

COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION
YEAR – IV SEMESTER – VII HONS DEPARTMENT – GEOGRAPHY FACULTY – DEBASREE SINHA

COURSE: PHILOSOPHY OF GEOGRAPHY

CODE: GEOG-H-CC16-7-Th

Topic/Unit	Competency-Based Expected Learning Outcome (Knowledge, Skill Value, Attitude)	Assessment	Brief Description of Strategies, Aids (if any), Evaluation process	Hours Allotted
Unit I: Nature of Geography 1. Development of Ancient Geography: Contributions of Greek, Roman, and Indian geographers 2. Development of Medieval Geography: Arab geographers 3. Contributions of Varenius and Kant 4. Contributions of Humboldt and Ritter Unit II: Geography in the 20th Century 7. Trends of geography in the post-World War-II period: Positivism, Hartshorne-Schaefer debate, quantitative revolution	Students will be able to: 1. Skill – Compare and interpret the ideas of different ancient geographical traditions. 2. Value – Appreciate the historical foundations of geographical knowledge across civilizations. 3. Value – Value scientific reasoning and philosophical inquiry in geographical thought. 4. Knowledge – Explain the major paradigms and methodological changes in post-war geography. 5. Skill – Critically evaluate different schools of geographical thought and apply quantitative reasoning to geographical problems.	1. Seminar presentation 2. Peer assessment 3. Written test	1. Group learning and teaching. 2. Individual learning / Self-study 3. Peer teaching 3. Lecture	17

COURSE: PHILOSOPHY OF GEOGRAPHY

CODE: GEOG-H-CC16-7-P

Topic/Unit	Competency-Based Expected Learning Outcome (Knowledge, Skill Value, Attitude)	Assessment	Brief Description of Strategies,	Hours Allotted
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			Aids (if any), Evaluation process	
2. Mapping voyages: Columbus, Vasco da Gama, Magellan, and James Cook 3. Group Presentation of five to ten students on any selected paradigm in geographical thought by using poster (In Part) 4. A Book Review within 1000 words to be selected from Couper, Dickinson, Johnston, and Sidaway	Students will be able to: 1. Knowledge – Explain the historical significance of the voyages in the development of geographical knowledge and world exploration. 2. Skill – Plot and analyse the major exploration routes on world maps and compare their geographical and geopolitical impacts. 3. Value – Develop critical thinking, intellectual curiosity, and an appreciation for scholarly contributions in geography.	1. Seminar presentation 2. Book review	1. Group learning and teaching. 2. Individual learning / Self-study	20

COURSE: – STATISTICAL METHODS IN GEOGRAPHY

CODE: GEOG-H-CC19-7-Th

Topic/Unit	Competency-Based Expected Learning Outcome (Knowledge, Skill Value, Attitude)	Assessment	Brief Description of Strategies, Aids (if any), Evaluation process	Hours Allotted
Unit II: Numerical Data Analysis 5. Central tendency: Mean, median, mode, and partition values 6. Measures of dispersion range, mean deviation, standard deviation, and coefficient of variation 7. Association and correlation: Product	Students will be able to: 1. Knowledge – Explain the fundamental concepts and applications of descriptive and inferential statistics in geographical studies. 2. Knowledge – Understand statistical techniques used for analysing spatial and temporal geographical data. 3. Skill - Apply appropriate statistical	1. Self-assessment 2. Written test	1. Learning by problem solving 2. Technology-based learning 3. Individual learning / self-study	24

moment correlation and rank correlation 9. Time series analysis 10. Hypothesis testing: Chi-square test and T-test	methods to analyse geographical datasets using manual calculations. 4. Value – Appreciate the role of statistics in evidence-based geographical research. 5. Attitude – Exhibit scientific temper, precision, and confidence while interpreting statistical evidence.			
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COURSE: – STATISTICAL METHODS IN GEOGRAPHY

