Balagarh Bijoy Krishna Mahavidyalaya

Department of Geography

Course Plan

SEMESTER –I (HONOURSE)

PAPER- CC1 (GEOTECTONIC & GEOMORPHOLOGY)

PAPE R	UNIT	SUB CATEGOR Y	TEACHER' S NAME	CREDI T	CURRICULU M DELIVERY
CC1	1	1,2,4	D.G	6	PPT, Lecture.
	GEOTECTONICS	3	S.B		PPT, Lecture.
	2 GEOMORPHOLOG	1,2	D.G		PPT, Lecture, Assignment.
	Y	3,4,5	S.B		PPT, Lecture, Assignment.
		6,7,8			Lecture.

PAPER- CC2 (CARTOGRAPHIC TECHNIQUES & GEOLOGICAL MAP STUDY)

PAPER	UNIT	SUB CATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
CC2	THEORY	1,2,4	D.G	2	PPT, Lecture.
		3,7,8	S.B		PPT, Lecture.
		5,6		-	PPT, Lecture.
	PRACTICAL	1,2	D.G	2	PPT, Lecture, Practical.
		4	S.B		PPT, Lecture, Practical.

3	S. B	PPT, Lecture, Practical,
		Assignment.

CC1 - Geotectonics and Geomorphology 6 Credits

Unit 1: Geotectonics

1. Earth's tectonic and structural evolution with reference to geological time scale

2. Earth's interior with special reference to seismology.

3. Concept of Isostasy: Theories of Airy and Pratt

4. Plate Tectonics: Processes at constructive, conservative, destructive boundaries and hotspots: resulting landforms

Unit 2: Geomorphology

1. Degradational processes: Weathering, mass wasting and resultant landforms

2. Models of landscape evolution: Views of Davis, Penck, and Hack

3. Slope Development: Concept of Wood

4. Development of river network and landforms on uniclinal and folded structures

5. Types of rocks, mineralogical composition of igneous rocks; Landforms on igneous rocks with special reference to Granite and Basalt

6. Karst landforms: Surface and sub-surface

7. Glacial and fluvio-glacial processes and landforms

8. Aeolian and fluvio-aeolian processes and landforms.

CC2 (Theory) - Cartographic Techniques and Geological map study 4 Credits

1. Maps: Classification and Types. Components of a Map

2. Concept of Scales: Plain, Comparative, Diagonal and Vernier

3. Coordinate Systems: Polar and Rectangular. Concept of Geoid and Spheroid. Map

Projections: Classification, Properties and Uses. Concept and Significance of UTM Projection

4. Concept of Generating Globe, Grids: Angular and Linear Systems of Measurement

5. Survey of India Topographical Maps: Reference scheme of Old and Open series

6. Delineation of Drainage Basin from Survey of India Topographical Map. Concept of Relief, Slope and Stream Order.

7. Types of rocks and minerals. Characteristics of Granite, Basalt, Dolerite, Pegmatite, Gneiss, Shale, Sandstone, Slate, Marble, Quartzite, Quartz, Feldspar, Mica, Limestone, Calcite, Bauxite, Magnetite, Hematite, Galena

8. Concept of Bedding Plane, Unconformity and Non-conformity, thickness of Bed, Dip, Throw, Hade, heave

CC2 (Practical) – Cartographic Techniques and Geological map study 2 Credits

1. Construction of Scales: Plain, Comparative, Diagonal and Vernier

2. Construction of Projections: Polar Zenithal Stereographic, Simple Conic with two Standard Parallels, Bonne's and Mercator's

3. Construction and Interpretation of Relief Profiles (Superimposed, Projected and Composite), Preparation of Relative Relief Map, Slope map (Wentworth), and Stream Ordering (Strahler) on a Drainage Basin.

4. Geological Map (Problems related to Horizontal, Uniclinal, Folded and Faulted structure); Drawing of Geological section and Interpretation of the Map.

*A Project File, comprising one exercise each is to be submitted.

SEMESTER –II (HONOURSE)

PAPER	UNIT	SUB CATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
CC-	1	1,2	D.G	6	Lecture.
3	Nature and Principles	3,4	S.B		ICT, Lecture.
	2	1,2	D.G		ICT, Lecture, Assignment.
	Society, Demography	3,4,			Lecture.
	and Ekistics	5, 6,7,8	S.B		Lecture.

