

## **BA / BSc / BCom - Program Outcomes**

On completion of undergraduate programme, the student is expected to achieve the following programme outcomes

PO1	<b>Knowledge (Remembering)</b>	<ul style="list-style-type: none"><li>• Demonstrate basic factual and procedural knowledge in the chosen field of study.</li><li>• Recall and recognize key concepts, terms, and theories.</li><li>• Summarize and explain fundamental principles and historical developments.</li></ul>
PO2	<b>Comprehension (Understanding)</b>	<ul style="list-style-type: none"><li>• Interpret and explain the significance of information and concepts.</li><li>• Translate complex ideas into simpler terms for understanding.</li><li>• Compare and contrast different theories or viewpoints within the discipline.</li></ul>
PO3	<b>Application (Applying)</b>	<ul style="list-style-type: none"><li>• Apply theoretical knowledge to practical situations or real-world problems.</li><li>• Use appropriate methods and techniques to solve discipline-specific problems.</li><li>• Demonstrate the ability to implement concepts in hands-on experiences or internships.</li></ul>
PO4	<b>Analysis (Analyzing)</b>	<ul style="list-style-type: none"><li>• Break down complex issues into their component parts.</li><li>• Identify patterns, relationships, and causes within the discipline.</li><li>• Evaluate the validity of arguments and evidence.</li></ul>
PO5	<b>Synthesis (Creating)</b>	<ul style="list-style-type: none"><li>• Integrate knowledge from various sources to develop innovative solutions.</li><li>• Design and create original projects, research, or products.</li><li>• Generate new ideas, hypotheses, or theories within the field.</li></ul>
PO6	<b>Evaluation (Evaluating)</b>	<ul style="list-style-type: none"><li>• Assess the quality and reliability of information and data.</li><li>• Critically evaluate the strengths and weaknesses of different approaches.</li><li>• Make informed judgments and recommendations based on evidence.</li></ul>

## B.A. Geography - Programme Specific Outcome (PSO)

On completion of undergraduate programme, the student is expected to achieve the following programme specific outcomes:

PSO1	To explore the fundamental concepts of the atmosphere, oceans and the Earth surface.
PSO2	To familiarize the students with the basic map making and reading techniques.
PSO3	To give the students general view and importance of man and environment relationship
PSO4	To refrain the theoretical knowledge of students of “what, where and why” in geography through field survey.
PSO5	To make them understand various aspects of human geography especially races, religion, cultural regions and population.

## B.A. Geography - Course Outcomes (CO)

Semester	Course Code	Course Title	Course Outcome Code	Course Outcome
1	CC-1	<b>GEOMORPHOLOGY</b>	CO1	Understanding of the conceptual and dynamic aspects of landform development (introductory concepts of geomorphology)
			CO2	Role of plate tectonics in the landscape formation
			CO3	Overview of Indian Geomorphology
			CO4	To describe the exogenous and endogenous process in the landscape, landform development and distinguish mechanisms that control these processes.
			CO5	Acquire knowledge about types of folds and faults and earthquakes, volcanoes and associated landforms.
1	CC-2	<b>OCEANOGRAPHY</b>	CO1	Understanding the basic principles and concepts in Oceanography
			CO2	Introductory concept of Physical aspects of Ocean

			CO3	Gain knowledge about properties of ocean water and Waves, Currents and Oceanic tides.
			CO4	Identify marine resources and characteristics of ocean waters.
			CO5	First order idea about the marine Life and the Environment
2	CC-3	<b>HUMAN GEOGRAPHY</b>	CO1	Gain knowledge about major themes of human geography.
			CO2	Develop an idea about space and society.
			CO3	Build an idea about population growth and distribution of population.
			CO4	Know about population – resource relationship
			CO5	Understanding the Classification of Settlements.
2	CC-4	<b>RESOURCE GEOGRAPHY</b>	CO1	Understand the concept and classification of resources
			CO2	Understand the approaches to resource utilization
			CO3	Understand the distribution, utilization, problems and management of Land, Water, Forest and Energy Resources.
			CO4	Understand the concept of Sustainable Resource development
			CO5	Understanding the Appraisal and Conservation of Natural Resource
3	CC-5	<b>CLIMATOLOGY</b>	CO1	Understand the elements of weather and climate, different atmospheric phenomena and climate change.
			CO2	Learn the interaction between the atmosphere and the earth's surface.
			CO3	Understand the importance of the atmospheric pressure and winds.
			CO4	Understand how atmospheric moisture works.
			CO5	Develop an idea about cyclones

