful application of cartographic conventions.
- Develop an understanding of the concepts regarding scale, map projections to suit map purposes.
- Better understanding of the techniques for interpretation of topographical and weather maps.

#### **Course Outcome (COs)**

This is a practical, hands-on course; when students complete it, they will be able to:

**CO1:** Explain how maps work, conceptually and technically and will be able to understand science and art of cartography.

**CO2:** Recognize the benefits and limitations of some common map projections and their use.

**CO3:** Understand and perform interpretation of topographical maps and weather maps.

## **SEMESTER – VI**

### **MJC-10 (T): EVOLUTION OF GEOGRAPHICAL THOUGHT**

Course Objectives:

- Understanding historical evolution of geographic thought;
- Detailed analysis of different paradigms in geography;
- Evaluating the contemporary trends in geographical studies.

#### **Course Outcome (COs)**

After studying, students will be able to:

**CO1:** Understand the evolution of geographical thought and relation of Geography with other Sciences.

**CO2:** Detailed knowledge about the paradigms and debates in the geographical studies.

**CO3:** Understanding of recent traditions in geography.

## **SEMESTER – VI**

### **MJC-11 (T): RESEARCH METHODOLOGY AND FIELD WORK**

Course Objectives:

- To understand concept and various techniques of research methodology in geography;
- Detailed analysis of different field survey techniques.
- Understand of the report writing and field tools.

#### **Course Outcome (COs)**

After learning, students will be able to:

**CO1:** Detailed exposure of new geographical landscape as study area.

**CO2:** In-depth knowledge of different field techniques.

**CO3:** Understanding the field ethics and different tools of field study.

### **SEMESTER – VI**

#### **MJC-12 (T): REMOTE SENSING AND GIS**

Course Objectives:

- The course aims are to give basic technical knowledge and practical experience in digital remote sensing;
- Knowledge and practical experience in handling satellite images focusing on hands-on experience of image pre-processing, enhancement and classification;
- Better understanding the techniques for the study of land use cover and urban study.

#### **Course Outcome (COs)**

After studying this course students will be able to:

**CO1:** Explain principles of remote sensing, different satellite systems and sensors;

**CO2:** Understand concept and methods of image processing, enhancement and classification and interpretation of satellite images;

**CO3:** Application of Image preprocessing techniques for land use land cover and urban studies.

### **SEMESTER – VI**

#### **MJC-12 (P): REMOTE SENSING AND GIS**

Course Objectives:

- The course aim is to give basic technical knowledge and practical experience in digital remote sensing and GIS;
- Knowledge and practical experience in handling spatial data;
- Better understanding the techniques for the study of land use cover and urban study.



### **Course Outcome (COs)**

This is a practical, hands-on course; after studying this course students will be able to:

**CO1:** Learning the use of GIS technique for image interpretation.

**CO2:** Create line, point and Polygon using GIS technique.

**CO3:** Application of Image processing technique for land use and land cover for urban studies.

## **SEMESTER – VII**

### **MJC-13 (T): REGIONAL PLANNING AND DEVELOPMENT**

Course Objectives:

- To understand the concept of Region and Regional Planning;
- To familiarize the students with Theories and Models for Regional Planning;
- To develop understanding about concept of development and different programmes and policies of development and planning.

### **Course Outcome (COs)**

After studying, students will be able to:

**CO1:** Conceptualize the Regional Planning and its theories.

**CO2:** Get the overview of Sustainable Regional Development.

**CO3:** Have sound knowledge for Development Policies and Programmes.

## **SEMESTER – VII**

### **MJC-15 (T): DISASTER MANAGEMENT**

Course Objectives:

- Understanding the basic concept of disaster management;
- Detailed analysis about the different types of disasters in India;
- Evaluating the role of institutional frame works to mitigate the disasters in the country.

### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Understanding about the various disasters in the country.