PAPER- CC-3 (Human Geography)

PAPER- CC4 (Cartograms, Survey and Thematic Mapping)

PAPER	UNIT	SUB CATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
CC-4	THEORY	1,2,4	D.G	2	ICT, Lecture.
		3,7,8	S.B		Lecture.
		5,6	S.B		ICT, Lecture.

PRACTICA	L 1,2	D.G	2	ICT, Lecture, Practical, Assignment.
	4	S.B		ICT, Lecture, Practical, Assignment.
	3	S. B		Lecture, Practical.

CC3 (Theory) – Human Geography 6 Credits Unit 1: Nature and Principles

- 1. Nature, scope and recent trends of Human Geography
- 2. Evolution of humans, concept of race and ethnicity; Major Racial Groups of the world
- 3. Space, society and cultural regions (language and religion)
- 4. Concept of Culture, Cultural Diffusion, Convergence, Cultural Realms of the world

Unit 2: Society, Demography and Ekistics

1. Evolution of human societies: Hunting and gathering, Pastoral nomadism, Subsistence farming, Industrial and urban societies

- 2. Human environment relations with special reference to Arctic and hot desert regions
- 3. Population growth and distribution, population composition; demographic transition model
- 4. Population–Resource regions

5. Human, population and environment relations with special reference to development– environment conflict.

- 6. Social morphology and rural house types in India
- 7. Types and patterns of rural settlements
- 8. Functional Classification of urban settlements

CC4 (Theory) – Cartograms, Survey and Thematic Mapping 4 Credits

- 1. Concepts of Cartograms and Thematic Maps
- 2. Concept and utility of Isopleths and Choropleth,
- 3. Concept, utility, and interpretation of: Climograph, Hythergraph and Ergograph
- 4. Preparation and interpretation of demographic charts and diagrams (Age-Sex Pyramid)
- 5. Concepts of Bearing: magnetic and true, whole-circle and reduced
- 6. Basic concepts of surveying and survey equipment: Abneys Level, Clinometer

7. Basic concepts of surveying and survey equipment's: Prismatic Compass, Dumpy Level, Transit Theodolite

8. Interpretation of Land use and land cover maps

CC4 (Practical) – Cartograms, Survey and Thematic Mapping 2 Credits

1. Diagrammatic representation of data: Star and Age-sex pyramid diagram, pie diagram

2. Representation of data on map by proportional circles, dots and spheres, isolines and Choropleth method.

3. Contouring by Dumpy Level and Prismatic Compass4. Determination of Height of objects using Transit Theodolite (Accessible and Inaccessible bases)

*A Project File, comprising one exercise each is to be submitted

<u>SEMESTER – III (HONOURSE)</u>

PAPER – CC5 (CLIMATOLOGY)

PAPER	UNIT	SUBCATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
CC5	UNIT 1	1,2,3,4	D.G	6	ICT, PPT, Lecture.
	UNIT 2	1,5,7,8			Lecture.
		2,3,4,6	S.B		ICT, PPT, Lecture.

<u>PAPER – CC6 (STATISTICAL METHODS IN</u> <u>GEOGRAPHY)</u>

PAPER	UNI T	SUBCATEGOR Y	TEACHER' S NAME	CREDI T	CURRICULU M DELIVERY
CC 6 THEORY	UNI T 1	1,2,3,4	S. B	4	Lecture.
	UNI T 2	1	D.G	-	Lecture.
	12	2,3,4	D.G		Lecture.
CC 6 PRACTICA L	 	1,2	S. B	2	Lecture, Practical. Class Test: 1
		3,4	D.G		Lecture, Practical. Class Test: 1
		4(Residual regression map)	S. B		Lecture, Practical. Assignment: 1

PAPER – CC7 (GEOGRAPHY OF INDIA)

PAPER	UNIT	SUB CATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
CC7	UNIT 1	1,2,3,4	S. B	6	ICT, Lecture.
	UNIT	5,6,7,8 1,2,3,4	D.G		Lecture. ICT, Lecture.
	2	1,2,3,4	0.0		ICI, Lecture.

