Name of the teacher: Dr. Sushma Sahai

Initials: SWS

Teaching Objective:

- To help students understand the origin, Heat budget of the atmosphere
- Analyze the factors influencing insolation
- Comprehend the types, causes and consequences of Inversion of temperature
- Assess and evaluate the factors of climate change
- To prepare students for higher education
- To provide guidance beyond prescribed syllabus

Semester Four Geography Major Topic-wise Time Plan GEOG - H-CC -6 -TH - CLIMATOLOGY

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
1. Unit I: Elements of the Atmosphere	3	1. Insolation: Controlling factors. Heat budget of the atmosphere	 Lecture method Stimulus Response Method Discussion/ Interactive method Visual aids 	Comprehend the factors influencing insolation	• Tutorials • Quiz
2	4	2. Temperature: horizontal and vertical distribution. Inversion of temperature: types, causes and consequences	 Lecture method Stimulus Response Method Stimulus Response Method Discussion/Interactive method Visual aids 	Differentiate between horizontal and vertical distribution of temperature	Tutorials Home assignments

3	6	3. Overview of climate change: Causes, trends, and predictions of global temperature rise since 1850 CE. Formation, depletion, restoration, and significance of the ozone layer	 Lecture method Stimulus Response Method Discussion/Interactive method Visual aids 	 Understand the mechanism of Greenhouse effect Comprehend and analyse the depletion of the Ozone layer 	• Crossword • Book Review
Unit II: Atmospheric Phenomena & Climatic Classification	6	8. Atmospheric disturbances: Tropical cyclones & thunderstorms	 Lecture method Stimulus Response Method Discussion/Interactive method Visual aids 	 Understand the origin, types and consequences of atmospheric disturbances 	TutorialsHome assignments
2	4	10. Climatic classification after Thornthwaite (1948) & Koppen (1936)	 Lecture method Stimulus Response Method Discussion/ Interactive method Visual aids 	 Understand the significance of climatic classification Differentiate between Thornthwaite Koppen classifications 	TutorialsPresentations

Name of the teacher: Dr. Sushma Sahai

Initials: SWS

Teaching Objective:

• To enable students to interpret Weather Maps

- Impart the skill to identify the Weather maps of different seasons
- Construction rainfall dispersion diagram and Climate water budget
- To prepare students for higher education
- To provide guidance beyond prescribed syllabus

4TH Semester Geography Major Topic-wise Time Plan GEO-A-CC-5-P – CLIMATOLOGY LAB (PRACTICAL)

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
1.	12	2. Interpretation of a daily weather map of India (any two): Pre-Monsoon, Monsoon and Post-Monsoon	Lecture method Stimulus Response Method Discussion/ Interactive method	 Comprehend and assess the climatic parameters provided in weather maps Skilled to apply the above knowledge to identify weather maps of different seasons 	TutorialsHome assignmentsViva Voce
2	6	3. Construction and interpretation of monthly rainfall dispersion diagram (quartile method). Climate water budget	 Lecture method Stimulus Response Method Discussi on/ Interact ive method 	Acquire the skill of constructing and interpreting rainfall dispersion diagram and climate water budget	TutorialsHome assignmentsViva Voce

Name of the teacher: Dr. Sushma Sahai

Initials: SWS

Teaching Objective:

- To help students understand the origin and nature of the ocean floor
- Analyse the factor for social differentiation and region formation
- Provide an in depth knowledge of the Social welfare schemes
- Assess the social indicators of development
- To prepare students for higher education
- To provide guidance beyond prescribed syllabus

4th Semester Geography Major Topic-wise Time Plan GEOG -CC-07-TH Social Geography

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
1.	3	Unit 1: Concepts 3. Social differentiation and region formation	 Lecture method Stimulus Response Method Discussion/Interactive method Visual aids 	Understand the origin and characteristics of the ocean floor	TutorialsPaper presentations
2	3	Unit II: Social Issues 4. Social indicators of development: Education and health	 Lecture method Stimulus Response Method Discussion/Interactive method Visual aids 	• Assess the physical and chemical properties of ocean water	TutorialsHome assignments
3	6	9. Social welfare schemes for tribes, women and children	• Lecture method	Differentiate between	● Tutorials

