

AZAD HIND FOUZ SMRITI MAHAVIDYALAYA
Dept. of Geography
Syllabus structuring & lesson plan(odd plan)
2022-23 (CBCS)
July-December 2022-23
1st Semester
GEO-A-CC-1-01-TH& P – Geotectonics and Geomorphology

Unit I: Geotectonics (TH/P)

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
1.1TH	Earth's tectonic and structural evolution with reference to geological time scale	HMK	July	TH (lecture method using ppt & interactive discussion)	Theoretical class of practical units Identification of rocks & minerals	Short questions	
2TH	Earth's interior with special reference to seismology. Isostasy :Models of Airy, Pratt and their applicability	HMK	July	TH (lecture method using ppt & interactive discussion		Short questions	
3TH	Plate Tectonics as a unified theory of global tectonics: Processes and landforms at plate margins and hotspots	HMK	August	TH (lecture method using ppt & interactive discussion		MCQ	
4TH	. Folds and Faults—origin and types	HMK	September	TH (lecture method using ppt & interactive discussion		MCQ	
5.1P	Measurement of dip and strike using clinometers	HMK	July		Practical (Geo lab-21)	Practical examination with Clinometers	
6.2P	mineral samples: Bauxite, calcite, chalcopryrite, feldspar, galena, gypsum, hematite, magnetite, mica, quartz, talc, tourmaline &) rock samples: Granite, basalt, dolerite, laterite, limestone, shale, sandstone, conglomerate, slate, phyllite, schist, gneiss, quartzite, marble	HMK	July		Practical (Geo lab-21)	Viva on mineral & rock characteristics	

73.TH	Delineation of drainage basins	RBM	July	TH (lecture method using ppt & interactive discussion		MCQ	
8.4TH	hypsothetic curve	RG	July	TH (lecture method using ppt & interactive discussion		MCQ	
9.3.P	Extraction and interpretation of geomorphic information from Survey of India 1:50k topographical maps of plateau region: Delineation of drainage basins, construction of relief profiles (superimposed, projected and composite), relative relief map, slope map (Wentworth's method), stream ordering (Strahler) and bifurcation ratio on a drainage basin	RBM	July to October		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
10.3.P	. Construction of hypsothetic curve and derivation of hypsothetic integer from Survey of India 1:50k topographical maps of plateau region	RG	July to October		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	

Unit II: Geomorphology (TH& P)

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
2.1TH	Degradational processes: Weathering, mass wasting and resultant landforms.	RG	July	TH (lecture method using ppt & Interactive discussion)		Short questions, MCQ & Viva	
2TH	Processes of entrainment, transportation and deposition by different geomorphic agents. Role of humans in landform development	RBM	July	TH (lecture method using ppt & interactivediscussion		Short questions MCQ & Viva	
3TH	Development of river network and landforms on uniclinal and folded structures. Surface expression of faults.	RBM	August	TH (lecture method using ppt & interactive discussion		Short questions MCQ & Viva	
4TH	Development of river network and landforms on granites, basalts and limestones	RBM	August	TH (lecture method using ppt & interactive discussion		Short questions MCQ & Viva	
5TH	. Coastal processes and landforms	RBM	September	TH (lecture method using ppt & interactive discussion		Short questions MCQ & Viva	
6TH	Glacial and glacio-fluvial processes and landforms	RBM	September	TH (lecture method using ppt & interactive discussion		Short questions MCQ & Viva	
9TH	Aeolian and fluvio-aeolian processes and landforms	RBM	September	TH (lecture method using ppt & interactive discussion		Short questions MCQ & Viva	
10TH	Role of time and systems approach in geomorphology. Models on landscape evolution: Views of Davis, Penck, King and Hack	RG	September & October	TH (lecture method using ppt & interactive discussion		Short questions MCQ & Viva	Test examination in November <u>2022-23</u>

GEO-A-CC-1-02-TH&P – Cartographic Techniques**Unit I&2:**

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
2.3.1	. Maps: Components and classification	HMK	July	TH (lecture method using ppt & interactive discussion)		Short questions& MCQ & Viva	
2	Concept and application of scales: Plain, comparative, diagonal and Vernier	HMK	July	TH (lecture method using ppt & interactive discussion)		Short questions& MCQ & Viva	
3	Coordinate systems: Polar and rectangular	HMK	July	TH (lecture method using ppt & interactive discussion)		Short questions	
4	Concept of generating globe	HMK	August	TH (lecture method using ppt & interactive discussion)		Short questions	
5	Grids: Angular and linear systems of measurement	HMK	August	TH (lecture method using ppt & interactive discussion)		Short questions	
6	. Bearing: Magnetic and true, whole-circle and reduced	HMK	September	TH (lecture method using ppt & interactive discussion)		Short questions& MCQ & Viva	
7	. Concept of geoid and spheroid with special reference to Everest and WGS-84	HMK	September	TH (lecture method using ppt & interactive discussion)		Short questions	
8	Map projections: Classification, properties and uses	RBM	July	TH (lecture method using ppt & interactive discussion)		Short questions& MCQ & Viva	
9	Concept and significance of UTM projection	RG	July	TH (lecture method using ppt & interactive discussion)		Short questions	
10	. Representation of data using dots and proportional circle	RG	July	TH (lecture method using ppt & interactive discussion)		Short questions	
11	Representation of data using isopleth and choropleth	RG	August	TH (lecture method using ppt & interactive discussion)		Short questions& MCQ & Viva	
12	Survey of India topographical maps: Reference scheme of old and open series. Information on the margin of maps	RBM	August	TH (lecture method using ppt & interactive discussion)		Short questions& MCQ & Viva	
2.4.1	Graphical construction of scales: Plain, comparative, diagonal and Vernier		September		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
2	Construction of projections: Polar Zenithal		September		Practical (Short questions &	

	Stereographic, Simple Conic with one standard parallel, Bonne's, Cylindrical Equal Area, and Mercator's		ber		Geo lab-21) & room no 19 (tracing unit)	application oriented short examinations.	
3	Thematic maps: Proportional squares, pie diagrams with proportional circles, dots and spheres		September		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
4	Thematic maps: Choropleth, isopleths, and chorochromatic maps		oct		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	Test examination in November <u>2022-23</u>