<u>PAPER – SEC1 (COMPUTER BASIC & COMPUTER</u> <u>APPLICATION)</u>

PAPER	UNIT	SUBCATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
SEC 1		1,2	S. B	2	ICT, Lecture, Practical.
		3,4	S. B		ICT, Lecture, Practical, Assignment.

CC 5 (Theory) – Climatology 6 Credits Unit 1: Elements of the Atmosphere

1. Nature, composition and layering of the atmosphere,

2. Insolation: controlling factors. Heat budget of the atmosphere.

3. Temperature: horizontal and vertical distribution. Inversion of temperature: types, causes and consequences.

4. Greenhouse effect and importance of ozone layer

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.

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

CC 6 (Theory) – Statistical Methods in Geography 4 Credits Unit 1

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

- 2. Collection of data and formation of statistical tables
- 3. Sampling: Need, types, and significance and methods of random sampling
- 4. Distribution: frequency, cumulative frequency

Unit 2

- 1. Central tendency: Mean, median, mode, partition values
- 2. Measures of dispersion range, mean deviation, standard deviation, coefficient of variation
- 3. Association and correlation: Rank correlation, product moment correlation
- 4. Linear Regression and time series analysis

CC 6 (Practical) – Statistical Methods in Geography 2 Credits

1. Construction of data matrix with each row representing an aerial 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.

3. Histograms and frequency curve would be prepared on the dataset.

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.

*A Project File, comprising one exercise each is to be submitted

CC 7 – Geography of India 6 Credits

Unit 1: Geography of India

- 1. Geology and physiographic divisions
- 2. Climate, soil and vegetation: Characteristics and classification
- 3. Population: Distribution, growth, structure and policy
- 4. Distribution of population by race, caste, religion, language, tribes
- 5. Agricultural regions, Green revolution and its consequences
- 6. Mineral and power resources distribution and utilisation of iron ore, coal, petroleum
- 7. Industrial development since independence.
- 8. Regionalization of India: Views of Spate and Bhatt.

Unit 2: Geography of West Bengal

- 1. Physical perspectives: Physiographic divisions, forest and water resources
- 2. Population: Growth, distribution and human development
- 3. Resources: Mining, agriculture and industries
- 4. Regional Development: Darjeeling Hills and Sundarban

SEC 1 – Computer Basics and Computer Applications 2 Credits

1. Numbering Systems; Binary Arithmetic

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.

- 3. Preparation of Annoted Diagrams and its interpretation: Scatter diagram and Histogram
- 4. Internet Surfing: Generation and extraction of information.

SEMESTER – IV (HONOURSE)

PAPER	UNIT	SUBCATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
CC8	UNIT 1	1,2,3,4	D.G	6	Lecture.
	UNIT 2	1,5,	D.G		Lecture.
		2,3,4,6,7,8	S. B		ICT, Lecture.

PAPER - CC8 (REGIONAL PLANNING AND DEVELOPMENT)

PAPER – CC9 (ECONOMIC GEOGRAPHY)

PAPER	UNIT	SUB CATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
CC 9	UNIT 1	1,2,3,4	D.G	6	Lecture.
	UNIT	1	D.G	-	ICT, Lecture.
	2	2,3,4,5,6	S.B	-	Lecture.
		7,8		-	Lecture.

PAPER – CC10 (ENVIRONMENTAL GEOGRAPHY)

PAPER	UNIT	SUB CATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
CC10	UNIT 1 Theoretical	1,2	D.G	6	PPT, Lecture.
		3,4,5,6,7,8	S.B		PPT, Lecture, Assignment.
	UNIT 2 Practical	2	D.G		ICT, PPT, Lecture, Practical.
		1,3,4	S. B		ICT, PPT, Lecture, Practical.

PAPER – SEC-2 (FIELD WORK)

PAPER	UNIT	SUBCATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
SEC 1			S.B	2	ICT, Lecture, Survey, Project, Practical.
			S.B		Lecture, Survey, Project, Practical.

