GEOGRAPHY B.A/B.SC. HONS. CBCS

COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM FOR BA/B.Sc. HONOURS IN GEOGRAPHY

YEAR	SEMESTER	CORE COURSE	NAME OF THE CORE COURSE	SKILL ENHANCEMENT COURSE (SEC1)	DISCIPLINE SPECIFIC ELECTIVE (DSE1)
		CC1	GEOTECTONICS AND GEOMORPHOLOGY		
1	I	CC2	CARTOGRAPHIC TECHNIQUES AND GEOLOGICAL MAP STUDY (Theory & Practical)		
1		CC3	HUMAN GEOGRAPHY		
	П	CC4	CARTOGRAMS, SURVEY AND THEMATIC MAPPING (Theory & Practical)		
		CC5	CLIMATOLOGY	GEG 1 GOMPHEED BACKG AND	
	Ш	CC6	STATISTICAL METHODS IN GEOGRAPHY (Theory & Practical)	SEC-1. COMPUTER BASICS AND COMPUTER APPLICATIONS OR REMOTE SENSING SEC-II. ADVANCED SPATIAL STATISTICAL TECHNIQUES OR	
		CC7	GEOGRAPHY OF INDIA		
2		CC8	REGIONAL PLANNING AND DEVELOPMENT	STATISTICAL TECHNIQUES OR FIELD WORK (Practical)	
	IV	CC9	ECONOMIC GEOGRAPHY		
		CC10	ENVIRONMENTAL GEOGRAPHY (Theory & Practical)		
	V	CC11	RESEARCH METHODOLOGY AND FIELD WORK (Theory & Practical)		DSE – 1. URBAN GEOGRAPHY OR CULTURAL AND SETTLEMENT GEOGRAPHY
3		CC12	REMOTE SENSING AND GIS (Theory & Practical)		DSE – 2. POPULATION GEOGRAPHY OR SOCIAL GEOGRAPHY
	VI	CC13	EVOLUTION OF GEOGRAPHICAL THOUGHTS		DSE – 3. FLUVIAL GEOMORPHOLOGY OR RESOURCE GEOGRAPHY
		CC14	DISASTER MANAGEMENT (Theory & Practical)		DSE – 4. SOIL AND BIO GEOGRAPHY OR AGRICULTURAL GEOGRAPHY

GEOGRAPHY B.A GEN. CBCS

COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM FOR B.A. GENERAL IN GEOGRAPHY

YEAR	SEMESTER	Core Course GEN / GE*	Name of the Core course	SKILL ENHANCEMENT COURSE (SEC1)	DISCIPLINE SPECIFIC ELECTIVE (DSE1)
1	I	CC 1/GEI	GEOTECTONICS AND GEOMORPHOLOGY PRACTICAL SCALE AND CARTOGRAPHY		
	П	CC2/GEII	CLIMATOLOGY, SOIL AND BIOGEOGRAPHY PRACTICAL SURVEYING AND LEVELLING		
	ш	CC3/GEIII	HUMAN GEOGRAPHY PRACTICAL MAP PROJECTION AND MAP INTERPRETATION	SEC-1. COMPUTER BASICS AND COMPUTER APPLICATIONS OR REMOTE SENSING	
2	IV	CC4/GEIV	ENVIRONMENTAL GEOGRAPHY PRACTICAL (FIELD WORK)	SEC- 2. REGIONAL PLANNING AND DEVELOPMENT OR GIS BASED PROJECT REPORT (PRACTICAL)	
	v			SEC- 3.FIELD TECHNIQUES AND SURVEY BASED PROJECT REPORT (PRACTICAL) OR COLLECTION, MAPPING AND INTERPRETATION OF CLIMATIC DATA	DSE – 1. GEOGRAPHY OF INDIA OR ECONOMIC GEOGRAPHY
3	VI			SEC- 4. COLLECTION, MAPPING AND INTERPRETATION OF PEDOLOGICAL DATA OR ROCKS AND MINERALS AND THEIR MEGASCOPIC IDENTIFICATION	PRACTICAL (FIELD WORK) DSE- 2. DISASTER MANAGEMENT OR GEOGRAPHY OF TOURISM PRACTICAL (FIELD WORK)

