

COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

YEAR - 2026

SEMESTER – I IDC

DEPARTMENT - GEOGRAPHY

Faculty-Dr Ambika Roy Bardhan

Topic/Unit	Competency-Based Expected Learning Outcome (Knowledge, Skill Value, Attitude)	Assessment	Brief Description of Strategies, Aids (if any), Evaluation process	Hours Allotted	Evaluated Outcome/ Post-Teaching Reflections
Paper: GEOD-IDC-1/2/3- Th -Introduction to Geography					
Unit III: Contemporary Geographical Issues – Climate Change and its Impact	Students will be able to: Knowledge • Explain the concept and causes of climate change. • Describe the impacts of climate change on the physical environment, ecosystems, agriculture, water resources, and human societies. • Explain mitigation and adaptation strategies to address climate change. Skills • Analyse the impacts of climate change using contemporary examples. • Interpret climate-related data and case studies. • Evaluate adaptation and mitigation measures. Values	Quiz with MCQ	• Group Learning and Teaching • Technology based Learning	2 Hours	Outcomes attained: Challenges Identified: Improvements required: Alignment with POs, PSOs, COs:

	• Appreciate the importance of climate action and environmental sustainability. • Recognise the need for responsible environmental practices. Attitude • Develop concern towards climate resilience and sustainable development. • Demonstrate commitment to environmentally responsible behaviour.				
Hazard and Disaster: Definition and Types	Students will be able to: Knowledge • Explain the concepts of hazard and disaster. • Describe different types of natural and anthropogenic hazards and disasters. • Explain disaster risk reduction and disaster management strategies. Skills • Classify hazards based on their origin and characteristics. • Analyse disaster events using real-world case studies. • Interpret hazard maps and identify vulnerable regions. Values • Appreciate the importance of disaster preparedness and community resilience. • Recognise the role of individuals and institutions in disaster management.	Short Answer Questions	• Group Learning and Teaching • Technology based Learning	2 hours	

	Attitude • Develop awareness towards disaster risk reduction. • Demonstrate responsible behaviour during disasters and emergencies.				
Deforestation, Soil Erosion and Loss of Biodiversity	Students will be able to: Knowledge • Explain the causes and consequences of deforestation, soil erosion, and biodiversity loss. • Describe the relationship between human activities and environmental degradation. • Explain conservation measures for forests, soils, and biodiversity. Skills • Analyse environmental degradation using case studies. • Evaluate conservation strategies and sustainable resource management practices. • Interpret environmental issues through maps and spatial data. Values • Appreciate the importance of conserving forests, soils, and biodiversity. • Recognise the need for sustainable environmental management. Attitude	Presentation	• Peer Teaching • Group Learning and Teaching • Technology based Learning	3 hours	

	• Develop environmental ethics and conservation-oriented behaviour. • Demonstrate commitment towards sustainable use of natural resources.				
Migration and Displacement	Students will be able to: Knowledge • Explain the concepts, causes, and types of migration and displacement. • Describe the socio-economic and environmental impacts of migration. • Explain issues related to internally displaced persons and environmental refugees. Skills • Analyse migration patterns using demographic and spatial data. • Interpret migration-related case studies. • Evaluate the challenges associated with displacement and rehabilitation. Values • Appreciate cultural diversity and social inclusion. • Recognise the importance of protecting the rights and dignity of displaced populations. Attitude • Develop empathy towards migrants and displaced communities.	Short Answer Questions	• Group Learning and Teaching • Technology based Learning	2 hours	

	• Demonstrate sensitivity towards social and environmental justice.				
Unit IV: Basics of Maps and Scales – Types and Elements of Maps	Students will be able to: Knowledge • Explain the concept, types, and elements of maps. • Describe essential map components such as title, legend, scale, direction, projection, and coordinates. Skills • Identify different types of maps and their applications. • Interpret map elements for geographical analysis. • Compare maps based on their purpose and content. Values • Appreciate the importance of maps as tools for spatial analysis and communication. • Recognise the significance of accuracy in map interpretation. Attitude • Develop interest in map reading and geographical exploration. • Demonstrate accuracy while interpreting maps.	Short Answer Questions	• Group Discussion • Group Learning and Teaching • Technology based Learning	2 hours	
Scale: Types and Applications	Students will be able to: Knowledge	Short Answer Questions	• Group Learning and Teaching	2 hours	