CC8: REGIONAL PLANNING AND DEVELOPMENT Credit: 6

Unit 1: Regional Planning

- 1. Concept and Classification of Regions
- 2. Types of Planning; Principles and Techniques of Regional Planning
- 3. Need for Regional Planning; Multilevel Planning in India
- 4. Metropolitan Concept: Metropolis, Metropolitan Areas, Metropolitan Region

Unit 2: Regional Development

- 1. Development: Meaning, Growth versus Development
- 2. Models for Regional Development: Growth Pole (Perroux) and Core Periphery (Hirschman)
- 3. Model for Regional Development in India: Growth Foci (R.P.Misra)
- 4. Concept of Regional Inequality and Disparity
- 5. Human Development: Significance, Indicators and Measurement
- 6. Status of Regional Imbalances in India
- 7. Strategies for Regional Development in India
- 8. NITI Aayog and its Functions

CC 9 (Theoretical): ECONOMIC GEOGRAPHY Credit: 6

Unit 1: Concepts and Approaches

- 1. Meaning and Approaches to Economic Geography
- 2. Concepts in Economic Geography: Goods; Services; Production; Consumption
- 3. Factors Influencing Location of Economic Activity and Forces of Agglomeration

4. Determining Factors of Transport Cost

Unit 2: Economic Activities

- 1. Concept and Classification of Economic Activities
- 2. Location Theories: Von Thünen and Alfred Weber
- 3. Primary Activities: Subsistence and Commercial Agriculture; Forestry; Fishing

4. Secondary Activities: Manufacturing (Iron and Steel in India and Japan, Petrochemical in India and USA)

- 5. Tertiary Activities: Types of Trade and Services
- 6. Agricultural Systems: Tea Plantation in India and Mixed Farming in Europe
- 7. Highways: Roles in Economic Development of India since 1990s
- 8. International Trade Blocs: WTO and OPEC

CC 10: ENVIRONMENTAL GEOGRAPHY Credit: 6 (4+2)

Environmental Issues (Theoretical)

- 1. Geographers' Approach to Environmental Studies
- 2. Changes in Perception of Environment in different stages of Human Civilization
- 3. Ecosystem: Concept, Structure and Functions
- 4. Environmental Degradation and Pollution: Water and Air
- 5. Environmental Issues related to Agriculture
- 6. Urban Environmental issues related to Waste Management
- 7. Concept and Issues related to Bio-diversity
- 8. Environmental Programs and Policies on Forest and Wetland: National and Global

CC 10 (Practical): ENVIRONMENTAL GEOGRAPHY Credit: 2 Environmental Geography (Practical)

- 1. Preparation of questionnaire for perception survey on environmental problems
- 2. Environmental Impact Assessment: Leopold Matrix
- 3. Quality assessment of soil using field kit: pH and NPK
- 4. Interpretation of air quality using CPCB / WBPCB data .

SEC -2 (Practical): FIELD WORK Credit: 2

FIELDWORK

Students are required to carry out a comprehensive field work in a village/mouza/town/C.D. Block/ drainage basin selecting a particular **research problem**. There should be a clear-cut **Problem background, major Objectives, Methodology and Findings**. The text of the fieldwork should not exceed 5000 words and 15-20 pages of illustrations (A4 Pages). The fieldwork along with the diagrams and illustrations should be prepared in computer using the standard (Using MS-Word for typing and Excel for calculation and graphs). The cartographic and statistical techniques used in the fieldwork should be at par with the syllabus of the UG Course.

Guidelines for Fieldwork:

The following methods are to be followed for fieldwork:

1) Preparation of questionnaire for assessing the physical/cultural/environment/socio-economic components. A filled-in questionnaire used in the survey should be attached with the report signed by the concerned teacher and the student

2) Preparation of maps (hand-drawn) with suitable scale and latitude and longitude

3) Preparation of charts/graphs in MS-Excel and duly labelled

4) The report should be typed in MS-Word. The font size is fixed at 12 in Times New Roman and the line spacing 1.5

5) Each field work should have a certificate of authenticity duly signed by the project supervisor

$SEMESTER-5^{\rm TH} (HONOURSE)$

PAPER – <u>C-11 (RESEARCH METHODOLOGY & FIELD</u> <u>WORK)</u>

PAPER	UNIT	SUBCATEGORY	TEACHER'S	CREDIT	CURRICULUM
			NAME		DELIVERY
CC11	UNIT 1	1,2		6(4+2)	,Lecture,
	RESEARCH				
	METHODOLOGY	3,4	S.B		ICT, Lecture,
	UNIT 2 FIELD		S.B		Lecture, Survey,
	WORK				Project, Practical.
					-

PAPER – <u>C12 (REMOTE SENSING & GIS)</u>

PAPER	UNIT	SUBCATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
CC12	UNIT 1	REMOTE SENSING	D.G	6	ICT, PPT, Lecture,
	UNIT 2	GIS	S.B		ICT, PPT, Lecture, Assignment.