$\frac{GEOGRAPHY\ (HONOURS)}{CC5\ (Theory)-Climatology}$

SL NO	TOPICS	SUB-TOPICS	NO. OF LECTURES AND TUTORIALS
UNIT 1	Elements of the Atmosphere		
1.	Nature, composition and layering of the atmosphere	Nature, composition	3
		Layering of the atmosphere	3+1
2.	Insolation: controlling factors. Heat budget of the atmosphere	Insolation: controlling factors.	3+1
		Heat budget of the atmosphere	3+1
3	Temperature: horizontal and vertical distribution. Inversion of temperature: types, causes and consequences	Temperature: horizontal and vertical distribution.	3+1
	1	Inversion of temperature: types, causes and consequences	3
4	Greenhouse effect and importance of ozone layer	Greenhouse effect and	3+1
		Importance of ozone layer	3
UNIT 2	Atmospheric Phenomena, Climate Change and Climatic Classification		
1	Condensation: Processes and forms. Mechanism of precipitation: Bergeron-Findeisen theory, collision and coalescence. Forms of precipitation	Condensation: Processes and forms.	4+1
		Mechanism of precipitation: Bergeron-Findeisen theory, collision and coalescence.	3+1
		Forms of precipitation	3+1

2	Air mass: Typology, origin, characteristics and modification	Air mass: Typology, origin, characteristics	3+1
		Air mass modification	2
3	Fronts: Warm and Cold; Frontogenesis and Frontolysis	Fronts: warm and cold;	3+1
		Frontogenesis and Frontolysis	2
4	Weather: stability and instability; barotropic and baroclinic conditions		
5	Circulation in the atmosphere: Planetary winds, jet stream and monsoons	Circulation in the atmosphere: Planetary winds	3+1
		Jet Stream	3+1
		Monsoons	3+1
6	Tropical and mid-latitude cyclones	Tropical cyclones	3+1
		Mid-latitude cyclones	3+1
7	Evidences and causes of climate change		
8	Climatic classification after Köppen, Thornthwaite (1948)	Climatic classification after Köppen,	5+1
		Climatic classification after Thornthwaite (1948)	5+1

MODULE FOR CC6 GEOGRAPHY (HONOURS)

CC6 (Theory) – Statistical Methods in Geography

SL NO	TOPICS	NO. OF LECTURES
1.	Importance and significance of Statistics in Geography. Discrete and continuous data, population and samples, scales of measurement (nominal, ordinal, interval and ratio), sources of data	8
2.	Collection of data and formation of statistical tables	8
3	Sampling: Need, types, and significance and methods of random sampling	8
4	Distribution: frequency, cumulative frequency	8
5	Central tendency: Mean, median, mode, partition values	8
6	Measures of dispersion range, mean deviation, standard deviation, coefficient of variation	8
7	Association and correlation: Rank correlation, product moment correlation	8
8	Linear Regression and time series analysis	8

CC6 (Practical) – Statistical Methods in Geography

SL NO	TOPICS	NO. OF LECTURES
1.	Construction of data matrix with each row representing an aerial unit (districts / blocks / mouzas / towns) and corresponding columns of relevant attributes.	06
2.	Based on the above, a frequency table, measures of central tendency and dispersion would be computed and interpreted.	06
3	Histograms and frequency curve would be prepared on the dataset.	06
4	Based on of the sample set and using two relevant attributes, a scatter diagram and regression line would be plotted and residual from regression would be mapped with a short interpretation.	06

GEOGRAPHY (HONOURS) CC7 (Theory) – Geography of India

SL NO	TOPICS	SUB-TOPICS	NO. OF LECTURES AND TUTORIALS
UNIT 1	Geography of India		
1.	Geology and physiographic divisions	Geology	4
		physiographic divisions	3+1
2.	Climate, soil and vegetation: Characteristics and classification	Climate, soil: Characteristics and classification	3+1
		vegetation: Characteristics and classification	3+1
3	Population: Distribution, growth, structure and policy	Population: Distribution, growth	4+1
		structure and policy	4
4	Distribution of population by race, caste, religion, language, tribes	Distribution of population by race, caste	4+1
		Distribution of population by religion, language, tribes	4
5	Agricultural regions, Green revolution and its consequences		4+1
6	Mineral and power resources distribution and utilisation of iron ore, coal, petroleum	Mineral and power resources distribution	4+1
		utilisation of iron ore, coal, petroleum	4