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Dept. of Geography

Syllabus structuring & lesson plan

2022-23 July to December) (Uneven semester)

3rd Semester

GEO-A-CC-3-05-TH – Climatology (TH & P)

Unit I: Elements of the Atmosphere

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
1	Nature, composition and layering of the atmosphere	RBM	July	TH (lecture method using ppt & interactive discussion)		MCQ	
2	Isolation: Controlling factors. Heat budget of the atmosphere	RBM	July	TH (lecture method using ppt & interactive discussion)		MCQ	
3	Temperature: horizontal and vertical distribution. Inversion of temperature: types, causes and consequences	RBM	August	TH (lecture method using ppt & interactive discussion)		MCQ	
4	Overview of climatechange:Greenhouse effect. Formation, depletion and significance of the ozone layer	RBM	August	TH (lecture method using ppt & interactive discussion)		MCQ	
1P	Measurement of weather elements using analogue instruments: Mean daily temperature, air pressure,relative humidity, rainfall	RBM	July to october		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
2P	Interpretation of a daily weather map of India (any two): Pre-Monsoon, Monsoon and Post-Monsoon	RBM	July to october		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
3P	Construction and interpretation of hythergraph and climograph	RG	July to october		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
4P	Construction and interpretation of wind rose	RG	July to october		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	Test examination in December 2022-23

Unit II: Atmospheric Phenomena and Climatic Classification

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
2.5	Condensation: Process and forms. Mechanism of precipitation: Bergeron-Findeisen theory, collision and coalescence. Forms of precipitation	RG	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
6	Air mass: Typology, origin, characteristics and modification	RG	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
7	Fronts: Warm and cold, frontogenesis and frontolysis	RG	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
8	Weather: Stability and instability, barotropic and baroclinic conditions	RG	August	TH (lecture method using ppt & interactive discussion)		MCQ	
9	Circulation in the atmosphere: Planetary winds, jet streams, index cycle	RG	August	TH (lecture method using ppt & interactive discussion)		MCQ	
10	Atmospheric disturbances: Tropical and mid-latitude cyclones, thunderstorms	RG	September	TH (lecture method using ppt & interactive discussion)		MCQ	
11	Monsoon circulation and mechanism with reference to India	RG	September	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
12	Climatic classification after Thornthwaite	RG	October	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test examination in December <u>2022-23</u> Sign of final lab work in December <u>2022-23</u>

GEO-A-CC-3-06-TH – Hydrology and Oceanography (TH)

Unit-I: Hydrology

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
3.1	Systems approach in hydrology. Global hydrological cycle: Its physical and biological role	HMK	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Run off: controlling factors. Infiltration and evapotranspiration. Run off cycle	HMK	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Drainage basin as a hydrological unit. Principles of water harvesting and watershed management	HMK	August				
4	Groundwater: Occurrence and storage. Factors controlling recharge, discharge and movement	HMK	August	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	

Unit-II: Oceanography:

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
3.5	Major relief features of the ocean floor: Characteristics and origin according to plate tectonics	RG	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
6	Physical and chemical properties of ocean water	RG	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
7	Water mass, T–S diagram	RG	August	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	

8	Air-Sea interactions, ocean circulation, wave and tide	RG	August	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
9	Ocean temperature and salinity: Distribution and determinants	RG	September	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
10	Coral reefs: Formation, classification and threats	RBM	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
11	Marine resources: Classification and sustainable utilization	RBM	August	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
12	Sea level change: Types and causes	RBM	September	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test examination in December <u>2022-23</u>
							Sign of final lab work in December <u>2022-23</u>

GEO-A-CC-3-07-TH – Statistical Methods in Geography (TH)

Unit I: Frequency Distribution and Sampling & Unit II: Numerical Data Analysis

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
3.7.1	Importance and significance of statistics in Geography	HMK	July	TH (lecture method using ppt& interactive discussion)		MCQ& Short questions	
2	Discrete and continuous data, population and samples, scales of measurement (nominal, ordinal, interval and ratio)	HMK	July	TH (lecture method using ppt& interactive discussion)		MCQ& Short questions	
3	Sources of geographical data for statistical analysis	HMK	August	TH (lecture method using ppt& interactive discussion)		MCQ& Short questions	
4	Collection of data and formation of statistical tables	HMK	August	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
5	Sampling: Need, types, and significance and methods of random sampling	HMK	September	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
6	Theoretical distribution: Frequency, cumulative frequency, normal and probability	HMK	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
7	Central tendency: Mean, median, mode, partition values	HMK	August	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
8	Measures of dispersion range, mean deviation, standard deviation, coefficient of variation	HMK	September	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
9	Association and correlation: Rank correlation, product moment correlation	HMK	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
10	Regression: Linear and non-linear	HMK	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
11	Time series analysis: Moving average	HMK	August	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
12	Hypothesis testing: Chi-squared test and T-test	HMK	August	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	

GEO-A-CC-3-06-P – Hydrology and Oceanography Lab

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
3.6.1 P	Construction and interpretation of rating curves	RG	July		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
2	Construction and interpretation hydrographs and unit hydrographs	RBM	July		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
3	Monthly rainfall dispersion diagram (Quartile method), Climatic water budget, and Ergograph	RG	August		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
4	Construction of Thiessen polygon from precipitation data	HMK	August		Practical (Geo lab-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	Test examination in December 2022-23
							Sign of final lab work in December <u>2022-23</u>

GEO-A-CC-3-07-P – Statistical Methods in Geography Lab

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
3.7.1 P	Construction of data matrix with each row representing an areal unit mouzas / towns) and corresponding columns of relevant attributes	HMK	July		Practical (RS-GIS Lab) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
2	Based on the above, a frequency table, measures of central tendency and dispersion would be computed and interpreted using histogram and frequency curve	HMK	August		Practical (RS-GIS Lab) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
3	From the data matrix, a sample set (20%) would be drawn using random, systematic and stratified methods of sampling and the samples would be located on a map with an explanation of the methods used	HMK	September		Practical (RS-GIS Lab) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
4	Based on of the sample set and using two relevant attributes, a scatter diagram and linear regression line would be plotted and residual from regression would be mapped with a short interpretation	HMK	October		Practical (RS-GIS Lab) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	Test examination in December <u>2022-23</u>
							Sign of final lab work in December 2022-23