PAPER – <u>DSE 1(CULTURAL & SETTLEMENT</u> <u>GEOGRAPHY)</u>

PAPER	UNIT	SUBCATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
DSE 1	UNIT 1	1,2,3	S.B	6	ICT, Lecture,
		4,5,6		•	Lecture,
	UNIT 2	1,2,3,4,5,6	D.G		ICT, Lecture,

PAPER – DSE 2(POPULATION GEOGRAPHY)

PAPER	UNIT	SUBCATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
DSE 2	UNIT1	1,2		2	Lecture,
		3,4	S.B		ICT, Lecture,
	UNIT 2	1,2,3	D.G	4	ICT, Lecture,
		5,6			Lecture,
		7,8	S.B		Lecture,

CC 11:RESEARCH METHODOLOGY AND FIELD WORK Credit: 6 (4+2) Unit 1: Research Methodology

1. Research in Geography: Meaning, types and significance

2. Significance of Literature review in research

3. Defining research problem, objectives and hypothesis. Research materials and methods

4. Techniques of writing scientific reports: Preparing notes, references, bibliography (APA Style), abstract and keywords

Unit 2: Field Work

1. Fieldwork in Geographical studies – Role and significance. Selection of study area and objectives. Pre-field preparations. Ethics of fieldwork

2. Field techniques and tools: Questionnaires (open, closed, structured, non-structured). Interview with special reverence to focused group discussions.

3. Field techniques and tools: Landscape survey using transects and quadrants, constructing a sketch, photo and video recording.

4. Collection of samples. Preparation of inventory from field data. Post-field tasks

CC 11 (Practical): RESEARCH METHODOLOGY AND FIELD WORK

1. Students will prepare a field report based on primary data collected form field survey and secondary data collected from different sources for either a rural area (Mouza) or an urban area (municipal ward) based on cadastral or municipal maps to study specific problems

2. The report should be typed in MS-Word in English language on A4 size paper in candidate's own words within 2500 words. The total number of pages in the Field Report should not exceed 25 pages including texts, figures, tables, photographs, maps, references (APA) and appendices

3. A copy of the bound report, duly signed by the concerned teacher, should be submitted

4. Preparation of maps (hand-drawn) with suitable scale and latitude and longitude

5. Preparation of charts/graphs in MS-Excel and duly labeled

6. The report should be typed in MS-Word. The font size is fixed at 12 in Times New Roman and the line spacing 1.5

CC 12: REMOTE SENSING AND GIS Credit: 6(4+2)

Unit 1: Remote Sensing

1. Definition, Concepts and Principles of Remote Sensing (RS): Types of Air Photo, RS satellites, sensors and platforms.

2. EMR Interaction with Atmosphere and Earth Surface, Sensor resolutions and their applications with reference to IRS.

3. Principles of False Color Composites (FCC) from IRS LISS-III and Landsat Images (ETM+) data: Image Processing, Pre-processing; Enhancement; Classification.

4. Principles of image interpretation for Forest, Water and Soil

Unit 2: GIS and GNSS

1. Definition and Components of Geographical Information System (GIS) and raster and vector data structures

2. Principles of preparing attribute tables and overlay analysis

3. Principles of GNSS positioning - Uses and Waypoint Collection Methods

4. Applications of Geographical Information System in Flood Management and Urban Sprawl

$CC\ 12$ (Practical): REMOTE SENSING AND GIS

Note: QGIS version 3.0 or above to be used

1. Georeferencing of Scanned Maps

2. Preparation of FCC using IRS LISS-III and/or Landsat (ETM+) data

3. Preparation of LULC Map by Supervised Image Classification (Maximum Likelihood) using IRS LISS-III or Landsat (ETM+) data

4. Digitization of Point. Line and Polygon Features and Preparation of Thematic Map (using bar, pie and choropleth method)

