

<u>Undergraduate Courses in Geography (Hons)</u> <u>CBCS Syllabus</u>

Program Outcome (PO)

- **PO1: Disciplinary Knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate programme of study.
- **PO2:Communication Skills:** Ability to express thoughts and ideas effectively and in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups.
- **PO3: Critical Thinking and Problem Solving:** Capability to apply analytic thought, critically evaluate practices, policies and theories by following scientific to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one's learning to real life situations.
- **PO4: Analytical Reasoning:** Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyse and synthesise data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints.
- **PO5: Cooperation/Team work:** Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team.
- **PO6: Self-directed Learning:** Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion.



PO7: Moral and Ethics: Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstrating the ability to identify ethical issues related to one's work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work.

PO8: Lifelong Learning: Ability to acquire knowledge and skills, including 'learning how to learn', that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling.

Programme Specific Outcome (PSO)

PSO1: *Understanding* of the Earth, atmosphere, oceans and the planets through analysis of landform development; crustal mobility and tectonics, climate change and dynamics; soil formation and classification; hydrological and oceanographic studies etc. They will also learn to associate landforms with structure and process; and establishing man-environment relationships.

PSO2: Development of sustainable approach towards the ecosystem and the biosphere with a view to conserve natural systems and maintain ecological balance alongwith the awareness about the hazards and disasters to which the subcontinent is vulnerable and their management.

PSO3: Construct a tolerant attitude towards the socio-cultural diversity of India and understanding the role and functioning of global economies, industrial locations and the exploitation of resources with impacts.

PSO4: *Understand* the spatio-temporal variation of phenomena on the Earth's surface through various techniques of mapping, cartography, software, interpretation of maps, photographs and images etc.

Course Outcome (CO) for different courses under Geography (Hons.)

Course Code:GEO-A-CC-1-01-TH/P

Course Title: Geotectonic and Geomorphology

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

CO1: Understand the Earth's tectonic and structural evolution with reference to geological time scale.

CO2: AnalyzeEarth's interior in light of seismology and theory of Plate tectonics.

CO3: Understand different Geomorphological processes and resultant landforms with reference to weathering, mass wasting.

CO4: *Explain* the development of river network and resultant landforms on uniclinal and folded structure, and also on granites, basalts and limestones.

CO-PO-PSO Mapping for GEO-A-CC-1-01-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2		3	2	1	1		1	2	1		2
CO2	2	1	2	3	1	1		1	2	2		1
CO3	2	1	1	1	1	1	1	1	2	1		1
CO4	2	1	2	2	1	1	1	1	2	1		2



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	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
AVG (CO Attainment Target Level)	2	1	2	2	1	1	1	1	2	1.25		1.5

Course Code:GEO-A-CC-1-02-TH/P
Course Title: Cartographic Techniques

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

CO1: Acquire knowledge about components and classification of scales, maps, bearings, and different coordinate systems.

CO2: *Understand* the concept of map projection, generating globe as well as angular and linear system of grid measurement.

CO3: Assess the importance of different cartographic techniques in the making of map.

CO4: *Construct* the graticules of various projections like Polar Zenithal Stereographic, Simple Conic with one standard parallel, Bonne's, Cylindrical Equal Area, and Mercator's.

CO-PO-PSO Mapping for GEO-A-CC-1-02-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4

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	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	2	3	2	2	1	1	1	1	1	1	2
CO2	2	2	3	1	1	1		1	1	1		2
CO3	2	1	2	2	1	1		1	1	1		2
CO4	2	1	2	2	1	1		1	1	1	1	2
AVG (CO Attainment Target Level)	2	1.5	2.5	1.75	1.25	1	1	1	1	1	1	2

Course Code:GEO-A-CC-2-03-TH/P Course Title:Human Geography

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

CO1: Acquire knowledge about nature, scope, recent trends and elements of human Geography.

CO2: Understand the evolution of human society alongwith various types of race and ethnicity.

CO3: Associate the human adaptation to environment.

CO4: Apply the knowledge of Demographic transition model to explain the population growth and distribution.