CODE: GEOG-H-CC19-7-P

Topic/Unit	Competency-Based Expected Learning Outcome (Knowledge, Skill Value, Attitude)	Assessment	Brief Description of Strategies, Aids (if any), Evaluation process	Hours Allotted
1. Construction of data matrix with each row representing an area unit (districts / blocks / mouzas / towns) and corresponding columns of relevant attributes 2. Based on the above, a frequency table, measures of central tendency, and dispersion would be computed and interpreted using histogram and frequency curve	Students will be able to: 1. Skill – Construct well-organized data matrices representing geographical units and their relevant attributes. 2. Skill – Prepare frequency tables and accurately compute measures of central tendency and dispersion from geographical datasets. 3. Skill – Compare different geographical datasets using descriptive statistical measures and present findings through appropriate tables and graphs.	1. Self-assessment 2. Written test	1. Learning by problem solving 2. Technology-based learning	15

COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

YEAR -2026 SEMESTER -VII DEPARTMENT – Geography

Faculty: Dr Kaustuva Banerjee

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
GEOG-H-CC17-7-Th – Resource Geography – Unit I: Resource and Development 1. Natural resources: Concept, significance, and classification 2. Approaches to resource utilization: Utilitarian, conservational,	1. Knowledge: Understand the concept, importance, and classification of natural resources. Skill: Identify and categorize different resources through examples and geographical data. Value: Appreciate the importance of sustainable resource use. Attitude: Develop responsibility towards conservation of natural resources. 2. Knowledge: Explain different approaches to resource utilization. Skill: Compare and analyze different approaches in real-life situations. Value: Recognize the need for balanced resource utilization.	Class discussion, oral questions, concept map, short answer questions, assignments. Comparative analysis, group activity, presentation, worksheet.	Strategies: Interactive teaching, brainstorming, case studies, discussion-based learning. Aids: Maps, charts, diagrams, videos, textbook resources. Evaluation: Written test, participation, and concept understanding. Strategies: Collaborative learning, role play, problem-solving activities. Aids: PPT, case studies, newspaper articles, examples of local resource management. Evaluation: Group performance, analytical ability, and presentation	2class(2hrs)/wk	

community based, and adaptive	Attitude: Encourage community participation and sustainable practices. 3. Knowledge: Understand global issues related to forest depletion and water scarcity. Skill: Interpret data, maps, and trends related to resource crises. Value: Develop awareness about environmental challenges. Attitude: Promote conservation and responsible consumption. 4. Knowledge: Explain methods of forest and water conservation. Skill: Suggest practical conservation measures. Value: Develop environmental ethics. Attitude: Participate in conservation activities.	Data interpretation questions, map-based questions, project work.	skills.		
3. Crisis of resource availability: Global scenario of forest and water		Assignment, poster making, quiz, activity-based assessment	Strategies: Inquiry-based learning, discussion on current environmental issues. Aids: Satellite images, graphs, maps, documentaries. Evaluation: Accuracy of interpretation, understanding of concepts, project assessment.		
4. An overview on conservation of forest and water resources	5. Knowledge: Understand agricultural resource conflicts and issues related to traditional and genetically modified crops. Skill: Analyze advantages and challenges of different agricultural practices. Value: Appreciate biodiversity and	Debate, case study analysis, written assessment, presentations.	Strategies: Experiential learning, awareness campaigns, local examples. Aids: Posters, videos, conservation reports. Evaluation: Creativity, application of knowledge, awareness level.		
Unit II: Resource Conflict and Management					

estimate of changes in forest cover from maps and/or satellite images					
2.Mapping and number estimate of changes in water bodies from maps and/or satellite images					

COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

DR. SUSHMA SAHAI YEAR - 2026 SEMESTER – VII MAJOR DEPARTMENT - GEOGRAPHY

PAPER – CC18 -7-TH- ENVIRONMENTAL ISSUES IN GEOGRAPHY

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
1.Geographer’s approach to environmental studies	Knowledge: Understands the meaning, scope and significance of environmental studies from a geographical standpoint Skill: Differentiates physical, ecological and human dimensions of environmental problems Value: Appreciates environment as a	Tutorials	Flipped classroom: students read a short article on the geographer's perspective on environment before class; class time used for structured discussion and think-pair-share	3	