GEO-A-SEC-A-3-02-TH – Tourism Management (TH)

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
A-3.1	Scope and Nature: Concepts and issues, tourism, recreation and leisure inter-relations	RBM	July	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Factors influencing tourism, Types of Tourism: Ecotourism, cultural tourism, adventure tourism, medical tourism, pilgrimage, international, national	RBM	August	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Use of information on factors (Historical, natural, socio-cultural and economic; motivating factors for pilgrimages) to plan destination marketing; tourism products; niche tourism planning	RG	September	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Tourism impact assessment, Sustainable tourism, Information Technology and Tourism, Tour operations planning and guiding	RG	October	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
5	Increasing Global tourism; Tourism in India: Tourism infrastructure, access, planning for different budgets for case study sites of Western Himalayas, Goa, Chilka/ Vembanad, Jaipur	RBM	October	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test examination in December 2022-23

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2022-23 (July to December) (Uneven semester)
5th Semester

GEO-A-CC-5-11-TH – Research Methodology and Fieldwork □

Unit I: Research Methodology (TH)

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
1.1TH	Research in Geography: Meaning, types and significance	RBM	July	TH (lecture method using ppt & interactive discussion)		Short questions	
1.2TH	Literature review and formulation of research design	RBM	July	TH (lecture method using ppt & interactive discussion)		Short questions	
1.3TH	Defining research problem, objectives and hypothesis	RBM	August	TH (lecture method using ppt & interactive discussion)		MCQ	
1.4TH	Research materials and methods	RBM	September	TH (lecture method using ppt & interactive discussion)		MCQ	
1.5TH	Techniques of writing scientific reports: Preparing notes, references, bibliography, abstract and keywords	RBM	September	TH (lecture method using ppt & interactive discussion)			
1.6TH	Plagiarism: Classification and	RBM	September	TH (lecture method using ppt			

	prevention			<i>& interactive discussion</i>			
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Unit II: Field work (TH)

<i>Unit</i>	<i>Section</i>	<i>Teacher</i>	<i>Time frame</i>	<i>Theory</i>	<i>Practical</i>	<i>CIE</i>	<i>Internal examination</i>
2.1TH	Fieldwork in Geographical studies: Role and significance. Selection of study area and objectives. Pre-field academic preparations. Ethics of fieldwork	RG	July	TH (lecture method using ppt & interactive discussion)		Short questions, MCQ & Viva	
2.2TH	Field techniques and tools: Observation (participant, non-participant), questionnaires (open, closed, structured, non-structured). Interview	RG	July	TH (lecture method using ppt & interactive discussion)		Short questions MCQ & Viva	
2.3TH	Field techniques and tools: Landscape survey using transects and quadrants, constructing a sketch, photo and video recording[RG	August	TH (lecture method using ppt & interactive discussion)		Short questions MCQ & Viva	
2.4TH	Positioning and collection of samples. Preparation of inventory from field data	RG	August	TH (lecture method using ppt & interactive discussion)		Short questions MCQ & Viva	

2.5TH	Post-field tabulation, processing and analysis of quantitative and qualitative data	RG	September	TH (lecture method using ppt & interactive discussion)		Short questions MCQ & Viva	
2.6TH	Fieldwork: logistics and handling of emergencies	RG	September	TH (lecture method using ppt & interactive discussion)		Short questions MCQ & Viva	

GEO-A-CC-5-11-P-ResearchMethodologyandFieldworkLab-

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
2.1.1	Each student will prepare a report based on primary data collected from field survey and secondary data collected from different sources.	HMK.RBM, RG	July		GEO LAB(19)	Short questions & MCQ & Viva	
2.1.2	Students will select either one rural area (<i>mouza</i>) or an urban area (municipal ward) for the study, with the primary objective of evaluating the relation between physical and cultural landscape.	HMK.RBM, RG	July		GEO LAB(19)	Short questions & MCQ & Viva	
2.1.3	A specific problem or a special feature should be identified based on which, the study area will be selected.	HMK.RBM	July		GEO LAB(19)	Short questions	

2.1.4	The report should be handwritten in English on A4 size paper in candidate's own words within 5,000 words (Introductory Chapter: 1000 words; Physical Aspects: 1500 words; Socio-economic Aspects: 1500 words; Concluding Chapter: 500 words, approximately) excluding tables, photographs, maps, diagrams, references and appendices.	HMK.RBM	August		GEO LAB(19)	Short questions	
2.1.5	Photographs, maps and diagrams should not exceed 15pages.	HMK.RBM			GEO LAB(19)		
2.1.6	A copy of the bound report, duly signed by the concerned teacher, will be submitted during examination.	HMK.RBM			GEO LAB(19)		
2.1.7	<p>The field work and post-field work will include:</p> <p>a. Collection of primary data on physical aspects (relief and soil) of the study area. Students should use survey instruments like prismatic compass, dumpy level, Abney level or clinometers where necessary.</p> <p>b. Collection of soil samples from different land cover land use regions of the study area for determining pH and NPK values with help of a soil kit.</p> <p>c. Collection of socio economic data, at the household level (with the help of a questionnaire) in the selected study area.</p> <p>d. Plot to plot land use survey for preparation of a land use map, covering whole or part of the selected area.</p> <p>e. Visit to different organizations and departments for</p>	HMK.RBM			GEO LAB(19)		