7	Industrial development since independence.		3+1
8	Regionalisation of India: Views of Spate and Bhatt		4
UNIT-2	Geography of West Bengal		
1	Physical perspectives: Physiographic divisions, forest and water resources	Physical perspectives: Physiographic divisions,	4
		forest and water resources	3+1
2	Population: Growth, distribution and human development	Population: Growth, distribution	3+1
		human development	3+1
3	Resources: Mining, agriculture and industries		3+1
4	Regional Development: Darjeeling Hills and Sundarban	Regional Development: Darjeeling Hills	3+1
		Regional Development: Sundarban	4

MODULE FOR SEC (SEM-3)

GEOGRAPHY (HONS. & GENERAL)

SEC -1 Computer Basics and Computer Applications

SL NO	TOPICS	NO. OF LECTURES
SEC-1	Computer Basics and Computer Applications	
1	Numbering Systems; Binary Arithmetic	2
2.	Data Computation, Storing and Formatting in Spreadsheets: Computation of Rank, Mean, Median, Mode, Standard Deviation, Moving Averages, Derivation of Correlation, Covariance and regression; Selection of technique and interpretation.	8
3.	Preparation of Annoted Diagrams and its interpretation: Scatter diagram and Histogram	6
4.	Internet Surfing: Generation and extraction of information	6

MODULE FOR CC+ GE

GEOGRAPHY (GENERAL)

CC3 Human Geography and Map Study

SL NO	TOPICS	NO. OF LECTURES
UNIT 1	Human Geography (Theory)	
1.	Definition, Nature, Major Subfields, Contemporary Relevance	6
2.	Space and Society: Cultural Regions; Race; Religion and Language	6
3.	Eskimos: Adjustment to the environment and recent development	6
4.	Population: Population Growth and Demographic Transition Theory	6
5.	Types of population migration with reference to India	6
6.	World Population Distribution and Composition (Age, Gender and Literacy)	6
7.	Settlements: Types and Patterns of Rural Settlements;	6
8.	Classification of Urban Settlements; Functional classification of towns	6
UNIT 2	Map Projection and Map interpretation (Practical)	
1	Simple Conical projection with one standard parallel	6
2.	Cylindrical Equal Area projection	6
3.	Interpretation of Topographical maps: Relation between Physiography, drainage and settlement	6
4.	Interpretation of weather maps	6

GEOGRAPHY (HONOURS) CC8 (THEORY) – REGIONAL PLANNING AND DEVELOPMENT

SL NO	TOPICS	SUB-TOPICS	NO. OF LECTURES AND TUTORIALS
UNIT 1	Regional Planning		
1.	Concept and Classification of Regions	Concept of Regions	3
		Classification of Regions	3+1
2.	Types of Planning; Principles and Techniques of Regional Planning	Types of Planning	3+1
		Principles and Techniques of Regional Planning	3+1
3	Need for Regional Planning; Multilevel Planning in India	Need for Regional Planning;	3+1
		Multilevel Planning in India	3
4	Metropolitan Concept: Metropolis, Metropolitan Areas, Metropolitan Region	Metropolitan Concept	3+1
		Metropolis, Metropolitan Areas, Metropolitan Region	3
UNIT 2	Regional Development		
1	Development: Meaning, Growth versus Development	Development: Meaning,	2+1
		Growth versus Development	3+1
2	Models for Regional Development: Growth Pole (Perroux) and Core Periphery (Hirschman)	Models for Regional Development: Growth Pole (Perroux	3+1
		Models for Regional Development: Core Periphery (Hirschman)	4
3	Model for Regional Development in India: Growth Foci (R.P.Misra)		3+1

4	Concept of Regional Inequality and Disparity	4
5	Human Development: Significance, Indicators and Measurement	6+1
6	Status of Regional Imbalances in India	6+1
7	Strategies for Regional Development in India	6+1
8	NITI Aayog and its Functions	6+1

