DEPARTMENTOFGEOGRAPHY

2024-25(NEP SYLLABUS)

PAPER CODE: GEOADS01T

SEMESTER	HONS/GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES (60)	DISTRIBUTION	PROJECT/IF ANY
I	MAJOR	I	1. Internal Structure(Earth) 2. Granite and Basaltic Landforms. 3. Exogenetic& Endogenetoic Forces 4. Fluvial Landforms 5. Hazards (India)	S.R S.D S.Dh	6 5 6 12	July-August July-August August-September	
I	MAJOR	II	6.Layers of Atmosphere 7. Pressure Belts, Jet Streams. 8. Soil Formation. 9. Soil Profile. 10. Concept of Eco-System. 11.Concept of Biome	M.B M.B S.R S.Dh	5 6 15 5	August-September September-October October-November December-January	

PAPER CODE: GEOADS01P

SEMESTER	HONS/GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
I	MAJOR		1. Linear Scale 2.Altimetric Curve, Physiographic Zones 3. Drainage, Geomorphic, Settlement, Transport (Topographical Sheet) 4.Drainage & Channel Patterns(Topographical Sheet) 5.Wind Rose	S.D. S.R M.B M.B M.B S.Dh	60	July-August August July-October November-December July-August	

PAPER CODE: GEOSE-01M-REMOTE SENSING

SEMESTER	HONS/GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES (45)	DISTRIBUTION	PROJECT/IF ANY
I	MAJOR		1. Principles of remote Sensing 2. Sensor Resolution of IRS and Landsat Mission 3. Preparation of FCC from IRS and Landsat, TM,OLI 4. Preparation of LULC Features from Satellite Imageries	S.D M.B	25 20	July-August August July-October November-December July-August	yes

PAPER CODE: GEOADS02T

SEMESTER	HONS/GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES (45)	DISTRIBUTION	PROJECT/IF ANY
II	MAJOR	I	1. Introduction to Human Geography 2. Approaches to Human Geography	S.D S.D	10	February-April	
II		II	3. Evolution of Human Societies 4. Human Adaptation to Environment 5.Distribution,Density,Growth(World Population) 6.Demographic Transition Theory	S.Dh M.B S.R	17	March April May June	
II		III	7.Sectors of Economy 8.Types of Agriculture 9.Site,Situation,types, patterns(Rural Settlements) 10.Classification(Urban Settlements)	S.Dh M.B	18	March-April May-July	

PAPER CODE: GEOADS02P

SEMESTER	HONS/GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
II	MAJOR		1. Growth Rate of Population of two decadal datasets 2. Choropleth Map 3. Types of Settlements(Topographical Map) 4. Transect Chart 5. Proportional Pie Diagrams & Proportional Square Diagram	S.Dh M.B S.D	60	July March March-May July April-June	

PAPER CODE: GEOAHM01T

SEMESTER	HONS/GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES (75)	DISTRIBUTION
I	MINOR	I	1. Internal Structure(Earth) 2. Granite and Basaltic Landforms. 3. Exogenetic & Endogenetoic Forces 4. Fluvial Landforms 5. Hazards (India)	S.R S.D S.Dh	6 6 8 15	July-August July-August August-September
I	MINOR	II	6.Layers of Atmosphere 7. Pressure Belts, Jet Streams. 8. Soil Formation. 9. Soil Profile. 10. Concept of Eco-system. 11.Concept of Biome	M.B M.B S.R S.Dh	6 8 18 8	August-September September-October October-November December-January

PAPER CODE: GEOHM02T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES (75)	DISTRIBUTION	PROJECT/IF ANY
II	MINOR	I	1. Introduction to Human Geography 2. Approaches to Human Geography	S.D S.D	20	February-April	
II	MINOR	II	3. Evolution of Human Societies 4. Human Adaptation to Environment 5. Distribution,Density, Growth(World Population) 6.Demographic Transition Theory	S.Dh M.B S.R	27	March April May June	
II	MINOR	III	7.Sectors of Economy 8.Types of Agriculture 9.Site,Situation,types, patterns(Rural Settlements) 10.Classification(Urban Settlements)	 S.Dh M.B	28	March-April May-July	