	<p>collection of secondary data.</p> <p>f. Any other survey relevant to the objective of the study.</p>						
2.1.8	<p>The Field Report should contain the following sections (a–e).</p> <p>a. Introduction: Study area extent and space relations, reasons for selection of the study area on the basis of a specific problem or special feature, objectives, methods of data collection, analyses and presentation, sources of information,etc.</p> <p>b. Physical aspects: Litho logy and geological structure, relief, slope, drainage, climate, soil, vegetation, environmental issues, proneness to natural hazards,etc.</p> <p>c. Socio-economic aspects:</p> <p>i. Population attributes: number, sex ratio, literacy, occupational structure, ethnic and religious composition, language, per capita income, etc.</p> <p>ii. Settlement characteristics: Number of houses, building materials, number and size of rooms, amenities,etc.</p> <p>iii. Agriculture: General land use, crop-combination, use of fertilizer and</p>	HMK.RBM,RG			GEO LAB(19)		

	<p>irrigational facilities, production and marketing etc.</p> <p>iv. Other economic activities: Fishing, horticulture, brick-making, household and other industries, etc.</p> <p>d. Conclusions: Relation between physical and cultural landscape. Evaluation of problems and prospects. General recommendations.</p> <p>e. Bibliography.</p>						
2.1.9	<p>The students will prepare (i) a chorochromatic land use land cover map on the basis of plot to plot survey; (ii) a profile of 250–1000m, surveyed and plotted, with different land use land cover superimposed on it.</p>	HMK.RBM, RG			GEO LAB(19)		
2.1.10	<p>All sections of the report should contain relevant maps, diagrams and photographs using primary and secondary data, clearly. Surveys not relevant for establishing the relation between physical and cultural landscape should be avoided.</p>	HMK.RBM, RG			GEO LAB(19)		

GEO-A-CC-5-12-TH – Remote Sensing, GIS and GNSS



Unit I: Remote Sensing (TH)

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
<i>1.1TH</i>	Principles of Remote Sensing (RS): Types of RS satellites and sensors	<i>HMK</i>	<i>July</i>	<i>TH (lecture method using ppt & interactive discussion)</i>		<i>Short questions</i>	
<i>1.2TH</i>	Sensor resolutions and their applications with reference to IRS and Land sat missions	<i>HMK</i>	<i>July</i>	<i>TH (lecture method using ppt & interactive discussion)</i>		<i>Short questions</i>	
<i>1.3TH</i>	Image referencing schemes and acquisition procedure of free geospatial data from NRSC / Bhuvan and USGS	<i>HMK</i>	<i>August</i>	<i>TH (lecture method using ppt & interactive discussion)</i>		<i>MCQ</i>	
<i>1.4TH</i>	Preparation of False Colour Composites from IRS LISS-3 and Land sat TM / OLI data.	<i>HMK</i>	<i>September</i>	<i>TH (lecture method using ppt & interactive discussion)</i>		<i>MCQ</i>	
<i>1.5TH</i>	Principles of image interpretation. Preparation of inventories of land use land cover (LULC) features	<i>HMK</i>	<i>September</i>	<i>TH (lecture method using ppt & interactive discussion)</i>			

	from satellite images						
1.6TH	Acquisition and utilization of free Digital Elevation Model data: CartoDEM, SRTM and ALOS						

Unit II: Geographical Information Systems and Global Navigation Satellite System

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
2.1TH	GIS data structures: types: spatial and non-spatial, raster and vector	HMK	July	TH (lecture method using ppt & interactive discussion)		Short questions	
2.2TH	Principles of preparing attribute tables and data manipulation and overlay analysis	HMK	July	TH (lecture method using ppt & interactive discussion)		Short questions	
2.8TH	Principles and significance of buffer preparation	HMK	July	TH (lecture method using ppt & interactive discussion)			
2.9TH	Principles and significance overlay analysis	HMK	July	TH (lecture method using ppt & interactive discussion)			

Unit III: Global Navigation Satellite System (GNSS)

3.1 TH	Principles of GNSS positioning and waypoint collection	HMK	July	TH (lecture method using ppt & interactive discussion			
3.2TH	Principles of transferring of GNSS waypoints to GIS. Area and length calculations from GNSS data	HMK	July	TH (lecture method using ppt & interactive discussion			

GEO-A-CC-5-12-P – Remote Sensing, GIS and GNSS Lab

4.1P	Image Georeferencing and enhancement. Preparation of reflectance libraries of LULC features across different image bands of IRS L3 or Land sat OLI data	HMK	July		GEO LAB 19		
4.2 P	Supervised image classification, class editing and post-classification analysis	HMK	July		GEO LAB 19		
4.3 P	Digitization of features and administrative boundaries. Data attachment, overlay and preparation of annotated thematic maps	HMK	July		GEO LAB 19		
4.4 P	Waypoint collection from GNSS receivers and exporting to GIS database	HMK	July		GEO LAB 19		

GEO-A-DSE-A-6-01-TH – Fluvial Geomorphology

3.1TH	Scope and components of Fluvial Geomorphology. Rivers and hydro systems. Geographers' Approach to study of rivers	RBM	July	TH (lecture method using ppt & interactive discussion			
3.2TH	Run off: components and controlling factors. Run off cycle	RBM	July	TH (lecture method using ppt & interactive discussion			
3.3TH	Models of channel initiation and network development	RBM	July	TH (lecture method using ppt &			

				<i>interactive discussion</i>			
3.4TH	Drainage basin and its significance as a hydrological unit	RBM	July	TH (lecture method using ppt & interactive discussion			
	Linear, areal and altitudinal properties of drainage basin. Horton’s stream laws.	RG	July	TH (lecture method using ppt & interactive discussion			
3.5TH	Fundamentals of Rosgen stream classification system	RG	July	TH (lecture method using ppt & interactive discussion			
3.6TH	Fluvialmorphodynamics:Adjustmentofchannelformstotectonic,climatic,sealevel and land use changes	RG	July	TH (lecture method using ppt & interactive discussion			
3.7TH	Large rivers of the tropics: Characteristics and significance	RG	July	TH (lecture method using ppt & interactive discussion			
3.8TH	Fluvial landforms: Terraces, alluvial fans, badlands and accretion topography	RG	July	TH (lecture method using ppt & interactive discussion			
3.9TH	Human intervention on fluvial systems : Types and consequences	RG	July	TH (lecture method using ppt & interactive discussion			
4 TH	Riverbank erosion and river degeneration: Processes, management and impact on land use	RG	July	TH (lecture method using ppt & interactive discussion			
4.1TH	Integrated watershed management: Principles and significance	RG	July	TH (lecture method using ppt & interactive discussion			