	shared resource requiring responsible use Attitude: Develops an interdisciplinary, spatial outlook towards environmental issues				
2. Concept of holistic environment and systems approach	Knowledge: Comprehends environment as an integrated system of interacting sub-systems - atmosphere, hydrosphere, lithosphere and biosphere Skill: Applies systems thinking (input-process-output-feedback) to analyse environmental phenomena Value: Recognises the interconnectedness and interdependence within nature Attitude: Inclines towards a holistic rather than a fragmented understanding of environment	Group Presentations	Jigsaw method: each group becomes "expert" on one sub-system then teaches others; groups build a shared system model showing linkages; PPT used as aids; evaluated through the group presentation assessed on accuracy and clarity of linkages shown	3	
4. Wetland ecosystem with special reference to East Kolkata Wetlands	Knowledge: Understands the structure, functions and ecological services of wetland ecosystems with special reference to East Kolkata Wetlands (EKW) Skill: Analyses case-study material and interprets the wastewater-fed resource-recycling system of EKW Value: Appreciates wetlands as Ramsar-recognised sites of ecological and livelihood importance Attitude: Develops sensitivity towards conservation of wetlands threatened by urban expansion	Problem-solving questions, class discussion	Virtual field trip using Google Earth imagery of EKW combined with brief lecture input on wastewater-fed pisciculture and resource recovery; video clips and photographs used as aids Documentary analysis	4	
5. Rural environmental issues: special reference	Knowledge: Understands rural environmental problems, particularly	Case-study analysis, group discussion	Fishbowl technique - Discussion on rural environmental and		

to sanitation and public health	issues of sanitation, water contamination and their public health implications in the rural West Bengal context Skill: Analyses linkages between inadequate sanitation infrastructure, water quality and the prevalence of water-borne and vector-borne diseases Value: Recognises access to safe sanitation and clean water as a basic right and public health necessity Attitude: Develops advocacy and civic commitment towards improved rural sanitation and hygiene practices		public health issues; case study of the Swachh Bharat Mission (Gramin) and open-defecation-free (ODF) initiatives; government data and photographs used as aids		
6. Urban environmental issues with special reference to waste management	Knowledge: Identifies major urban environmental problems, particularly the challenges of solid waste generation, collection and disposal Skill: Evaluates existing waste management practices and proposes sustainable alternatives such as segregation and the 3Rs Value: Develops civic responsibility towards clean and sustainable urban living Attitude: Adopts a proactive attitude towards waste segregation and reduction in daily life	Problem-solving questions, class discussion	Documentary on urban environmental issues; PPT with photographs and flowcharts of the waste-management hierarchy used as aids	4	
PAPER – CC18 7-P - ENVIRONMENTAL ISSUES IN GEOGRAPHY LAB					
1.Preparation of questionnaire for perception survey on environmental problems	Knowledge: Understands the design principles of a questionnaire used for perception-based surveys on environmental problems Skill: Constructs valid, unbiased survey questions and sampling	Continuous assessment through practical record maintenance and evaluation, mock viva voce and tutorials	Field/secondary data, worksheets, guided calculations; group work with supervision	8	

	procedures to elicit public perception of environmental issues Value: Appreciates the importance of community perception in environmental assessment and planning Attitude: Develops a systematic and ethical approach to primary data collection				
2.Preparation of check-list for Environmental impact Assessment for urban / industrial development projects	Knowledge: Understands the components and purpose of an Environmental Impact Assessment (EIA) checklist for urban/industrial development projects Skill: Prepares a structured checklist identifying likely environmental impacts (air, water, soil, noise, socio-economic) of a development project Value: Recognises the role of EIA in balancing development needs with environmental protection Attitude: Develops a precautionary, evidence-based approach to project appraisal	Mock viva voce and tutorials	Case study; group work with supervision	15	

COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

TEACHER – DR. SUSHMA SAHAI YEAR - 2026 SEMESTER - VII DEPARTMENT – GEOGRAPHY

PAPER – CC20 -7-TH- REGIONAL DEVELOPMENT AND PLANNING

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
Unit I: Regional Development 4. Underdevelopment: Concept and causes	Knowledge: Understands the concept of underdevelopment and the major theories explaining regional disparities Skill: Analyses the physical, historical, economic and political causes of underdevelopment in a region Value: Recognises underdevelopment as a relative, multi-dimensional condition rather than a fixed state Attitude: Develops a critical perspective on development discourse and regional inequality	Problem-solving questions, class discussion	Case-based examples using aids like PPT; peer explanation	2	
Unit II: Regional Planning 6. Regional Planning: Principles and objectives	Knowledge: Understands the meaning, principles and objectives of regional planning Skill: Differentiates the goals of regional planning, such as balanced growth, resource optimisation and equity, across different contexts Value: Appreciates regional planning as a tool for reducing spatial inequality Attitude: Develops an evaluative	Tutorials and short written assignment	Blended learning; Interactive lecture using PPTs	4	