	• Explain the concept and importance of map scales. • Describe different types of scales and their applications. • Explain the relationship between scale, distance, and detail. Skills • Calculate and interpret map scales. • Apply different scales to measure distances on maps. • Compare scales for different mapping purposes. Values • Appreciate the role of scales in accurate map representation. • Recognise the importance of precision in cartographic work. Attitude • Develop confidence in using scales for geographical analysis. • Demonstrate accuracy and systematic approach in map-based exercises.		• Technology based Learning		
Paper: GEOD-IDC-1/2/3- Pr -Introduction to Geography Lab					
Rainfall– Temperature Graph of any Indian Station	Students will be able to: Knowledge • Explain the significance of climatic graphs in geographical analysis. • Describe the relationship between rainfall and temperature in different climatic regions of India.	Practical Exercise, Viva-Voce, Practical Notebook	• Learning by Problem Solving • Experiential Learning	3 hours	

	Skills • Construct rainfall–temperature graphs using climatic data. • Plot rainfall and temperature accurately using appropriate scales. • Interpret seasonal variations and identify climatic characteristics of a station. • Compare climatic patterns of different regions using graphical representation. Values • Appreciate the importance of climatic data in geographical studies. • Recognise the role of graphical techniques in data interpretation. Attitude • Develop accuracy and systematic presentation of geographical data. • Demonstrate confidence in interpreting climatic information.				
Bar Diagram: Production of Leading Crops of Selected States of India	Students will be able to: Knowledge • Explain the purpose and applications of bar diagrams in geographical representation. • Describe the spatial distribution of major crops in India. Skills • Construct simple and multiple bar	Practical Exercise, Viva-Voce, Practical Notebook	• Learning by Problem Solving • Experiential Learning	3 hours	

	diagrams using agricultural data. • Select appropriate scales for graphical representation. • Analyse regional variations in crop production. • Interpret agricultural patterns using graphical techniques. Values • Appreciate the role of graphical methods in geographical data analysis. • Recognise the importance of agriculture in the Indian economy. Attitude • Develop precision in graphical representation. • Demonstrate analytical thinking while interpreting agricultural data.				
Pie Diagram: Land Use or Occupational Structure of West Bengal	Students will be able to: Knowledge • Explain the principles and applications of pie diagrams. • Describe the land-use pattern or occupational structure of West Bengal. Skills • Calculate sector angles accurately for pie diagram construction. • Construct pie diagrams using statistical data. • Interpret proportional data and compare different categories.	Practical Exercise, Viva-Voce, Practical Notebook	• Learning by Problem Solving • Experiential Learning	4 hours	

	- Analyse land-use or occupational characteristics using graphical methods. Values - Appreciate the usefulness of statistical diagrams in geographical analysis. - Recognise the importance of presenting spatial data effectively. Attitude - Develop accuracy and attention to detail in diagram construction. - Demonstrate confidence in analysing socio-economic data.				
Line Graph: Population Growth of India	Students will be able to: Knowledge - Explain the concept and significance of line graphs in representing temporal data. - Describe the trend and pattern of population growth in India. Skills - Construct line graphs using population data. - Plot data accurately with appropriate scales and labels. - Analyse trends, growth rates, and demographic changes from graphical representation. - Interpret temporal variations using statistical graphs.	Practical Exercise, Viva-Voce, Practical Notebook	Learning by Problem Solving Experiential Learning	3 hours	

	Values • Appreciate the importance of demographic data in planning and development. • Recognise the role of graphical representation in geographical analysis. Attitude • Develop analytical thinking and precision in graphical representation. • Demonstrate confidence in interpreting demographic trends.				
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COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

YEAR - 2026 SEMESTER - I DEPARTMENT -Geography

GEOD-IDC-1- Th -Introduction to Geography 50 Marks / 2 Credits

Dr. Suman Chatterjee (SCH)

Topic/Unit	Competency-Based Expected Learning Outcome (Knowledge, Skill, Value & Attitude)	Assessment (Stress on Previous Year Questions)	Brief Description of Strategies, Aids (if any), Evaluation Process	No. of Classes	Evaluated Outcome / Post-Teaching Reflections
Unit-I: Concepts in Geography Nature and Scope of Geography	Knowledge: Explain the nature, scope and branches of Geography. Skill: Differentiate physical and human geography using examples. Value & Attitude: Develop scientific and spatial thinking towards geographical phenomena.	Class discussion, short notes, concept-based MCQs. <i>(No direct previous-year questions found in the analysed papers.)</i>	Lecture-cum-discussion using concept maps and diagrams; brainstorming on "Why Geography is an integrative science?"; formative assessment through oral questioning and concept mapping.	1	