		• Stimulus Response	different Water masses	
		Method	 Comprehend 	
		Discussion/ Interactive	the T-S diagram	
		method		
		Visual aids		

Name of the teacher: Dr. Sushma Sahai

Initials: SWS

Teaching Objective:

• To enable students to construct cartograms

• To help students to prepare questionnaire on socio-economic status

• To prepare students for higher education

• To provide guidance beyond prescribed syllabus

4th Semester Geography Major Topic-wise Time Plan GEOG -CC-07- P- Social Geography Lab

			- Social Geography La	1	
Topics	Hours	Topics	Teaching 	Learning	Assessment
	allotted	(as per curriculum)	method	outcome (output)	
1.	5	3. Construction and interpretation of cartograms showing distribution of people living below poverty line in India	Discussion methodInteractive method	 Comprehend, assess and acquire the skill to construct cartograms 	TutorialsHome assignmentsViva Voce
2	7	4. Preparation of a questionnaire on socio-economic status/ access to amenities in slum areas (rural or urban)	 Discussion method Interactive method 	Acquire the skill of constructing and interpreting rainfall dispersion diagram and climate water budget	TutorialsHome assignmentsViva Voce

Name of the teacher: Dr. Sushma Sahai

Initials: SWS

Teaching Objective:

• To enable students to construct thematic maps

• To prepare students for higher education

• To provide guidance beyond prescribed syllabus

4th Semester Geography Major Topic-wise Time Plan GEOG -CC-08- P- Cartographic Techniques Lab

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
1.	8	3. Construction and interpretation of thematic maps: Dasymetric density, Isopleth, and Chorochromatic maps	Discussion methodInteractive method	Comprehend, assess and acquire the skill to construct thematic maps	TutorialsHome assignmentsViva Voce

Name of the teacher: Mrs S. Sethwala

Initials: S.S

Teaching Objectives

• To provide an overview of different landform forming processes

• To help the student relate the theoretical knowledge to field work

• To build core concepts

Semester IV Major Topic-wise Time Plan

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
1. CC 5 TH Geomorphology	20	1. Time and space in geomorphology 2. Degradationalm processes- mass wasting and landforms 3. River network and landforms on uniclinal and folded structure 4. River network - landforms on granite , basalt and limestones 9. Models - Davis, Penck , King and Hack	lecture method project method problem solving method	 Able to familiarise with the fluvial processes Able to recognise types of drainage on different structures 	 class tests Objective worksheets home
1. CC 5 PR Geomorphology Lab	20	4.Determination of channel sinuosity index	Lecture method Demonstrati on method Problem solving method	Able to establish relationship between slope , gradient and drainage	Class testsCase study
2. CC 7 TH Social Geography	20	Nature , scope and content Social structure, Social process Social problems in urban areas 10.Social segregation	lecture method class discussion Problem solving method	To be able to identify the causes, effects, and solutions for social change and contemporary social issues	 class tests MCQ /Objective Worksheets home assignments case study exams
3 . CC 8 TH Cartographic Techniques	15	4. Concept of geoid , spheroid 5. map projections - classification , properties, uses 6. Polar Zenithal, Simple conic, Bonnes, Cylindrical , Mercators 7. UTM	lecture method Demonstrati on method Practical exercises	To be able to understand how different types of maps are made and their different uses	class tests home assignments exams

Name of the teacher: Kaustuva Banerjee

Initials: KB

Teaching Objective:

- Comprehend the role of various national agencies in the preparation of maps.
- Evaluate the importance of GIS in map making.
- Justify the basic principles of data representation.
- Analyse the method of computation of different development indices.