	outlook towards planning objectives and their practical outcomes				
7. Approaches to regional planning: Sectoral and spatial planning, centralised planning	Knowledge: Understands sectoral, spatial and centralised approaches to regional planning Skill: Compares the strengths and limitations of different planning approaches for specific regional problems Value: Values a context-sensitive choice of planning approach over a one-size-fits-all model Attitude: Develops a comparative, analytical mindset towards planning strategies	Group presentations and class discussion	Flipped Classroom	6	
8. Decentralisation and multi-level planning in India (73 rd and 74 th amendments)	Knowledge: Understands the framework of decentralisation and multi-level planning in India introduced through the 73 rd and 74 th Constitutional Amendments Skill: Analyses the roles of Panchayati Raj Institutions and Urban Local Bodies in multi-level planning Value: Recognises decentralisation as a means of strengthening grassroots participation in planning Attitude: Develops a civic-minded appreciation of local self-governance in regional development	Tutorials and class discussion	Blended learning; peer teaching	8	
PAPER – CC20 -7-P - REGIONAL DEVELOPMENT AND PLANNING LAB					
4. Preparation of an interview schedule for any Gram Panchayat member on a relevant development issue	Knowledge: Understands the structure and purpose of an interview schedule for eliciting information from local governance functionaries Skill: Designs a structured interview schedule to elicit a Gram Panchayat	Continuous assessment through practical record maintenance and evaluation, mock viva voce and	Field/secondary data, worksheets, guided calculations; group work with supervision	8	

	member's perspective on a relevant development issue Value: Appreciates grassroots-level insight as a valuable source of data for regional development studies Attitude: Develops professionalism and ethical sensitivity in engaging with local governance stakeholders	tutorials			
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COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

YEAR - 2026 SEMESTER - __VII__ DEPARTMENT - __Geography

Faculty-Dr Suman Chatterjee

GEOM-DSCC20-Th – Regional Development and Planning 75 Marks / 3 Credits

Topic/Unit	Competency-Based Expected Learning Outcome (Knowledge, Skill, Value & Attitude)	Assessment	Brief Description of Strategies, Aids (if any), Evaluation Process	Number of Classes	Evaluated Outcome / Post-Teaching Reflections
5. Regional Disparities in India: Economic and Social	Knowledge: Explain the concepts of regional diversity, regional disparity, Types of regional disparities, backward regions and regional planning initiatives (e.g., BRDF). Skill: Compare levels of regional development using socio-economic indicators and analyze causes and consequences of regional disparities. Value & Attitude: Develop sensitivity towards inclusive, balanced and sustainable regional development.	Class test, short-answer and descriptive questions, case study, previous-year university questions, group discussion.	Interactive lecture using thematic maps, Census/NITI Aayog data and case studies of backward regions. Discussion on regional diversity vs disparity, balanced development and regional imbalance. Evaluation through quizzes, written assignments and previous-year question practice.	4	
9. Planning Issues in Hill Area (Formal Region) and City Region (Functional Region)	Knowledge: Explain the concepts of formal and functional regions; understand planning issues in hill areas and city regions; identify characteristics of functional regions and the role of gravity models in regional planning. Skill: Differentiate formal and functional	Viva voce, assignment, concept mapping, previous-year descriptive questions,	Lecture with maps and diagrams illustrating hill regions and metropolitan regions. Discussion of formal vs functional regions, planning challenges, urban influence zones and gravity model	4	

	regions, interpret regional planning problems and apply regional concepts to geographical examples. Value & Attitude: Appreciate region-specific planning approaches for sustainable and equitable development.	classroom presentation.	applications. Evaluation through previous-year question solving, oral presentations and concept-based exercises.		
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COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