CO-PO-PSO Mapping for GEO-A-CC-1-03-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	2		1	1	1	1	1		1	1	1
CO2	2	1	1	1	1	1		1		1	1	1
соз	2	1	2	1		1	1	1	1	1	1	1
CO4	2	1	1	1	1	1		1		1	1	1
AVG (CO Attainment Target Level)	2	1.25	1.33	1	1	1	1	1	1	1	1	1

Course Code:GEO-A-CC-2-04-TH/P

Course Title:Cartograms, Thematic Mapping and Surveying

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

CO1: Acquire knowledge about principal national agencies producing thematic maps in India.

CO2: *Understand* different types of thematic mapping techniques, and the usages of various survey instruments.

CO3: Analyze and Interpret geological maps and weather maps.

CO4: *Perform* Traverse survey, Profile survey, and Height determination of base accessible and base inaccessible objects by Theodolite survey, Dumpy level survey and prismatic survey.

CO-PO-PSO Mapping for GEO-A-CC-1-04-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	1		1			1	1		1	1
CO2	2	1	1	1	1	1	1	1	1		1	1
СОЗ	2	1	2	2	1	1		1	1	1	1	1
CO4	2		2	2	2	2	1	1	1	1	1	1
AVG (CO Attainment Target Level)	2	1	1.5	1.67	1.25	1.33	1	1	1	1	1	1

Course Code:GEO-A-CC-3-05-TH/P

Course Title: Climatology

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

CO1: Acquire knowledge about nature, composition, and various layering of atmosphere.

CO2: *Understandthe* phenomenon of climate change with special reference to greenhouse effect, formation, depletion and significance of ozone layer.

CO3: Explain the formation and mechanism of precipitation in light of Bergeron-Findeisen theory.

CO4: Develop interpretation of daily weather map of India for Pre-monsoon and Monsoon and Post-monsoon period.

CO-PO-PSO Mapping for GEO-A-CC-1-05-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	2	2	1	1		1	1	1		1
CO2	2	1	2	3	1	1	1	1	1	1	1	1
соз	2	1	2	1	1	2	1	1	1	1		1

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	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO4	2	1	2	2	1	1		1	1	1	1	1
AVG (CO Attainment Target Level)	2	1	2	2	1	1.25	1	1	1	1	1	1

Course Code:GEO-A-CC-3-06-TH/P

Course Title: Hydrology and Oceanography

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

CO1: Acquire knowledge about the global hydrological cycle and its physical and biological role.

CO2: *Explain* the occurrence, storage, and factors controlling ground water.

CO3: Evaluate the physical and chemical properties of ocean water.

CO4: Construct and Interpret hydrological and rainfall dispersion graphs and diagrams.

CO-PO-PSO Mapping for GEO-A-CC-1-06-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4

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	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	2	2	1	1	1	1	1	1	1	1
CO2	2	1	1	2	1	1		1	1	1		1
СОЗ	2	1	1	1	1	1	1	1	1	1	1	1
CO4	2	1	1	1	1	1	1	1	1	1		1
AVG (CO Attainment Target Level)	2	1	1.25	1.5	1	1	1	1	1	1	1	1

Course Code: GEO-A-CC-3-07-TH/P

Course Title: Statistical Methods in Geography

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

CO1: Acquire knowledge about the significance of statistics in geography.

CO2: Understand the importance of use of data in geography.

CO3: Interpret statistical data for a holistic understanding of geographical phenomena.

CO4: learn to *calculate* regression and correlation and different hypothesis testing.

CO-PO-PSO Mapping for GEO-A-CC-1-07-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	3	3	2	2	1	1	1	1	1	1
CO2	2	1	2	1	1	1	1	1	1	1	1	1
СОЗ	1	1	3	3	1	2	1	1	1	1	1	1
CO4	1	1	3	3	1	1	1	1	1	1	1	1
AVG (CO Attainment Target Level)	1.5	1	2.75	2.5	1.25	1.5	1	1	1	1	1	1

Course Code: GEO-A-SEC-A-3-01-TH
Course Title: Coastal Management

After completion of the course, students will be able to, CO1: *Acquire knowledge* about components of a coastal zone.

CO2: Explain the role of costal morphodynamic variables in the evolution of coastal forms.