GEO-A-DSE-A-6-01-P – Fluvial Geomorphology Lab

5.1P	Computation of channel pattern indices from river plan form	RBM	July		GEO LAB 19		
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5.2P	Riverbank erosion: Quantification of eroded area and vulnerability zonation	RG	July		GEO LAB 19		
5.3P	Flood hazard zonation from flood frequency analysis	RG	July		GEO LAB 19		
5.4P	Analyses of pebbles: Shape indices	RBM	July		GEO LAB 19		

3.10 GEO-A-DSE-B-6-05-TH – Cultural and Settlement Geography Unit I: Cultural Geography

6.1TH	Definition, scope and content of cultural geography	RBM	July	TH (lecture method using ppt & interactive discussion			
6.1TH	Development of cultural geography in relation to allied disciplines	RBM	July	TH (lecture method using ppt & interactive discussion			
6.2TH	Cultural hearth and realm, cultural diffusion, diffusion of major world religions and languages	RBM	July	TH (lecture method using ppt & interactive discussion			
6.3TH	Cultural segregation and cultural diversity, culture, technology and development	RBM	July	TH (lecture method using ppt & interactive discussion			
6.4TH	Races and racial groups of the world	RBM	July	TH (lecture method using ppt & interactive discussion			
6.5 TH	Cultural regions of India	RBM	July	TH (lecture method using ppt & interactive discussion			

Unit II: Settlement Geography

7.1 TH	Rural Settlement: Definition, nature and characteristics	RG	July	TH (lecture method using ppt & interactive discussion			
7.2 TH	Morphology of rural settlements: site and situation, layout-internal and external	RG	July	TH (lecture method using ppt & interactive discussion			
7.3 TH	Rural house types with reference to India, Social segregation in rural areas; Census Categories of rural settlements	RG	July	TH (lecture method using ppt & interactive discussion			
7.4 TH	Urban Settlements: Census definition (Temporal) and categories in India	RG	July	TH (lecture method using ppt & interactive discussion			
7.5 TH	Urban morphology: Models of Burgess, Hoyt, Harris and Ullman.	RG	July	TH (lecture method using ppt & interactive discussion			
7.6 TH	City-region and conurbation. Functional classification of cities: Schemes of Harris, Nelson and McKenzie	RG	July	TH (lecture method using ppt & interactive discussion			

GEO-A-DSE-B-6-05-P – Cultural and Settlement Geography Lab

8.IP	Mapping language distribution of India	RBM	July		GEO LAB 19	
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8.2P	CD block-wise housing distribution in any district of West Bengal using proportional Square	RG			GEO LAB 19	
8.3P	Identification of rural settlement types from topo sheet	RBM			GEO LAB 19	
8.4P	Social area analysis of a city (Shevky& Bell)	HMK			GEO LAB 19	

LESSON PLAN OF GEOGRAPHY HONOURS FOR THE ACADEMIC SESSION 2020-21
EVEN SESSION
AZAD HIND FOUZ SMRITI MAHAVIDYALAYA
Dept. of Geography
Syllabus structuring & lesson plan
2022-23 (CBCS)
JANUARY TO JUNE 2022-23
2ND SEMETER

GEO-A-CC-2-03- – Human Geography (TH &P)

Unit I & II : Nature and Principles (TH/P)& Society, Demography and Ekistics

<i>Unit</i>	<i>Section</i>	<i>Teacher</i>	<i>Time frame</i>	<i>Theory</i>	<i>Practical</i>	<i>CIE</i>	<i>Internal examination</i>
1.1TH	Nature, scope and recent trends. Elements of human geography	RBM	JANUARY	TH (lecture method using ppt & interactive discussion)		Short questions	
2TH	Approaches to Human Geography: Resource, locational, landscape, environment	RBM	JANUARY	TH (lecture method using ppt & interactive discussion)		Short questions	
3TH	Concept and classification of race. Ethnicity	RBM	JANUARY	TH (lecture method using ppt & interactive discussion)		MCQ	
4TH	Space, society and cultural regions (language and	RBM	MARCH	TH (lecture method using ppt &		MCQ	

	religion)			<i>interactive discussion)</i>			
5TH	Evolution of human societies: Hunting and food gathering, pastoral nomadism, subsistence farming and industrial society	<i>RBM</i>	<i>MARCH</i>	<i>TH (lecture method using ppt & interactive discussion</i>			
6TH	Human adaptation to environment: Case studies of Eskimo, Masai and Maori	<i>RBM</i>	<i>APRIL</i>	<i>TH (lecture method using ppt & interactive discussion</i>			
7TH	Population growth and distribution, composition; demographic transition	<i>RG</i>	<i>MAY</i>	<i>TH (lecture method using ppt & interactive discussion</i>			
8TH	Population–resource regions (Ackerman	<i>RG</i>	<i>JUNE</i>	<i>TH (lecture method using ppt & interactive discussion</i>			
9TH	Development–environment conflict	<i>RG</i>	<i>JUNE</i>	<i>TH (lecture method using ppt & interactive discussion</i>			
10TH	Types and patterns of rural settlements	<i>RG</i>	<i>JUNE</i>	<i>TH (lecture method using ppt & interactive</i>			

				<i>discussion</i>			
11TH	Rural house types in India	RG	JUNE	TH (lecture method using ppt & interactive discussion			
12 TH	Morphology and hieranrchy of urban settlements	RG	JUNE	TH (lecture method using ppt & interactive discussion			
13P	Spatial variation in continent- or country-level religious composition by divided proportional circles	RBM	JUNE	PR(ROOM NO-22)			
14P	Measuring arithmetic growth rate of population comparing two decadal datasets	RG	JUNE	PR(ROOM NO-22)			
15P	Types of Age-Sex pyramids (progressive, regressive, intermediate and stationary): Graphical representation and analysis	RG	JUNE	PR(ROOM NO-22)			