YEAR - 2026 SEMESTER - VII DEPARTMENT - Geography

GEOM-DSCC-20-P – Regional Development and Planning Lab 25 Marks

Topic/Unit	Competency-Based Expected Learning Outcome (Knowledge, Skill, Value & Attitude)	Assessment	Brief Description of Strategies, Aids (if any), Evaluation Process	Number of Classes	Evaluated Outcome / Post-Teaching Reflections
Practical 1: Delineation of Formal Regions by Weighted Index Method	Knowledge: Explain the concept of formal regions, regionalization techniques and the weighted index method. Skill: Compute weighted indices from socio-economic indicators, classify regions, delineate formal regions on maps and interpret spatial variations. Value & Attitude: Develop analytical thinking, accuracy in computation and appreciation of objective regional classification.	Practical record, numerical exercise, map submission, viva voce, previous-year practical and theory questions.	Demonstration of weighted index calculation using Excel/manual computation; preparation of composite index from selected variables; thematic mapping and regional delineation using GIS/manual methods. Discussion of previous-year questions on regionalization techniques and Location Quotient as an index-based regionalization method. Continuous evaluation through practical performance and interpretation.	8	
Practical 2: Delineation of Functional Regions by Breaking Point Analysis	Knowledge: Explain the concept of functional regions, breaking point analysis and the application of gravity principles in regional delineation. Skill: Calculate breaking points, delineate functional regions using population and distance data, prepare maps and interpret spheres of influence. Value & Attitude: Develop problem-solving ability, quantitative	Practical notebook, numerical problem, map work, viva voce, previous-year practical question.	Instructor-led demonstration of Breaking Point Formula with worked examples; manual/Excel calculations; delineation of influence zones on maps; interpretation of city-region boundaries through classroom discussion. Evaluation based on computational accuracy, map presentation and interpretation of functional regions.	8	

	reasoning and application of regional planning concepts to real-world situations.				
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COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

YEAR - 2026 SEMESTER - VII DEPARTMENT - Geography

GEOM-DSCC-19-Th – Statistical Methods in Geography 75 Marks / 3 Credits

Topic/Unit	Competency-Based Expected Learning Outcome (Knowledge, Skill, Value & Attitude)	Assessment	Brief Description of Strategies, Aids (if any), Evaluation Process	Number of Classes	Evaluated Outcome / Post-Teaching Reflections
1. Discrete and Continuous Data, Population & Samples, Scales of Measurement	Knowledge: Differentiate variable and attribute; identify discrete and continuous data; explain population, sample and universe; classify nominal, ordinal, interval and ratio scales. Skill: Classify variables and measurement scales from geographical datasets. Value & Attitude: Develop scientific thinking and appreciation of appropriate data classification.	Short answer questions, classification exercises, previous-year questions, MCQs	Interactive lecture using geographical examples (rainfall, temperature, population), PowerPoint, Smartboard with Teachmint app, worksheets. Discussion of previous-year questions on population vs sample, discrete/continuous variables and measurement scales.	4	
2. Collection of Data and Preparation of Statistical Tables	Knowledge: Explain primary and secondary data, methods of data collection and sources of geographical data; understand frequency distribution and statistical tables. Skill: Prepare grouped frequency distribution and block tables from raw data. Value & Attitude: Appreciate systematic data organization and ethical data collection.	Class exercise, preparation of frequency tables, previous-year numerical questions	Lecture-demonstration using census and survey data, spreadsheet/MS Excel, statistical table preparation, guided practice using previous university questions.	4	
3. Sampling: Need, Types, Significance and Methods of	Knowledge: Explain need, advantages and limitations of sampling; distinguish simple random, systematic and stratified sampling; compare census and sample	Viva, assignment, previous-year descriptive questions,	Classroom discussion with field survey examples, diagrams, random number demonstration, map-based illustration of sampling methods, group activities.	4	