CO3: Analyze the environmental impacts and management of mining, oil exploration, salt manufacturing, land reclamation and tourism.

CO4: *Understand* the principles of coastal zone management and the importance of exclusive economic zones and coastal regulation zones in India.

CO-PO-PSO Mapping for GEO-A-SEC-A-3-01-TH:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	2	1	1	1	1	1	1	1	1	1
CO2	2	1	2	2	1	1	1	1	1	1		1
соз	2	1	3	3	1	2	1	1	1	1	1	1
CO4	1	1	2	1	1	1	1	1	1	1		1
AVG (CO Attainment Target Level)	1.75	1	2.25	1.75	1	1.25	1	1	1	1	1	1

Course Code: GEO-A-CC-4-08-TH/P

Course Title: Economic Geography

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

CO1: Acquire knowledge about the significance of Economic Geography,

CO2: *Understand* different types of economic activities, and factors affecting location of any economic activity with special reference to Von Thunen and Weberian models.

CO3: Assess the importance of WTO and BRICS in world economy.

CO4: Analyze the significance of transnational sea-routes, railways and highways with reference to India.

CO-PO-PSO Mapping for GEO-A-CC-4-08-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	1	2	1	2	1	1	1	1	2	1
CO2	2	1	2	2	1	2	1	1	1	1	1	1
CO3	2	1	1	2	1	1	1	1	1	1	1	1
CO4	1	2	1	1	1	1	1	1	1	1	1	1
AVG (CO Attainment	1.75	1.25	1.25	1.75	1	1.5	1	1	1	1	1.25	1

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
Target Level)												

Course Code: GEO-A-CC-4-09-TH/P

Course Title: Regional Planning and Development

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

CO1: Acquire knowledge about the concept of regions and regionalization and types of regional planning.

CO2: *Understand* varied aspects of development and regional disparity, in order to formulate measures of balanced development.

CO3: Explain the different indicators of development.

CO4: Measure the inequality by Location Quotient, and also measuring regional disparity by Sopher Index.

CO-PO-PSO Mapping for GEO-A-CC-4-09-TH/P:

PO4 PO3 PO4 POF PO5 PO7 PO9 PS04 PS03 P				
	102 DO1 DOE DOE DO7 DO9 DSO1 DSO2	SO1 PSO2	PSO1 PSO2	PSO3 PSO4
PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PSO1 PSO2 P	03 P04 P05 P06 P07 P08 P301 P302	301 P302	P301 P302	P3U3 P3U4

	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	2	2	2	1	1	1	1	1	1	1	1
CO2	2	1	1	1	1	1	1	1	1		1	1
CO3	1	1	3	3	1	1	1	1	1		1	1
CO4	2	1	3	3	1	1	1	1	1	1	1	1
AVG (CO Attainment Target Level)	1.75	1.25	2.25	2.25	1	1	1	1	1	1	1	1

Course Code: GEO-A-CC-4-10-TH/P
Course Title: Soil and Biogeography

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

CO1: Acquire knowledge about the factors of soil formation, significance of different soil properties, and profile of different soil types.

CO2: *Understand* and *explain* the principles of soil classification and the role of man as an active agent of soil transformation, erosion and degradation.

CO3: Analyze varied biomes of the world and bio-geochemical cycles with special reference to carbon dioxide and nitrogen.

CO4: Compose the measures of biodiversity conservation.

CO-PO-PSO Mapping for GEO-A-CC-4-10-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	1	2	1	1	1	1	1	1		1
CO2	2	1	2	1	1	1	1	1	1	1		1
соз	2	1	1	1	1	1	1	1	1	1	1	1
CO4	2	1	2	2	1	1	1	1	1	1	1	1
AVG (CO Attainment Target Level)	2	1	1.5	1.5	1	1	1	1	1	1	1	1

Course Code: GEO-A-SEC-B-4-03-TH
Course Title: Rural Development

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

CO1: Acquire knowledge about the basic elements and measures of levels of rural development.

CO2: Identify the paradigms of rural development with reference to Lewis model and Myrdal's model.

CO3: Analyze the area based approach to rural development with an eye on PMGSY, SJSY, MNREGA, and Jan DhanYojana.