DSE-1 (Theoretical): CULTURAL AND SETTLEMENT GEOGRAPHY Credit: 6

Unit 1: Cultural Geography

- 1. Definition, Scope and Content of Cultural Geography
- 2. Development of Cultural Geography
- 3. Concept of Cultural Hearth, Realm; Cultural Landscape
- 4. Cultural Innovation and Diffusion; Diffusion of Major World Religions

5. Cultural Segregation, Cultural Diversity, and Acculturation

6. Major Races of the World: Distribution and Characteristics

Unit 2: Settlement Geography

- 1. Scope and Content of Settlement Geography
- 2. Definition and Characteristics of Rural Settlement
- 3. Rural Settlements: Site and Situation
- 4. Urban Settlements: Census Definition, Urban Outgrowth, Urban Agglomeration
- 5. Urban Morphology: Classical Models of Burgess, Hoyt, Harris and Ullman
- 6. Functional Classification of Cities: Harris and Nelson

DSE-2 (Theoretical): POPULATION GEOGRAPHY Credit: 6 **Unit 1: (2 Credits)**

1. Development of Population Geography; Relation between Population Geography and Demography

2. Determinants of Population Dynamics; Concept of Optimum Population

3. Theories of population growth: Malthusian Theory and Marxian Approach, Demographic Transition Model

4. Distribution, Density and Growth of Population in India since 1951

Unit 2: (4 Credits)

- 1. Population Composition and Characteristics: Age-Sex; Female-Male Ratio
- 2. Measures of Fertility and Mortality
- 3. Population Composition of India: Rural and Urban, Occupational Structure as per Census of India
- 4. Migration: Theories, Causes and Types
- 5. Concept of Human Development Index
- 6. Population and development: population-resource regions,
- 7. Population policies in Selected Countries: Sweden and China
- 8. Contemporary Issues in Population: Health and Unemployment

SEMESTER – 6TH (HONOURSE)

PAPER – C13 (EVOLUTION OF GEOGRAPHICAL THOUGHT)

PAPER	UNIT	SUBCATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
CC13	UNIT 1	1,2,3,4,	D.G	6	Lecture,
		5,6	S. B		ICT, Lecture,
	UNIT 2	1,2,3	S. B		Lecture,
		4,5,6	D.G		ICT, Lecture,

PAPER – C14 (DISASTER MANAGEMENT)

PAPER	UNIT	SUBCATEGOR		CREDI	CURRICULU
		Y	TEACHER'	Т	M DELIVERY
			S NAME		
CC14	UNIT 1	1,2,3,4	S.B	6 (4+2)	ICT, PPT,
Theoretica					Lecture,
1					
	UNIT 2	1,2,3,4	S.B		PPT, Lecture,
CC14	Disaster		S.B	2	PPT, Lecture,
Practical	Managemen				Survey,
	t Project				Project,
	Work				Practical.

PAPER – DSE 3 (RESOURCE GEOGRAPHY)

PAPER	UNIT	SUBCATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
DSE 3	UNIT 1	1,2,3	S.B	6	ICT, Lecture,
		4,5,6	D.G		ICT, Lecture,
	UNIT 2	1,2,3,4,	D.G		Lecture,
		5,6			Lecture,

PAPER – DSE 4(SOIL AND BIO GEOGRAPHY)

PAPER	UNIT	SUBCATEGORY	TEACHER'S NAME	CREDIT	CURRICULUM DELIVERY
DSE 4	UNIT1	1,2	D.G	2	Lecture,
		3,4	S.B		ICT, Lecture,
	UNIT 2	1,2,3	D.G	4	ICT, Lecture,
		5,6			Lecture,
		7,8	S.B		ICT, PPT, Lecture,

CC 13 (Theoretical): EVOLUTION OF GEOGRAPHICAL THOUGHT Credit: 6 Unit: 1

- 1. Definition, Scope and Content of Geography; Geography as a Spatial Science
- 2. Geography in Ancient Period: Greek and Roman
- 3. Development of Geography in Medieval period: Arabian
- 4. Development of Mapping and Knowledge about the World Regional Geography in the Age of Explorations
- 5. Classical Geography in 19th Century: Humboldt, Ritter
- 6. Quantitative Revolution and its Critique