Random Sampling	survey. Skill: Select appropriate sampling methods for geographical investigations. Value & Attitude: Develop objectivity in designing representative surveys.	sampling design exercise			
4. Theoretical Distribution: Frequency, Cumulative Frequency, Normal Distribution & Probability	Knowledge: Explain frequency distribution, cumulative frequency, frequency density, normal distribution and axioms of probability; understand skewness using mean, median and mode. Skill: Solve probability problems and prepare grouped frequency distributions. Value & Attitude: Develop logical and analytical reasoning for statistical interpretation.	Numerical problems, previous-year questions, quiz, class test	Lecture with graphical illustrations (frequency curve, normal curve), problem-solving sessions, board work, calculator-based exercises, discussion of previous university numerical questions.	5	

COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

YEAR - 2026 SEMESTER - VII DEPARTMENT - Geography

GEOM-DSCC-19-P – Statistical Methods in Geography Lab

Topic/Unit	Competency-Based Expected Learning Outcome (Knowledge, Skill, Value & Attitude)	Assessment	Brief Description of Strategies, Aids (if any), Evaluation Process	Number of Classes	Evaluated Outcome / Post-Teaching Reflections
Practical 3: Sampling Methods From the data matrix, draw a 20% sample using Random, Systematic and Stratified Sampling and locate the samples on a map with justification.	Knowledge: Explain the concept, need and significance of sampling; distinguish random, systematic and stratified sampling; relate practical sampling with previous-year theory questions. Skill: Draw representative samples (20%) using different sampling techniques; prepare sampling frame; locate sampled units accurately on a map; justify the choice of sampling method. Value & Attitude: Develop objectivity, accuracy and ethical field survey practices.	Practical exercise, viva voce, map submission, record book, previous-year theory questions (Systematic vs Stratified Sampling; Advantages of Simple Random Sampling; Census vs Sample Survey).	Demonstration using Excel/manual random number table; instructor-led sampling from a data matrix; map plotting using graph paper or GIS; group discussion comparing sampling methods; continuous observation and evaluation based on correctness of sampling design, map accuracy and explanation.	8	
Practical 4:	Knowledge: Explain scatter diagram,	Practical notebook,	Demonstration using MS Excel (or	7	

Scatter Diagram, Linear Regression and Residual Mapping Using the sample data and two relevant attributes, prepare a scatter diagram, fit a linear regression line, compute residuals, map them and interpret the results.	correlation, regression line, independent and dependent variables, residuals and their geographical significance; relate practical work with previous-year regression questions. Skill: Plot scatter diagram, compute regression equation, estimate predicted values, calculate residuals, prepare residual map and interpret spatial patterns. Value & Attitude: Develop analytical thinking, precision in statistical computation and evidence-based interpretation.	regression calculations, scatter plot, residual map, viva voce, interpretation exercise, previous-year regression numericals (2020–2022).	manual calculation); guided plotting of scatter diagram; stepwise regression calculation; preparation of residual map using GIS/manual methods; interpretation through classroom discussion; evaluation based on computation accuracy, graphical presentation and interpretation.		
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COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

YEAR -2026

SEMESTER - VII (MAJOR)

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: GEOG-H-CC18-7-Th – Environmental Issues in Geography					
Ecosystems and their Relationship with Habitats	Students will be able to: Knowledge: Explain the concept, structure and functioning of ecosystems and their relationship with habitats. Skill: Analyse interactions among biotic and abiotic components within different habitats. Value: Appreciate the importance of ecological balance and biodiversity conservation.	Short Answer Questions	- Group Learning and teaching - Technology based Learning	2 Hours	Outcomes attained: Challenges Identified: Improvements required: Alignment with POs, PSOs, COs:

	Attitude: Develop concern for ecosystem protection and sustainable resource use.				
Environmental Policies – Club of Rome, Earth Summits (Stockholm, Rio and Johannesburg), National Action Plan on Climate Change	Students will be able to: Knowledge: Explain major environmental policy initiatives at global and national levels. Skill: Compare objectives and outcomes of important environmental summits and policies. Value: Appreciate the need for international cooperation for environmental protection. Attitude: Develop awareness of climate responsibility and sustainable development.	Quiz with MCQ	• Peer Teaching • Group Learning and teaching • Technology based Learning	3 Hours	
Conference of the Parties (COP): Global Initiatives for Environmental Management with Special Reference to Montreal, Kyoto and Paris	Students will be able to: Knowledge: Understand the objectives and outcomes of major global environmental agreements. Skill: Analyse international efforts towards climate change mitigation and environmental management. Value: Realise the importance of global environmental governance and cooperation. Attitude: Foster a positive outlook towards collective environmental action.	Presentation	• Peer Teaching • Group Learning and teaching • Technology based Learning	3 Hours	
Environmental Impact Assessment (EIA) and Environmental Management Planning (EMP)	Students will be able to: Knowledge • Explain the concept, objectives, and significance of Environmental Impact Assessment (EIA). • Describe the stages and components of the EIA process. • Explain the concept and objectives of Environmental Management Planning (EMP). • Describe the role of EIA and EMP in sustainable development and environmental decision-making.	Presentation	• Peer Teaching • Group Learning and teaching • Technology based Learning	2 hours	