CO4: *Understand* the significance of rural governance in terms of the development of policies and programmes in India.

CO-PO-PSO Mapping for GEO-A-SEC-B-4-03-TH:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	2	1	1	1	1	1	1	1	1	1
CO2	2	1	1	1	1	1	1	1	1	1	1	1
соз	2	2	1	1	1	1	1	1		1	1	1
CO4	2	1	1	1	1	1	1	1		1	1	1
AVG (CO Attainment Target Level)	2	1.25	1.25	1	1	1	1	1	1	1	1	1

Course Code: GEO-A-CC-5-11-TH/P

Course Title: Research Methodology and Fieldwork

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

CO1: Acquire knowledge about the basic concept, significance and different types of research in Geography along with Plagiarism and its types.

CO2: *Understand* the techniques of writing scientific reports, preparing notes, references, bibliography, abstract and keywords.

CO3: Explain the different techniques and tools used in the field survey.

CO4: Develop strategies to handle logistics and other emergencies on field.

CO-PO-PSO Mapping for GEO-A-CC-5-11-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	1	1	2	2	3	3	3	3		1	1	1
CO2	2	1	3	3	1	1	1	1		1	1	1
CO3	2	1	3	3	1	1	1	1	1	1	1	1
CO4	1	3	3	3	3	3	1	2	1	1	1	1

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	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
AVG (CO Attainment Target Level)	1.5	1.5	2.75	2.75	2	2	1.5	1.75	1	1	1	1

Course Code: GEO-A-CC-5-12-TH/P

Course Title: Remote Sensing, GIS and GNSS

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

CO1: Acquire knowledge about the principles of remote sensing, sensor resolutions and image referencing schemes and the principles of GNSS positioning and waypoint collection.

CO2: *Understand* sensor resolutions and their applications with reference to IRS and Landsat missions.

CO3: Interpret satellite imagery and understand the preparation of false color composites from them.

CO4: Create false colour composites from IRS-LISS-3 and Landsat TM/OLI data and land use land cover (LULC) map using GIS software.

CO-PO-PSO Mapping for GEO-A-CC-5-12-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4

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	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	2	2	2	2	1	1	1	1	1	1
CO2	2	1	2	2	1	1	1	1	1	1	1	1
CO3	2	1	3	3	1	1	1	1	1	1		1
CO4	2	1	2	2	1	1	1	1	1	1		2
AVG (CO Attainment Target Level)	2	1	2.25	2.25	1.25	1.25	1	1	1	1	1	1.25

Course Code: GEO-A-DSE-A-5-02-TH/P

Course Title: Climate Change: Vulnerability and Adaptations

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

CO1: Acquire knowledge about global climatic assessment and IPCC reports and National Action Plan on climate change.

CO2: *Understand* climate change with reference to the geological time scale.

CO3: Assess the origin of Greenhouse gases and global warming.

CO4: *Understand* about global initiatives to climate change mitigation with reference to Kyoto Protocol, carbon trading, clean development mechanism, COP, climate fund.

CO-PO-PSO Mapping for GEO-A-DSE-A-5-02-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	2	1	1	1	1	1	1	1		1
CO2	2	1	2	2	1	1	1	1	1	1	1	1
соз	1	1	2	2	2	1	1	1	1	1	1	1
CO4	1	1	1	1	1	1	1	1	1	1		1
AVG (CO Attainment Target Level)	1.5	1	1.75	1.5	1.25	1	1	1	1	1	1	1

Course Code: GEO-A-DSE-B-6-05-TH/P

Course Title: Cultural and Settlement Geography

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

CO1: Acquire knowledge about the scope and content of cultural geography, concept of cultural hearth and realm, cultural diffusion.

CO2: *Understand* the concept of cultural segregation and cultural diversity, culture, technology and development.

CO3: Differentiate about the various races and racial groups of the world.

CO4: Develop the skill of mapping language distribution of India, andidentifying rural settlement types from topographical sheet.