16P	Nearest neighbour analysis from Survey of India 1:50k topographical maps (5' x 5')	RBM	JUNE	PR(ROOM NO-22)			
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GEO-A-CC-2-0-TH & P – Thematic Mapping and Surveying

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
2.71 TH	Concepts of rounding, scientific notation. Logarithm and anti-logarithm. Natural and log scales	HMK	JANUARY	TH (lecture method using ppt & interactive discussion)		Short questions	
2.72 TH	Concept of diagrammatic representation of data	RBM	JANUARY	TH (lecture method using ppt & interactive discussion)		Short questions	
2.73 TH	Preparation and interpretation of	HMK	JANUARY	TH (lecture method using		MCQ	

	geological maps			<i>ppt & interactive discussion)</i>			
2.74 TH	Preparation and interpretation of weather maps	<i>RBM</i>	<i>MARCH</i>	<i>TH (lecture method using ppt & interactive discussion)</i>		<i>MCQ</i>	
2.75 TH	Preparation and interpretation land use land cover maps	<i>HMK</i>	<i>MARCH</i>				
2.76 TH	Preparation and interpretation of socio-economic maps	<i>RBM</i>	<i>MARCH</i>				
2.77TH	Principal national agencies producing thematic maps in India: NATMO, GSI, NBSSLUP, NHO, NRSC / Bhuvan, etc.	<i>HMK</i>	<i>MARCH</i>				
2.78TH	Basic concepts of surveying and survey equipment: Prismatic compass	<i>HMK</i>	<i>APRIL</i>				
2.79 TH	Basic concepts of surveying and survey equipment: Dumpy level	<i>HMK</i>	<i>APRIL</i>				
2.710TH	Basic concepts of surveying and survey equipment:	<i>HMK</i>	<i>APRIL</i>				

	Theodolite						
2.11 TH	Basic concepts of surveying and survey equipment: Abney level	HMK	APRIL				
2.712TH	Basic concepts of surveying and survey equipment: Laser distance measurer	HMK	APRIL				
2.81P	Traverse survey using prismatic compass	HMK	MAY		Practical (Geo lab-21) & room no 19		
2.82P	Profile survey using dumpy Level	HMK	MAY		Practical (Geo lab		
2.83P	Height determination of base accessible and inaccessible (same vertical plane method) objects by theodolite	HMK	MAY		Practical (Geo lab		
2.84P	Interpretation of geological maps with uniclinal structure, folds, unconformity, and intrusions	HMK	JUNE		Practical (Geo lab		

AZAD HIND FOUZ SMRITI MAHAVIDYALAYA
Dept. of Geography
Syllabus structuring & lesson plan
2022-23 (CBCS)
January to June (2021-22)
4TH Semester
GEO-A-CC-4-08-TH – Economic Geography (TH)

Unit I: Concepts:

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
4.1	Meaning and approaches to economic geography	RBM	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Concepts in economic	RBM	February	TH (lecture		MCQ& Short	

	geography: Goods and services, production, exchange and consumption			method using ppt & interactive discussion)		questions	
3	Concept of economic man, theories of choices	RBM	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Economic distance and transport costs	RBM	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	

Unit II: Economic Activities:

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
4. II. 1	Concept and classification of economic activities	RG	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Factors affecting location of economic activity with special reference to agriculture	HMK	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Primary activities: Agriculture, forestry, fishing and mining	RG	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	

4	Secondary activities: Classification of manufacturing, concept of manufacturing regions, special economic zones and technology parks	RG	March	TH (lecture method using ppt & interactive discussion		MCQ& Short questions	
5	Tertiary activities: Transport, trade and services	RG	January	TH (lecture method using ppt & interactive discussion		MCQ& Short questions	
6	Transnational sea-routes, railways and highways with reference to India	RG	February	TH (lecture method using ppt & interactive discussion		MCQ& Short questions	
7	International trade and economic blocs	RBM	February	TH (lecture method using ppt & interactive discussion		MCQ& Short questions	
8	WTO and BRICS: Evolution, structure and functions	RBM	March	TH (lecture method using ppt & interactive discussion		MCQ& Short questions	Test examination in June 2022-23

GEO-A-CC-4-08-P – Economic Geography Lab

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
4-P.1	Choropleth mapping of state-wide variation in GDP	RBM	January		Practical (GEO Lab R-21) & room	Short questions & application	

					no 19 (tracing unit)	oriented short examinations.	
2	State-wide variation in occupational structure by proportional divided circles	RBM	February		Practical (GEO Lab R21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
3	Time series analysis of industrial production (India and West Bengal)	RG	January		Practical (GEO Lab R21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
4	Transport network analysis by detour index and shortest path analysis	RG	February		Practical (GEO Lab R21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	Test examination in June 2022-23
							Sign of final lab work in 2022-23

GEO-A-CC-4-09-TH – Regional Planning and Development

Unit I: Regional Planning:

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
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4.9.1	Concept of regions: Types of regions and their delineation	RBM	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Regional Planning: Types, principles, objectives, tools and techniques	RBM	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Regional planning and multi-level planning in India	RBM	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Metropolitan concept and urban agglomerations	RBM	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test examination in June 2022-23

Unit II: Regional Development:

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
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4.9. II.1	Concepts of growth and development, growth versus development	RG	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Indicators of development: Economic, social and environmental	RG	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Human development: Concept and measurement	RG	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Theories and models for regional development: Cumulative causation	HMK	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
5	Theories and models for regional development: Stages of development (Rostow), growth pole model (Perroux)	HMK	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
6	Concept and causes of underdevelopment	RG	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	

7	Regional development in India: Disparity and diversity	RG	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
8	Need and measures for balanced development in India	RG	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test examination in June 2022-23