	Skills • Analyse the environmental impacts of developmental projects using EIA principles. • Interpret EIA reports and identify potential environmental risks and mitigation measures. • Evaluate environmental management strategies for sustainable resource use. • Apply EIA and EMP concepts to real-world developmental and environmental case studies. Values • Appreciate the importance of environmental protection in developmental planning. • Recognise the need for balancing economic development with environmental sustainability. Attitude • Develop a responsible and ethical approach towards environmental planning and management. • Demonstrate commitment to sustainable development and environmentally informed decision-making.				
Overview of Principal Environment-Related Regulations of India and Review of their Achievements	Students will be able to: Knowledge: Explain major environmental regulations and policies in India and their achievements. Skill: Evaluate the effectiveness of environmental legislation in addressing environmental issues. Value: Become aware of the role of law in	Presentation	• Group Learning and teaching • Technology based Learning	3 Hours	

	environmental conservation. Attitude: Develop respect for environmental governance and civic responsibility.				
Paper: GEOG-H-CC18-7-Pr – Environmental Issues in Geography					
Quality assessment of water using portable tester: pH, salinity, and hardness [10]	Students will be able to: Knowledge: Understand the significance of pH, salinity and hardness as indicators of water quality. Skill: Measure and analyse water quality parameters using portable testing instruments and interpret the results. Value: Appreciate the need for safe water resources and environmental monitoring. Attitude: Develop scientific accuracy and responsibility towards water conservation and public health.	Practical record work; laboratory exercise	• Learning by Problem Solving • Experiential Learning	4 Hours	
Interpretation of changes in air quality using multi-seasonal and multi-city or multi locational (within a single city) CPCB / WBPCB data	Students will be able to: Knowledge: Understand major air quality parameters and their seasonal and spatial variations. Skill: Analyse and interpret air quality data from CPCB/WBPCB using tables, graphs and comparative techniques. Value: Become aware of the importance of air quality monitoring for environmental and public health. Attitude: Develop concern for pollution control and sustainable environmental management.	Data analysis exercise; Practical record work	• Learning by Problem Solving • Experiential Learning	3 hours	
Paper: GEOG-H-CC16-7-Th – Philosophy of Geography					
Contributions of Richthofen, Ratzel, Hettner, Vidal de la Blache, and Hartshorne	Students will be able to: Knowledge: Explain the contributions of major geographical thinkers to the development of Geography. Skill: Compare the philosophical perspectives of different scholars and relate	Presentation	• Peer Teaching • Group Learning and teaching • Technology based Learning	4 Hours	

	them to the evolution of geographical thought. Value: Appreciate the historical development of Geography as a scientific discipline. Attitude: Develop respect for diverse schools of geographical thought and scientific enquiry.				
Dualism and Dichotomies in Geography: General vs. Particular, Physical vs. Human, Regional (Ideographic) vs. Systematic (Nomothetic), Determinism vs. Possibilism	Students will be able to: Knowledge: Describe the major dualisms and dichotomies in Geography. Skill: Critically analyse different philosophical debates and apply them to geographical examples. Value: Appreciate the complementary nature of different approaches in geographical enquiry. Attitude: Develop critical and balanced perspectives towards geographical concepts and paradigms.	Short Answer Questions	• Group Learning and teaching • Technology based Learning	4 Hours	
Philosophical Basis of Radicalism: Historical and Dialectical Materialism, Structuralism	Students will be able to: Knowledge: Explain the philosophical foundations of Radical Geography, including Historical Materialism, Dialectical Materialism, and Structuralism. Skill: Interpret geographical inequalities and socio-spatial processes using radical perspectives. Value: Develop awareness of social justice, equity, and inclusive development. Attitude: Cultivate critical thinking towards socio-economic and spatial inequalities.	Long Answer Questions	• Group Learning and teaching • Technology based Learning	3 Hours	
Behavioural, Humanistic, and Critical Approaches in	Students will be able to: Knowledge: Describe the principles of Behavioural, Humanistic, and Critical Geography.	Long Answer Questions	• Group Learning and teaching • Technology based Learning	3 Hours	