CO-PO-PSO Mapping for GEO-A-DSE-B-6-05-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	1	1	1	1	1	1		1	1	1
CO2	1	1	2	2	1	1	1	1		1		1
CO3	2	1	2	2	1	1	1	1	1	1	1	1
CO4	2	1	1	1	1	1	1	1	1	1	1	1
AVG (CO Attainment Target Level)	1.75	1	1.5	1.5	1	1	1	1	1	1	1	1

Course Code: GEO-A-CC-6-13-TH/P

Course Title: Evolution of Geographical Thought

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

CO1: Acquire knowledge about the evolution of the philosophy of Geography.

CO2: Analyze the evolution of geographical thought from ancient to modern times.

CO3: *Identify* relationship of Geography with other disciplines and man-environment relationships.

CO4: Assess modern and contemporary principles of Empiricism, Positivism, Structuralism, Human and Behavioral Approaches in Geography.

CO-PO-PSO Mapping for GEO-A-CC-6-13-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	2	2	1	1	1	1	1	1	1		1
CO2	2	1	2	1	1	1	1	1	1	1	1	1
CO3	2	1	2	2	1	1	1	1	1	1	1	1
CO4	2	1	1	1	1	1	1	1		1		
AVG (CO Attainment Target Level)	2	1.25	1.75	1.25	1	1	1	1	1	1	1	1

Course Code: GEO-A-CC-6-14-TH/P
Course Title: Disaster Management

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

CO1: Acquire knowledgeaboutthe nature of hazards and disasters.

CO2: Assess risk, perception and vulnerability with respect to hazards.

CO3: Construct preparedness plan, resilience, and capacity building plan as a response system of any hazard.

CO4: Evaluate the nature, impact and management of major natural and man-made hazards affecting the Indian subcontinent.

CO-PO-PSO Mapping for GEO-A-CC-6-14-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	2	2	2	1	1	1	1	1	1	1	1
CO2	2	1	3	3	1	1	1	1	1	1	1	1
CO3	2	1	2	2	1	1	3	2	1	1	1	1
CO4	1	1	2	1	1	1	1	1	1	1	1	1

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
AVG (CO Attainment Target Level)	1.75	1.25	2.25	2	1	1	1.5	1.25	1	1	1	1

Course Code: GEO-A-DSE-A-5-04-TH/P
Course Title: Resource Geography

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

CO1: Acquire knowledge about the concept and classification of resources.

CO2: *Understand* the approaches to resource utilization and the concept of Sustainable Resource development.

CO3: Analyze the problems of resource depletion in terms of global scenario and contemporary energy crisis and assess the future scenario.

CO4: Develop the skill of mapping of changes in forest cover and water bodies from satellite images.

CO-PO-PSO Mapping for GEO-A-DSE-A-5-04-TH/P:

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4

			1		1	•	1		1			T
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	1	1	1	1	1	1		1		1
CO2	2	1	1	1	1	1	1	1		1	1	1
CO3	1	1	3	3	1	1	1	1	1	1	1	1
CO4	2	1	2	2	1	1	1	1	1	1	1	2
AVG (CO Attainment Target Level)	1.75	1	1.75	1.75	1	1	1	1	1	1	1	1.25

Course Code: GEO-B-DSE-B-6-08-TH/P
Course Title: Geography of India

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

CO1: Acquire knowledge about the phyosiographic divisions with reference to tectonic provinces.

CO2: Assess the correlation between climate, soil, and vegetation of India.

CO3: *Understand* the concept of Green revolution and its consequents.

CO4: Analyze the phyosiographic division, forest and water resources of West Bengal and explain regional issues related to Darjeeling hills and Sundarbans.

CO-PO-PSO Mapping for GEO-B-DSE-B-6-08-TH/P:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
	Disciplinary Knowledge	Communication Skills	CriticalThinking andProblemSolving	Analytical Reasoning	Cooperation/ Team work	Self- directed Learning	Moral and Ethics	Lifelong Learning				
CO1	2	1	2	2	1	1	1	1	1	1	1	1
CO2	2	1	3	3	1	1	1	1	1	1	1	1
CO3	2	1	1	1	1	1	1	1		1	1	1
CO4	1	2	2	2	1	1	1	1	1	1	1	1
AVG (CO Attainment Target Level)	1.75	1.25	2	2	1	1	1	1	1	1	1	1