GEO-A-CC-4-09-P – Regional Planning and Development Lab

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
4.9.P-1	Delineation of formal regions by weighted index method	HMK	January		Practical (GEO Lab R-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
2	Delineation of functional regions by breaking point analysis	HMK	February		Practical (GEO Lab R-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
3	Measurement of inequality by location quotient	HMK	March		Practical (GEO Lab R-21) & room	Short questions & application	

					no 19 (tracing unit)	oriented short examinations.	
4	Measuring regional disparity by Sopher index	HMK	April		Practical (GEO Lab R-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	Test examination in June 2020-21
							Sign of final lab work in 2022-23

GEO-A-CC-4-10-TH – Soil and Biogeography

Unit I: Soil Geography:

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
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4.10. I.1	Factors or soil formation. Man as an active agent of soil transformation	HMK	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Soil profile. Origin and profile characteristics of lateritic, podzol and chernozem soils	HMK	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Definition and significance of soil properties: Texture, structure and moisture	HMK	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Definition and significance of soil properties: pH, organic matter and NPK	HMK	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
5	Soil erosion and degradation: Factors, processes and mitigation measures	RG	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
6	Principles of soil classification: Genetic and USDA. Concept of land capability and its	RG	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test examination in June 2022-23

	classification						
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Unit II: Biogeography:

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
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4.10. II.1	Concepts of biosphere, ecosystem, biome, ecotone, community and ecology	RBM	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Concepts of trophic structure, food chain and food web. Energy flow in ecosystems	RBM	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Classification of world biomes (Whittaker). Geographical extent and characteristics of tropical rain forest, savanna, hotdesert, taiga and coral reef biomes	HMK	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Bio-geochemical cycles with special reference to carbon dioxide and nitrogen	HMK	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
5	Deforestation: Causes, consequences and management	RBM	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
6	Biodiversity: Definition, types, threats and	RBM	April	TH (lecture method using ppt &		MCQ& Short questions	Test examination in June 2022-

	conservation measures			interactive discussion)			23
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GEO-A-CC-4-10-P – Soil and Biogeography Lab

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
4.10. P.1	Determination of soil reaction (pH) and salinity using field kit	RBM	January		Practical (GEO Lab R-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
2	Determination of soil type by ternary diagram textural plotting	RG	February		Practical (GEO Lab R-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
3	Plant species diversity determination by matrix method	HMK	March		Practical (GEO Lab R-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
4	Time series analysis of biogeography data	HMK	January		Practical (GEO Lab R-21) & room no 19 (tracing unit)	Short questions & application oriented short	Test examination in June 2022-23

						examinations.	
							Sign of final lab work in 2022-23

GEO-A-SEC-B-4- -TH – Sustainable Development

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
B.4.1	Sustainable development: Concept, Historical background, components, limitations	RBM	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Challenges of sustainable development: Determinants, linkage among sustainable development, environment and poverty	RBM	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Global environmental issues: Population, income and urbanization, health care, forest and water resources	RG	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Global goals for sustainable development:	RG	May	TH (lecture method using ppt &		MCQ& Short questions	Test examination in June 2022-

	Domain, conflict, crisis and compromise			interactive discussion)			23
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AZAD HIND FOUZ SMRITI MAHAVIDYALAYA

Dept. of Geography

Syllabus structuring & lesson plan

2021-22 (CBCS)

January to June (2021-22)

6TH Semester

GEO-A-CC-6-13-TH–EvolutionofGeographicalThought

Unit I: Nature of Pre Modern Geography:

Unit	Section	Teacher	Time frame	Theory	Prac	CIE	Internal examination
6.1 3.I. 1	Development to modern Geography: Contributions of Greek, Chinese, and Indian geographers	HMK	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Impact of 'Dark Age' in Geography and Arab contributions	HMK	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Geography during the age of 'Discovery' and 'Exploration' (contributions of Portuguese voyages, Columbus, Vasco da Gama, Magellan, Thomas Cook)	HMK	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Transition from cosmography to scientific Geography contributions of Bernard Varenus and Immanuel Kant). Dualism and Dichotomies (General vs. Particular, Physical vs. Human, Regional vs. Systematic, Determinism vs. Possibilism, Ideographic vs. Nomothetic)[HMK	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test exam in June 2022-23

Unit II: Foundations of Modern Geography and Recent Trends

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
6.13. II. 1	Evolution of Geographical thoughts in Germany ,France, Britain and United States of America[5] Contributions of Humboldt and Ritter	RBM	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Contributions of Richthofen, Hartshorne– Schaeffer,Ratzel, LaBlaché	RBM	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	1. Trends of geography in the post World War –II period :Quantitative revolution, systems approach[7] Structuralism and historical materialism	RBM	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Changing concept of space with special reference to Harvey	RBM	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
5	1. Evolution of Critical Geography :Behavioral ,humanistic and radical[5] Towards postmodernism: Geography in the 21st Century	RBM	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test (internal) examination in June 2022-23

GEO-A-CC-6-13-P–EvolutionofGeographicalThoughtLab

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
13.6. P. 1	Changing Perception of maps of the world (Ptolemy, IbnBatuta, Mercator)	RG	March		Practical (GEO Lab R-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	
<u>2</u>	Mapping voyages ;Columbus ,Vasco da Gama ,Magellan , Thomas Cook	RG	March		Practical (GEO Lab R-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	Test examination in June 2021-22. 2022-23
<u>3</u>	Group Presentation of 5–10 students any selected school of geographical thought	RBM, RG & HMK	March to June		Practical (GEO Lab R-21) & room no 19 (tracing unit)	Short questions & application oriented short examinations.	Sign of final lab work in 2022-23

GEO-A-CC-6-14-TH–HazardManagement

Unit I: Concepts

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
6.14. I.1	Classification of hazards and disasters .Hazard continuum	RBM	February	TH (lecture method using ppt & interactive discussion		MCQ& Short questions	
2	Approaches to hazard study: Risk perception and vulnerability assessment .Hazard paradigms	RBM	March	TH (lecture method using ppt & interactive discussion		MCQ& Short questions	Test (internal) exam in 2022-23
3	Responses to hazards: Preparedness, trauma and	RBM	April	TH (lecture method using ppt & interactive		MCQ& Short questions	

	after math. Resilience and capacity building			discussion)			
4	Hazard mapping: Data and geospatial techniques	RBM	May	TH (lecture method using ppt & interactive discussion		MCQ& Short questions	