GEOGRAPHY (HONOURS) CC9 (THEORY) – ECONOMIC GEOGRAPHY

SL NO	TOPICS	SUB-TOPICS	NO. OF LECTURES AND TUTORIALS
UNIT 1	Concepts and Approaches		
1.	Meaning and Approaches to Economic Geography	Meaning of Economic Geography	3
		Approaches to Economic Geography	3+1
2.	Concepts in Economic Geography: Goods; Services; Production; Consumption	Concepts in Economic Geography:	3+1
		Economic Geography: Goods; Services; Production; Consumption	3+1
3	Factors Influencing Location of Economic Activity and Forces of Agglomeration	Factors Influencing Location of Economic Activity	3+1
		Forces of Agglomeration	3
4	Determining Factors of Transport Cost		6+1
UNIT 2	Economic Activities		
1	Concept and Classification of Economic Activities	Concept of Economic Activities	2+1
		Classification of Economic Activities	3+1
2	Location Theories: Von Thünenand Alfred Weber	Location Theories: Von Thünenand	3+1
		Location Theories: Alfred Weber	4
3	Primary Activities: Subsistence and Commercial Agriculture; Forestry; Fishing		3+1
4	Secondary Activities:		4
	Manufacturing (Iron and Steel in India and Japan,		

	Petrochemical in India and	
	USA)	
5	Tertiary Activities: Types of Trade and Services	6+1
6	Agricultural Systems: Tea Plantation in India and Mixed Farming in Europe	6+1
7	Highways: Roles in Economic Development of Indiasince 1990s	6+1
8	International Trade Blocs: WTOand OPEC	6+1

MODULE FOR CC 10 GEOGRAPHY (HONOURS)

CC10 (THEORY) – ENVIRONMENTAL GEOGRAPHY

SL NO	TOPICS	NO. OF LECTURES
1.	Geographers' Approach to Environmental Studies	8
2.	Changes in Perception of Environment in different stages of Human Civilization	8
3	Ecosystem: Concept, Structure and Functions	8
4	Environmental Degradation and Pollution: Water and Air	8
5	Environmental Issues related to Agriculture	8
6	Urban Environmental issues related to Waste Management	8
7	Concept and Issues related to Bio-diversity	8
8	Environmental Programs and Policies on Forest and Wetland: National and Global	8

CC 10 (PRACTICAL) – ENVIRONMENTAL GEOGRAPHY

SL NO	TOPICS	NO. OF LECTURES AND TUTORIALS
1.	Preparation of questionnaire for perception survey on	06
	environmental problems	
2.	Environmental Impact Assessment: Leopold Matrix	06
3	Quality assessment of soil using field kit: pH and NPK	06
4	Interpretation of air quality using CPCB / WBPCB data	06

MODULE FOR SEC (SEM-4)

GEOGRAPHY (HONS.)

SEC –2 (Practical) : FIELD WORK

SL NO	TOPICS	NO. OF LECTURES
SEC-2	FIELD WORK	
1	Research Problems	2
2.	Data Collection	8
3.	Computation and Analysis	6
4.	Interpretations	6

GEOGRAPHY (GENERAL)

CC – 1D: ENVIRONMENTAL GEOGRAPHY

SL NO	TOPICS	NO. OF LECTURES
UNIT 1	(Theoretical)	
1.	Concepts and approaches of Environmental Geography:	6
2.	Concept, Structure and Functions of Ecosystem	6
3.	Human-Environment Relationship in Mountain and Coastal Regions	6
4.	Environmental Problems and Management: Air and Water Pollution	6
5.	Environmental Programmes and Policies: MAB	6
6.	Forest and Wild Life Policy of India	6
7.	Environmental Movements in India: Chipko	6
8.	Wetlands: Ramsar Sites in India	6
UNIT 2	(Practical)	
1	Questionnaire for Air Pollution and Health Perception Survey	6
2.	Soil Test using Kit: pH and Organic Carbon	6
3.	Mapping of Wetlands from Topographical Sheet	6
4.	Mapping of Forest from Topographical Sheet	6

MODULE FOR SEC-2

GEOGRAPHY (CC)

SEC-2 (THEORY) – REGIONAL PLANNING AND DEVELOPMENT

SL NO	TOPICS	NO. OF LECTURES
UNIT 1	Regional Development	
1.	Definition of Region; Types of Regions	6
2.	Regional Planning – Concept and Significance	6
3.	Human Development Index – Concept and Indicators	6
4.	Agricultural Development in India Since 1970s	6
5.	Industrial Development in India Since 1990s	6
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6.	Planning Region: DVC	6
7.	Preparation of Questionnaire on Sanitation and Health	6
8.	Preparation of Questionnaire on Waste Management	6