Unit-I: Concepts in Geography Man–Environment Relationship: Determinism and Possibilism	Knowledge: Explain Determinism and Possibilism with major contributors. Skill: Compare the two approaches and apply them to contemporary environmental issues. Value & Attitude: Develop balanced views on sustainable human–environment interaction.	Short-answer writing, comparison table, case-study discussion. <i>(No direct previous-year questions found in the analysed papers.)</i>	Interactive lecture using historical examples (Ratzel, Vidal de la Blache), debate on "Nature vs Human Agency", case studies from India; evaluation through written comparison and oral presentation.	1	
Unit-II: Regional Geography of India & West Bengal Regional Classification of India (after R. L. Singh)	Knowledge: Describe principles and criteria of regionalisation. Skill: Compare R.L. Singh's regional classification with agro-climatic and economic regionalisation. Value & Attitude: Appreciate regional diversity and planning.	Map-based exercise comparing R.L. Singh's regional classification, economic regionalisation, agro-climatic regionalisation, and characteristics of Bundelkhand; collaborative presentation; atlas work; analytical short-answer writing; peer evaluation.	Lecture using thematic maps of India; comparison charts of different regional classifications; group presentation on selected regions; evaluation through map-based exercises and PYQ practice.	2	
Unit-II: Regional Geography of India & West Bengal Physiography of India & West Bengal	Knowledge: Explain physiographic divisions, tectonic evolution and drainage characteristics. Skill: Interpret physiographic maps and relate relief to geological evolution. Value & Attitude: Appreciate India's geomorphic diversity.	Map-pointing and labelled sketch maps of physiographic divisions, Main Boundary Fault, Peninsular Plateau, Western Himalayas, Bhabar–Khadar,	Lecture with geological maps, block diagrams and cross-sections; atlas work; drainage map interpretation; evaluation through map pointing, diagram drawing and descriptive answers.	3	

		antecedent drainage, physiographic divisions of West Bengal, Nallamala Hills, Sundarban boundary, Multipurpose River Valley Projects, and drainage characteristics of North Bengal; diagram-based quiz; portfolio; descriptive assignment.			
Unit-II: Regional Geography of India & West Bengal Climate	Knowledge: Explain climatic regions, monsoon mechanism and climatic classification. Skill: Interpret climatic maps and rainfall distribution. Value & Attitude: Develop awareness of climate variability and its impacts.	Climatic map interpretation, weather-data analysis and infographic preparation on climatic types, winter rainfall in Punjab and Tamil Nadu, Jet Stream mechanism, and distribution of climatic regions; concept quiz; group discussion; reflective assignment.	Lecture using Köppen climatic map, monsoon animation, wind circulation diagrams; evaluation through climatic map interpretation, viva and written assignments.	2	

Unit-II: Regional Geography of India & West Bengal Soils	Knowledge: Describe major soil types, distribution and degradation. Skill: Relate soil characteristics to physiography and agriculture. Value & Attitude: Promote awareness of soil conservation.	Soil-profile interpretation, thematic mapping and case-study analysis on soil erosion, deltaic soils, lateritic soils of western West Bengal, and soil conservation measures; worksheet; short descriptive answers; peer review.	Lecture with soil profile diagrams and thematic maps; discussion on conservation measures; evaluation through descriptive writing and diagram-based questions.	1	
Unit-II: Regional Geography of India & West Bengal Natural Vegetation	Knowledge: Explain vegetation types, forest conservation and biodiversity. Skill: Relate climate and vegetation distribution. Value & Attitude: Develop environmental ethics towards forest conservation.	Poster preparation and project-based assessment on Sundarban World Heritage Site, Joint Forest Management (JFM) and forest conservation measures in West Bengal; case-study discussion; presentation; reflective journal.	Lecture using vegetation maps, documentary clips and case study of Sundarbans; evaluation through short-answer questions and case-study analysis.	1	
Unit-II: Regional Geography of India & West Bengal	Knowledge: Explain spatial distribution, growth and population policy. Skill: Interpret demographic data and relate it to demographic transition. Value & Attitude:	Census-data interpretation, choropleth map analysis and graph-based exercises on population density,	Lecture using census maps, demographic pyramids and statistical tables; evaluation through data interpretation, graph analysis and PYQ writing.	2	

Population Distribution	Develop awareness of population issues and sustainable development.	population growth and Demographic Transition Theory, and National Population Policy (2000); analytical note; quiz; portfolio.			
Unit-II: Regional Geography of India & West Bengal Urbanisation	Knowledge: Explain urbanisation, urban morphology, hierarchy and planning concepts. Skill: Analyse urban problems using geographical concepts and models. Value & Attitude: Develop awareness of sustainable urban development.	Problem-based learning, case-study analysis and concept quiz covering Necropolis, Smart Cities Mission, Urban Sprawl, slums, Christaller's K-Principles, Rank-Size Rule, site and situation, transport linkage, urban morphology of Chandigarh, ethnic neighbourhood planning, social area analysis, suburbanisation, August Lösch's theory, CBD of Kolkata, National Urban Development	Lecture using urban maps, satellite imagery, case studies (Kolkata & Chandigarh), group discussion and problem-solving exercises; evaluation through analytical essays, diagram drawing and PYQ practice.	4	

		Policy, and pattern of urbanisation in modern India; group presentation; peer and self- assessment; analytical essay.			
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