				and Monsoon.
3	CC-6	<b>GEOGRAPHY OF INDIA</b>	CO1	Learn the differences in terms of varied physiography and Structure of India.
			CO2	Understanding about India's land formation, Drainage, Soil, Climate and natural vegetation.
			CO3	Study the economy and various types of resources, its distribution and utilization in India.
			CO4	Understanding the social distribution of population of of India.
			CO5	Develop an idea about regionalisation of India.
3	CC-7	<b>GEOGRAPHY OF JHARKHAND</b>	CO1	Learn the differences in terms of varied physiography and Structure of Jharkhand
			CO2	Understanding about Jharkhand's land formation, Drainage, Soil, Climate and natural vegetation.
			CO3	Study the economy and various types of resources and Industries of Jharkhand.
			CO4	Understanding the social distribution of population and tribes of Jharkhand State.
			CO5	Develop an idea about regionalisation of Jharkhand.
4	SEC-2	<b>HYDROLOGY</b>	CO1	Analyse the concepts of Hydrology
			CO2	Emphasizing the significance of groundwater quality and its circulation
			CO3	Evaluate the role of the global hydrological cycle
			CO4	Interpret hydrological and rainfall dispersion graphs and diagrams.
			CO5	Know about Flood and Droughts.
4	CC-8	<b>ECONOMIC GEOGRAPHY</b>	CO1	Understand the concept of economic activity, factors affecting location of economic activity. Gain knowledge about

				different types of Economic activities
			CO2	Assess the significance of Economic Geography, the concept of economic man and theories of choice.
			CO3	Analyze the factors of location of agriculture and industries.
			CO4	Understand the evolution of varied types of economic activities.
			CO5	Map and interpret data on production, economic indices, transport network and flows.
4	CC-9	<b>ENVIRONMENTAL GEOGRAPHY</b>	CO1	Gain knowledge about concept, scope of environmental geography and components of environment.
			CO2	Develop an idea about human-environment relationships.
			CO3	Build an idea about ecosystem.
			CO4	Know about environmental programmes and policies.
			CO5	Know about Environmental Problems in Tropical ,Temperate and Polar Ecosystem.
4	CC-10	<b>POPULATION GEOGRAPHY</b>	CO1	Understand the nature and scope of population.
			CO2	Know about composition of population, like- age, sex marital status, family, economic composition and language.
			CO3	Analysethe population Size, Distribution and Growth and Population Growth Theories.
			CO4	Gain knowledge different aspects of population geography.
			CO5	Understanding the Contemporary Issues – Ageing of Population, Declining Sex Ratio.
5	CC-11	<b>GEOGRAPHICAL THOUGHT</b>	CO1	Perceive the evolution of the philosophy of Geography
			CO2	Appreciate the contribution of the

				thinkers in Geography.
			CO3	Discussing the evolution of geographical thought from ancient to modern times.
			CO4	Establishing relationship of Geography with other disciplines and man-environment relationships.
			CO5	Analyzing modern and contemporary principles of Empiricism, Positivism, Structuralism, Human and Behavioral Approaches in Geography
5	CC-12	<b>SETTLEMENT GEOGRAPHY</b>	CO1	Acquire knowledge about settlements- Definition, nature and characteristics
			CO2	Analyze the morphology of rural and Urban settlements
			CO3	Learn the rural house types, census categories of rural settlements and idea of social segregation
			CO4	Acquire the knowledge spatial organization and Hierarchy of Settlement.
			CO5	Analyze the functional classification of cities and towns, rural Urban Fringe.
5	DSE-1	<b>URBAN GEOGRAPHY</b>	CO1	Understand the nature, scope, approaches and recent trends in Urban Geography
			CO2	Understand the patterns of urbanization in developed and developing countries.
			CO3	Understand the Functional Classification of the Cities.
			CO4	Gain the knowledge about Urban Issues.
			CO5	Study the changing land use of Delhi, Kolkata and Chandigarh, Mumbai, Chennai.
5	DSE-2	<b>SOCIAL</b>	CO1	Understand the nature, scope,

		<b>GEOGRAPHY</b>		approaches and recent trends in Social Geography
			CO2	Study the Peopling Process of India – Technology and Occupational Change and Migration.
			CO3	Identifying Social Categories: Caste, Class, Religion, Race and their spatial distribution.
			CO4	Understand the Welfare and Well Being Concept: Healthcare, Housing and Education.
			CO5	Inclusion and Exclusion of Social Geographies, Slums, Communal Conflicts and Crime.
6	CC-13	<b>REGIONAL PLANNING &amp; DEVELOPMENT</b>	CO1	Understand the evolution and types of Regional Planning and need for regional planning.
			CO2	Recognize the Choice of a Region for Planning and Understand the Regionalization of India for Planning
			CO3	Build an idea about theories and models for regional planning.
			CO4	Know about the changing Concept of development and under development.
			CO5	Studying the indicators for Human Development
	CC-14	<b>AGRICULTURAL GEOGRAPHY</b>	CO1	Understand the nature, scope, approaches and recent trends in agricultural geography and land use / land cover definition and classification.
			CO2	To gain the knowledge about determinants of agriculture – Physical, Technological and Institutional.
			CO3	To Understand the agricultural region of India – Agro climatic, agro -ecological and crop combinations.
			CO4	To gain the knowledge about the