Geography Semester IV Major Topic-wise Time Plan

Topics	Hours	Topics	Teaching	Learning outcome	Assessment
	allotted	(as per curriculum)	method	(output)	
1.	20	Coordinate systems: Polar	Lecture	1. Comprehend the	Continuous
GEOG-H-		and rectangular	Method	importance of	Internal
CC08-4-Th -		Grids: Angular and linear		bearing in preparing	Assessment
Cartographic		systems of measurement	Stimulus	maps.	
Techniques		Bearing: Magnetic and true,	Response	2. Analyse the	Formative
		whole-circle and reduced	Method	difference between	Assessment
		Representation of data		angular and linear	
		using dots, spheres, and	Discussion	measurements	Internal
		divided proportional circles	Method	3.Evaluate the role	Assessment
		Representation of data		of cartograms	
		using isopleth, choropleth,	Interaction		
		and chorochromatic maps	Method		
		Survey of India			
		topographical maps:			
		Reference scheme of old			
		and open series.			
		Information on the margin			
		of maps			
2. GEOG-H-	10	Preparation of human	Lecture	1. Differentiate	Continuous
CC07-4-P -		development index (after	Method	between HDI and	Internal
Social		UNDP)		GDI	Assessment
Geography		Preparation of gender	Demonstrati	2. Understand the	
		development index (after	on Method	concept of	Formative
		UNDP)		Development	Assessment
			Laboratory	indices	
			Method		

Name of the teacher: DEBASREE SINHA

Initials: D.S

Teaching Objective:

• Provide an understanding of processes responsible for landform development on Earth.

• Sensitize students about the significance of the atmospheric processes and their impact on the planet.

• Inculcate awareness about India's social problems and ideas of social justice.

4th Semester Major Course Topic-wise Time Plan

Topics	Hours	Topics	Teaching	Learning outcome	Assessment
	allotted	(as per curriculum)	method	(output)	
1. GEOG-H-CC05-	31	3. Processes of	1. Lecture	Students will be able	1. Written
4-Th – (Theory)		entrainment,		to:	class test
Geomorphology		transportation, and	2. Power point		
		deposition by	presentation	1. Explain the	
		different		existence of the	
		geomorphic agents		large variety of	
				landforms on the	
		5. Development of		Earth.	
		river network and			
		landforms on		2. Account for the	
		granites, basalts, and		processes	
		limestones		responsible for	
				landform	
		6. Coastal processes and landforms		development.	
				3. Identify processes	
		7. Glacial and glacio-		& landforms on	
		fluvial processes and		field.	
		landforms			
				4. Understand the	
		8. Aeolian and fluvio-		consequences of	
		aeolian processes		human-environment	
		and landforms		interactions on	
				landforms.	
		10. Role of humans			
		in landform			
		development			
2. GEOG-H-CC06-	22	4. Condensation:	1. Lecture	Students s will be	1. Written
4-Th – (Theory)		Process and forms.		able to:	class test
Climatology		Mechanism of	2. Power point		
		precipitation:	presentation	1. Conceptualize key	
		Bergeron-Findeisen		atmospheric	
		theory, and collision		processes	
		& coalescence		2. Understand global	
		theory. Forms of		atmospheric	
		precipitation		circulations	

		5. Air mass: Typology, origin, characteristics, and modification 6. Types of fronts. Frontogenesis and frontolysis 7. Weather: Stability and instability, barotropic and baroclinic conditions		3. Establish linkages between changes in the atmospheric processes & their impact on Earth's weather & climate. 4. Have a comprehensive grasp of the Indian monsoon	
3. GEOG-H-CC07- 4-Th – (Theory) Social Geography	14	5. Concepts of social justice and social security with examples from India 6. Contemporary social issues: Gender related problems 8. Social problems in rural areas: Marginalisation and deprivation	Lecture Power point presentation	Students s will be able to: 1. Understand the importance of social justice and security in India. 2. Discern the existence of gender related, as well as other social issues and problems.	Written class test Student presentations