Unit II: Hazard-specific Study with Focus on West Bengal and India

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
6.14.II.1	Earthquake: Factors, vulnerability ,consequences and management	RG	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Landslide: Factors, vulnerability ,consequences and management	RG	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Tropical Cyclone: Factors, vulnerability, consequences and management	RG	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Flood: Factors, vulnerability ,consequences and management	RG	May	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
5	Riverbank erosion :Factors, vulnerability ,consequences and management	RG	February	TH (lecture method using ppt & interactive		MCQ& Short questions	Test (internal) examination in June 2022-23

				discussion)			
6	Fire: Factors ,vulnerability, consequences and management	RG	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
7	Biohazard:Classification,vulnerability,consequencesandm anagement	RG	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	

GEO-A-CC-6-14-P-HazardManagementLab

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
6.14 .P1-3	A Group Project Report is to be prepared and submitted based on any one case study among the following hazards from West Bengal, incorporating preparedness plan, preferably in the vicinity of the candidates' institution / district	RBM, HMK & RG	January to May		Practical (GEO Lab R-21) & room no 19 (tracing unit & RS-GIS Lab)	Short questions & application oriented short examinations.	Test examination in June 2022-23 Sign of final lab work in 2022-23

GEO-A-DSE-A-6-04-TH-Resource Geography

Unit I: Resource and Development

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
A.6.04.1	Natural Resources: Concept and classification	RBM	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Approaches to Resource Utilization :Utilitarian ,Conservational ,Community based adaptive	RBM	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Significance of Resources :Backbone of Economic growth	RBM	March	TH (lecture method using ppt &		MCQ& Short questions	

	and development			interactive discussion)			
4	Pressure on resources .Appraisal and Conservation of Natural Resources	RBM	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
5	Problems of resource depletion—global scenario (forest, water ,fossil fuels	RBM	May	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
6	Sustainable Resource Development	RBM	May	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test (internal) examination in June 2022-23

Unit II: Resource Conflict and Management

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
A.6.04.II .1	Distribution,Utilisation,Proble msandManagementofMetallic MineralResources:Ironore,Ba uxite,copper	RG	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	

2	Distribution, Utilisation, Problems and Management of Non-Metallic Mineral Resources: Limestone, Mica, Gypsum	RG	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Distribution, Utilisation, Problems and Management of Energy Resources: Conventional and Non-Conventional	RG	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Contemporary Energy Crisis and Future Scenario	RG	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
5	Politics of Power resources	RG	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
6	Limits to Growth and Sustainable Use of Resources; Concept of Resource sharing	RG	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test (internal) examination in June 2022-23

GEO-A-DSE-A-6-04-P-Resource Geography Lab

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
A-6-4-P.1	Mapping of forest cover from satellite images	HMK	January		Practical (GEO Lab R-21) & room no 19 (tracing unit & RS-GIS Lab)	Short questions & application oriented	

						short examinations.	
2	Mapping of water bodies from satellite images	HMK	February		Practical (GEO Lab R-21) & room no 19 (tracing unit & RS-GIS Lab)	Short questions & application oriented short examinations.	
3	Decadal changes in state-wise production of coal and iron ore	HMK	February		Practical (GEO Lab R-21) & room no 19 (tracing unit & RS-GIS Lab)	Short questions & application oriented short examinations.	
4	Computing Human Development Index :comparative decadal change of top five Indian states	HMK	March		Practical (GEO Lab R-21) & room no 19 (tracing unit & RS-GIS Lab)	Short questions & application oriented short examinations.	Test (internal) examination in June 2022-23
							Sign of final lab work in 2022-23

GEO-A-DSE-B-6-08-TH– Geography of India

Unit I: Geography of India

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
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B-6-8-I-1	Physiographic divisions with reference to tectonic provinces	RG	January	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Climate, soil and vegetation :Classification and interrelation	RG	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Population: Distribution ,growth, structure and policy	RG	February	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Tribes of India with special reference to Gaddi, Toda ,Santal and Jarwa	RG	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
5	Agricultural regions. Green revolution and its consequences	RG	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
6	Mineral and power resources :Distribution and utilization of iron ore ,coal ,petroleum and natural gas	RG	May	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
7	Industrial development: Automobile and information technology	RG	May	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
8	Regionalization of India: Physiographic (R.L.Singh)and economic (P.Sengupta)	RG	May	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test (internal) examination in June 2022-23

Unit II: Geography of West Bengal

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
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B-6-8-II-1	Physical perspectives :Physiographic divisions ,forest and water resources	RBM	March	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
2	Resources :Agriculture ,mining ,and industry	RBM	April	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
3	Population :Growth ,distribution and human development	RBM	May	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	
4	Regional Issues: Darjeeling Hills and Sundarban	RBM	May	TH (lecture method using ppt & interactive discussion)		MCQ& Short questions	Test (internal) examination in 2022-23

GEO-A-DSE-B-6-08-P–Geography of India Lab

Unit	Section	Teacher	Time frame	Theory	Practical	CIE	Internal examination
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B-6-8-P-1	Monthly temperature and rainfall graphs of five select stations from different physiographic regions of India	RG	March		Practical (GEO Lab R-21) & room no 19 (tracing unit & RS-GIS Lab)	Short questions & application oriented short examinations.	
2	Crop Combination :Comparison of any two contrasting districts in West Bengal	RBM	April		Practical (GEO Lab R-21) & room no 19 (tracing unit & RS-GIS Lab)	Short questions & application oriented short examinations.	
3	Annual trends of production :Mineral resources and manufacturing goods over two decades	RG	May		Practical (GEO Lab R-21) & room no 19 (tracing unit & RS-GIS Lab)	Short questions & application oriented short examinations.	
4	Composite Index :Comparison of developed and backward states	HMK	May		Practical (GEO Lab R-21) & room no 19 (tracing unit & RS-GIS Lab)	Short questions & application oriented short examinations.	Test (internal) examination in June 2022-23
							Sign of final lab work in 2022-23