Geography	Skill: Compare the different approaches and evaluate their relevance in contemporary geographical studies. Value: Appreciate the role of human perception, values, and social justice in geographical analysis. Attitude: Develop empathy, critical reasoning, and human-centred perspectives in understanding spatial phenomena.				
Concept of Space: Absolute, Relative, and Relational with Special Reference to Lefebvre	Students will be able to: Knowledge: Explain the concepts of absolute, relative, and relational space with reference to Lefebvre's theory of space. Skill: Analyse spatial phenomena using different conceptualisations of space. Value: Appreciate the multidimensional nature of space in geographical research. Attitude: Develop analytical and critical perspectives towards spatial organisation and socio-spatial processes.	Long Answer Questions	• Group Learning and teaching • Technology based Learning	2 Hours	
Paper: GEOG-H-CC16-7-Pr – Philosophy of Geography					
Changing Perception of Maps of the World: Ptolemy and Mercator	Students will be able to: Knowledge: Explain the evolution of world maps from Ptolemy to Mercator and describe the characteristics of their projections. Skill: Compare historical and modern representations of the world and interpret distortions associated with different map projections. Value: Appreciate the historical development of cartography and its influence on geographical knowledge. Attitude: Develop critical thinking towards the interpretation and use of maps.	Practical work, Viva voce	• Group Learning and Teaching	4 Hours	
Group Presentation (5–10	Students will be able to: Knowledge: Explain the key concepts and	Poster Presentation	• Project Based Learning		

Students) on a Selected Paradigm in Geographical Thought Using Poster	significance of selected paradigms in geographical thought. Skill: Collect, organise, synthesise, and present information effectively through poster preparation and group presentation. Value: Develop collaborative learning, academic integrity, and appreciation of diverse geographical perspectives. Attitude: Enhance confidence, communication skills, teamwork, and critical thinking through collaborative presentation.				
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COMPETENCY BASED LEARNING DESIGN/COMPETENCY BASED POST-TEACHING REFLECTION

YEAR - 2026 SEMESTER – VII -DEPARTMENT -GEOGRAPHY

Mrs SABIHA SETHWALA

GEOG- H-CC-17 (TH) RESOURCE GEOGRAPHY

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
GEOG-CC-17-TH –RESOURCE GEOGRAPHY UNIT - II 6. Distribution of metallic minerals 7. Distribution of non metallic minerals 8. Utilization, management of energy resources 9. Human resources - significance Sustainable use of resources	• Knowledge conceptual understanding of resources of metallic and non metallic energy resource distribution • Skill learn to apply geographical tools to assess uneven distribution of resources and to develop actionable strategies for resource management • Value students understand the significance of sustainable resource development and the concept of limits to growth • Attitude develop a scientific temper to transform neutral substances into valuable resources and to examine the anthropogenic pressures driving resource depletion and environmental degradation	• Class tests • Objective • Worksheets • Home assignments • Tutorials	• Lecture Method • Project Method • Problem solving method • Flipped classroom • Peer teaching	20	

GEOG-CC-17- PR –RESOURCE GEOGRAPHY 3. Crop combination - Weavers Method 4. Decadal change in production of coal and iron	• Knowledge to understand agricultural dominance in specific areas • Skill learning to calculate by standard deviation if a region relies on monoculture or diverse multicrop farming • Value students understand the exact crop combinations and exact crop combinations that help agricultural planners optimise land use • Attitude use of mathematical approach to create a standardized framework for comparing cropping patterns across regions	• Class tests • Home assignments • Tutorials	• Lecture Method • Problem solving method	10	
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