Unit: 2

- 1. German School of Thought
- 2. French School of Thought
- 3. American School of Thought
- 4. Indian Contribution to Geography
- 5. Concept of Determinism, Possibilism and Neo-Determinism
- 6. Approaches to the study of Geography: Systematic and Regional

CC 14: (Theoretical)DISASTER MANAGEMENT Credit: 6 (4+2) Unit 1

- 1. Classification of hazards and disasters
- 2. Approaches to hazard study: Risk perception and vulnerability assessment. Hazard paradigms
- 3. Responses to hazards: Preparedness, trauma and aftermath. Resilience and capacity building
- 4. Hazards mapping: Data and techniques.

Unit 2

- 1. Earthquake: Factors, vulnerability, consequences and management
- 2. Landslide: Factors, vulnerability, consequences and management
- 3. Cyclone: Factors, vulnerability, consequences and management
- 4. Fire: Factors, vulnerability, consequences and management

CC 14 (Practical): DISASTER MANAGEMENT Credit: 2 Disaster Management Project Work List of Practical

An individual Project Report based on any one among the following disasters incorporating preparedness, mitigation and management plan.

- 1. Earthquake
- 2. Landslide
- 3. Cyclone
- 4. Flood
- 5. Drought
- 6. River Bank Erosion
- 7. Mining Area Subsidence
- 8. Tsunami

1. Students will prepare a Project Report based on the topic mentioned by the Department;

2. The report should be typed in MS-Word in English language on A4 size paper in candidate's own words within 2000 words. The total number of pages in the Field Report should not exceed 20 pages including texts, figures, tables, photographs, maps, references (APA) and appendices

3. A copy of the bound report, duly signed by the concerned teacher, should be submitted

4. Preparation of maps with suitable scale and latitude and longitude

5. Preparation of charts/graphs in MS-Excel and duly labelled

6. The report should be typed in MS-Word. The font size is fixed at 12 in Times New Roman and the line spacing 1.5

Internal Assessment: 15 (Assessment 10 and Attendance 05) Marks

DSE - 3 (Theoretical): RESOURCE GEOGRAPHY Credit: 6 Unit: 1

1. Resource Geography: Its Importance and relation with other sub-disciplines

- 2. Resource: Concept and Classification
- 3. Functional Theory of Resource
- 4. Problems of Resource Depletion with Special Reference to Forest, Water and Fossil Fuels
- 5. Resource Conservation: Principles and Methods
- 6. Concept of 'Limits to Growth'

Unit: 2

1. Distribution and Utilisation of Metallic Mineral Resources in Indian Context: Iron ore, Bauxite

2. Distribution and Utilisation of Non-Metallic Mineral Resources in Indian Context: Mica, Limestone

3. Distribution, Problems and Management of Energy Resources in Indian Context: Conventional (Coal) and Non-Conventional (Solar)

- 4. Power resources and problems with reference to Petroleum
- 5. Contemporary Energy Crisis and Future Scenario

6. Sustainable Resource Development

DSE - 4 (Theoretical): SOIL AND BIO GEOGRAPHY Credit: 6 Unit: 1: Soil Geography

- 1. Soil: Definition, Factors of Formation
- 2. Development and Characteristics of an ideal Soil Profile

3. Physical and Chemical Properties of Soil with special reference to Texture, Structure, Organic Carbon and pH

4. Concept of Zonal, Azonal and Intrazonal Soil; Formation and Profile Characteristics of Laterite and Podsol

5. Classification of Soil: Russian and Indian (ICAR)

6. Soil Degradation and Management

Unit-2: Bio-Geography

1. Definition and Scope of Bio-geography, Meaning of Biosphere, Ecology, Ecosystem,

- Environment, Communities, Habitats, Niche, Ecotone and Biotopes
- 2. Biosphere and Energy: Laws of Energy Exchange, Food Chain, Food Web and Energy Flow
- 3. Bio-Geo Chemical Cycle: Carbon, Nitrogen
- 4. Factors of Plant Growth: Light, Heat, Moisture, Wind, Soil and Topography
- 5. Biomes Concept and Classification; Tropical Rainforest and Temperate Grassland
- 6. Threat to Biodiversity- Causes, Consequences and Conservation