				agricultural systems of the world and Agricultural Land use model
			CO5	Understand Agricultural Revolutions in India: Green, White, Blue, Pink
6	DSE-3	<b>POLITICAL GEOGRAPHY</b>	CO1	Understand the nature, scope, approaches and recent trends in Political geography
			CO2	Learn the concept of nation and state and geopolitical theories.
			CO3	Understand the different dimensions of electoral geography and resource conflicts
			CO4	Have sound knowledge of politics of displacement
			CO5	Understand the resources conflicts focusing on water sharing disputes, forest and minerals .
	DSE-4	<b>BIOGEOGRAPHY</b>	CO1	Understand the concept of Biogeography
			CO2	Learn the concept of Evolution of Plants and Animals - – Adaptation, Dispersal, Colonization and Extinction
			CO3	Have sound knowledge of Factors Affecting the Community – Plant Succession, Arresting Factors, Vegetation Climax.
			CO4	Study the Concept of Biomes – Forest, Grassland, Desert and Mountain.
			CO5	Understandthe Biodiversity – Preservation and Conservation.



## Practicals

Laboratory provides a wide space for students to nurture their hidden scientific potential, creative thinking and systematic analyzing skills. Through B. Sc. Zoology programme, students will realize how theory, experiment and observation are mutually correlated and help each other to expand the frontiers of knowledge of the physical universe. By conducting various experiments, students will be able to internalize a number of skills and they will be benefited in life in many ways as follows:

### CONSOLIDATED STRUCTURE OF MODEL I PRACTICALS

#### FOR SEMESTERS I - VI

Semester	Title of the Practical	CO	COURSE OUTCOME
Sem-1	<b>GEOMORPHOLOGY</b>	CO1	Develop an idea about scale and draw different types of scale like linear, diagonal and vernier. Gain knowledge about topographical maps and apply this knowledge in ground surface.
	<b>OCEANOGRAPHY</b>	CO2	Acquire knowledge different types of map projection and Maps Projections.
Sem-2	<b>HUMAN GEOGRAPHY</b>	CO1	Know about diagrammatic data presentation like line, bar and circle. Develop an idea about different types of thematic mapping techniques and preparation and Interpretation.
	<b>RESOURCE GEOGRAPHY</b>	CO2	Acquire the Cartographic Overlays – Point, Line and Areal Data.
Sem-3	<b>CLIMATOLOGY</b>	CO1	Learn to use of data in Geography, Scales of Measurement and Tabulation and Descriptive Statistic. To familiarize the students with the weather instruments and their applications in Geographical phenomena
	<b>GEOGRAPHY OF INDIA</b>	CO2	Acquire the Knowledge of Association and Correlation and Sampling and Dispersion, Scattered diagram, Frequency
	<b>GEOGRAPHY OF JHARKHAND</b>	CO3	Know about the Central Tendency.
Sem-4	<b>ECONOMIC GEOGRAPHY</b>	CO1	Gain knowledge about representation of state wise variation in occupational structure and work participation rate using proportional circles and proportional divided circles and also composite index. They can know about transport network analysis.
	<b>ENVIRONMENTAL GEOGRAPHY</b>	CO2	They can know how prepare a questionnaire on the basis of perception survey on environmental problems. Gain knowledge about doing project on environmental problem
	<b>POPULATION</b>	CO3	Brings direct interaction of different types of

	<b>GEOGRAPHY</b>		surveying instruments like Prismatic Compass, Plane table, Dumpy level, Theodolite with environment. Gain knowledge about geological maps and drawing of sections and interpretations of the relief and structure of the geological maps. Gain hands-on experience of GPS
Sem-5	<b>GEOGRAPHICAL THOUGHT</b>	CO1	They can know about the quantitative techniques in geography. Gain knowledge about crop combination by Weber, Rafiulla and Doi.
	<b>SETTLEMENT GEOGRAPHY</b>	CO2	Learn the significance of field work in geographical studies. Understand the meaning of field and identifying the case study. They can understand Landforms and settlement, Social, Cultural Aspects, Urban and rural environment of any part of India.
Sem-6	<b>REGIONAL PLANNING &amp; DEVELOPMENT</b>	CO1	They can know about delineation of formal regions by weighted index method and also delineation of functional regions by breaking point analysis. Gain knowledge about measuring inequality by Location Quotient, and also measuring regional disparity by Sopher Index.
	<b>AGRICULTURAL GEOGRAPHY</b>	CO2	To enable students to apply Previously knowledge in Problems and Prospects in agriculture. To Familiarize the students with new modern technical methods and their applications in Agricultural activities.