**CO2:** Providing thorough understanding about the human responses to the disasters.

**CO3:** Human responses and mitigating measures to both natural and manmade disasters.

**CO4:** Understanding the processes of natural hazards and disasters.

**CO5:** Assessing the role of anthropogenic activities producing pollution.

**CO6:** Explaining different types of environmental crisis.

## **SEMESTER – VII**

### **MJC-15 (P): DISASTER MANAGEMENT**

Course Objectives:

- Understanding the basic concept of disaster management;
- Detailed analysis about the different types of disasters in India;
- Evaluating the role of institutional frame works to mitigate the disasters in the country.

#### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Understanding about the various disasters in the country.

**CO2:** Providing thorough understanding about the human responses to the disasters.

**CO3:** Human responses and mitigating measures to both natural and manmade disasters.

**CO4:** Understanding the processes of natural hazards and disasters.

**CO5:** Explaining different types of environmental crisis.

## **SEMESTER – VII**

### **MJC-16 (T): SOCIAL GEOGRAPHY**

Course Objectives:

- To familiarize the student with the theoretical foundations and conceptual grounding of unique of social geography.
- To appreciate the roles of geographic factors in socio-cultural diversity in terms of caste, class, religion etc.
- To analyze in details the social wellbeing, problems and welfare programmes and policies.

#### **Course Outcome (COs)**

After studying, students will be able to:

**CO1:** Get Knowledge of the social geography and social diversity.

**CO2:** Appraise the key concepts of social geography in regional context; geographic factors underlying patterns of social well-being and inclusive development.

**CO3:** Explain the social problems and the welfare programs and policies.

### **SEMESTER – III**

#### **MIC-3 (T): ECONOMIC GEOGRAPHY**

Course Objectives:

- To understand the concept and spatial distribution of economic activities in the world.
- To analyze the factors affecting the economics activities.
- To describe in details the spatial pattern of economic activities.

#### **Course Outcome (COs)**

After learning, students will be able to:

**CO1:** Distinguish to different types of economic activities and their utilities.

**CO2:** Examine the significance and relevance of economic activities for the progress of Mankind.

### **SEMESTER – III**

#### **MIC-3 (P): ECONOMIC GEOGRAPHY**

Course Objectives:

- Create professional and aesthetically pleasing maps through thoughtful application of cartographic conventions;
- Develop an understanding of the concepts regarding scale, map projections to suit map purposes;
- Better understanding of the techniques for interpretation of topographical and weather maps.

#### **Course Outcome (COs)**

This is a practical, hands-on course; when students complete it, they will be able to:

**CO1:** Explain how diagram work.

**CO2:** Recognize the benefits and limitations of some common map projections.

**CO3:** To Understand how prismatic compass survey work.

### **SEMESTER – IV**

#### **MIC-4 (T): Population Geography**

Course Objectives:

- To bring an understanding among students about the relevant population data.
- To aware students about current population issues and its causes.

#### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Understand the various demographic data.

**CO2:** Understand the role of population dynamics in shaping our countries population.

**CO3:** Critically analyze the current contemporary population issues and its implication in our society.

### **SEMESTER – IV**

#### **MIC-4 (P): Population Geography**

Course Objectives:

- Introduce the basic graphical diagrams associated with the use of population data.
- Various population projection methods.

#### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Learn different graphical diagrams associated with population data.

**CO2:** Calculate the different population projection methods.

### **SEMESTER – IV**

#### **MIC-5 (T): Human Geography**

Course Objectives:

- To understand the concept of human communities, culture and its relationship with environment.
- To examine the Contemporary relevance of environmental thoughts.
- To give a detailed eye-view on migration and settlement pattern.

#### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Get a complete idea of space and place.

**CO2:** Conceptualize the trends and pattern of Migration and settlement types.

**CO3:** Recent trend of urbanization level.

## **SEMESTER – IV**

### **MIC-6 (T): Geography of India and Bihar**

Course Objectives:

- Various dimensions of the geographical feature of India and their spatial distribution.
- Detailed analysis of Natural resources of India.
- Understanding of regional divisions of India.

#### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Get an overview of Geography of India and Bihar.

**CO2:** Able to learn the India's rich minerals and industrial assets.

**CO3:** Able to link the current economic development of India.

**CO4:** Comprehensive knowledge about Bihar with facts and figures.

## **SEMESTER – IV**

### **MIC-6 (P): Geography of India and Bihar**

Course Objectives:

- Various dimensions of the geographical feature of India and their spatial distribution.
- Detailed analysis of Natural resources of India.
- Understanding of regional divisions of India.

#### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Get an overview of Geography of India and Bihar.

**CO2:** Able to learn the India's rich minerals and industrial assets.

**CO3:** Able to link the current economic development of India.

**CO4:** Comprehensive knowledge about Bihar with facts and figures.

## **SEMESTER – IV**

### **MIC-6 (P): Geography of India and Bihar**

Course Objectives:

- Introduce the basic graphical diagrams associated with the use of population data.
- Use of Top sheet maps.

#### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Learn different graphical diagrams associated with population data.

**CO2:** Identify and interpret the physical and cultural feature of top sheet map.

### **SEMESTER – VI**

#### **MIC-7 (T): REGIONAL PLANNING AND DEVELOPMENT**

Course Objectives:

- To understand the concept of Region and Regional Planning;
- To familiarize the students with Theories and Models for Regional Planning;
- To develop understanding about concept of development and different programmes and policies of development and planning.

#### **Course Outcome (COs)**

After studying, students will be able to:

**CO1:** Conceptualize the Regional Planning and its theories.

**CO2:** Get the overview of Sustainable Regional Development.

**CO3:** Have sound knowledge for Development Policies and Programmes.

### **SEMESTER – VI**

#### **MIC-8 (P): Statistical Methods in Geography**

Course Objectives:

- To enable the students to differentiate between quantitative and qualitative information.
- To enable students with the nature of various data, different sources and methods of data collection.
- To apply the sampling methods for data collection.

#### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Present statistical data in diagrammatic and graphical form.

**CO2:** Distinguish between dependent and independent variable.

## **SEMESTER – VII**

### **MIC-9 (T): ENVIRONMENTAL GEOGRAPHY**

Course Objectives:

- To understand the Environmental Geography, its concepts and Components.
- To critically examine Environmental pollution.
- To provide a theoretical and empirical framework for understanding environmental law.

#### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Develop an idea about Environment and different fundamental concepts.

**CO2:** Understand different process of pollution.

**CO3:** Assess the role of anthropogenic activities producing pollution.

**CO4:** Explain different types of environmental crisis.

**CO5:** Understand the processes of natural hazard and disasters.

## **SEMESTER – VII**

### **MIC-9 (P): ENVIRONMENTAL GEOGRAPHY**

Course Objectives:

- To understand the Environmental issues, its concepts and Components.
- To examine Environmental issues critically.
- To provide a theoretical and empirical framework for understanding environmental law.

#### **Course Outcome (COs)**

After completion of the course students will be able to:

**CO1:** Develop an idea about Environment and different fundamental concepts.

**CO2:** Understand different process of pollution.

**CO3:** Assess the role of anthropogenic activities producing pollution.

## **SEMESTER – VIII**

### **MIC-10 (T): REMOTE SENSING AND GIS**

Course Objectives:

- The course aim is to give basic technical knowledge and practical experience in digital remote sensing;
- Knowledge and practical experience in handling satellite images focusing on hands-on experience of image pre-processing, enhancement and classification;
- Better understand the techniques the study of land use cover and urban study.

#### **Course Outcome (COs)**

After studying this course students will be able to:

**CO1:** Understand and Interpret Aerial Photograph.

**CO2:** Know about the Application of Image preprocessing techniques for land use land cover and urban studies.

### **SEMESTER – VIII**

#### **MIC-10 (P): REMOTE SENSING AND GIS**

Course Objectives:

- The course aim is to give basic technical knowledge and practical experience in digital remote sensing;
- Knowledge and practical experience in handling satellite images focusing on hands-on experience of image pre-processing, enhancement and classification;
- Better understand the techniques the study of land use cover and urban study.

#### **Course Outcome (COs)**

This is a practical, hands-on course; after studying this course students will be able to:

**CO1:** Explain principles of remote sensing, different satellite systems and sensors;

**CO2:** Understand concept and methods of image processing, enhancement and classification and interpretation of satellite images;

**CO3:** Application of Image preprocessing techniques for land use land cover and urban studies.