PAPER CODE: GEOADS03T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES(75)	DISTRIBUTION	PROJECT/ IF ANY
III	MAJOR	I	1.Earth's tectonic structural evolution with reference to geological time scale, with special reference to the events of the events of the Pleistocene 2. Isostasy: Models of Airy and Pratt, and their applicability 3. Plate Tectonics as a unified theory of global tectonics: Processes and landforms at plate margins and hotspots 4. Folds and Faults- Formation and classification	S.D S.D	20	February-April	
III	MAJOR	II	6.Degradation processes: Weathering, mass wasting and resultant landforms 7. Development of river network and landforms on uniclinal and folded structures, Surface expression of faults. 8.Coacial and glacio-fluvial processes and landforms 9. Aeolian and fluvio-aeolian processes and landforms 10. Models on landscape evolution: views of Davis, Penck and Hack	SDH MB SDH MB	27	March April May June	

PAPER CODE: GEOADS03P

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES(75)	DISTRIBUTION	PROJECT/ IF ANY
III	MAJOR		1.Megascopic identification of (a) mineral samples: Bauxite, calcite, chalcopyrite, feldspar, galena, gypsum, hematite, magnetite, mica, quartz, talc, tourmaline and (b) rock samples:- Granite, basalt, dolerite, laterite, limestone, shale, conglomerate, slate, phyllite, schist, gneiss, quartzite, marble 2. interpretation of geological maps with uniclinal structure, folds, unconformity and intrusions 3. Reference scheme of Survey of India Everest and Open Series bMaps, Map margin information. Extraction and interpretation of geomorphic information from Survey of India 1:50,000 topographical	S.D S.D	20	February-April	

			maps of plateau region: Construction and inyerpretation of relief profiles (serial, superimposed, projected and composite) **4. Drainage basin delineation, stream ordering(Strahler) on the delineated drainage basin** **5. Morphometric analysis: Preparation of Relative Relief(Smith), Average Slope(Wentworth) and Drainage Density (Horton) on a delineated drainage basin.** **(6) Construction of hypsometric curve and derivation of hypsometric integer of a drainage basin of plateau region.** **7. Determination of channel sinuosity index (channel length/ valley length measured through straight line) and braiding index of rivers from topographical maps (c. 10-km reach)** **8. Viva voce based on laboratory notebook**				

PAPER CODE: GEOSE-3M

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES(75)	DISTRIBUTION	PROJECT/ IF ANY
III	**MAJOR**	**I**	**1. Defining research problem, objectives and hypothesis.** **2. Literature review and formulation of research design** **3. Research materials and methods** **4. Techniques of writing scientific reports: Preparing notes, references, bibliography, abstract and keywords** **5. Plagiarism: Classification and prevention**	**S.D** **S.D**	**20**	**February-April**	
III	**MAJOR**	**II**	**6. Fieldwork in Geographical studies: Role and significance. Selection of study area and objectives. Pre-field academic preparations. Ethics of fieldwork** **7. Field techniques and tools: Observation(participant, non-participant),questionnaire (open, closed, structured, non-structured).Interview** **8. Field techniques and tools: Landscape survey using transects and quadrants, constructing a sketch, photo and video recording.** **9. Positioning and collection of samples. Preparation of inventory from field data.**	**SDH** MB SR	**27**	**March** **April** **May** **June**	

			10. Post-field tabulation, processing and analysis of quantitative and qualitative data. **11. Fieldwork: Logistics and handling of emergencies.**				

PAPER CODE: GEOADS04T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES(75)	DISTRIBUTION	PROJECT/ IF ANY
IV	**MAJOR**	**I**	**1. Insolation: Controlling factors. Heat budget of the atmosphere** **2. Temperature: horizontal and vertical distribution. Inversion of temperature: types, causes and consequences** **3. Greenhouse effect and formation, depletion, and significance of the ozone layer**	**S.D** **S.D**	**20**	**February-April**	
IV	**MAJOR**	**II**	**4. Condensation: Process and forms. Mechanism of precipitation: Bergeron-Findeisen theory, collision and coalescence. Forms of precipitation** **5. Air mass: Typology, origin, characteristics and modification** **6. Types of fronts: warm and cold; frontogenesis and frontolysis** **7. Weather: stability and instability; barotropic and baroclinic conditions** **8. Atmospheric disturbances: Tropical and mid-latitude cyclones** **9. Monsoon circulation and mechanism with reference to India** **10. Climatic classification after Koppen, Thornthwaite (1955b)**	**SDH** MB SR	**27**	**March** **April** **May** **June**	

PAPER CODE: GEOADS04P

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES(75)	DISTRIBUTION	PROJECT/ IF ANY
IV	**MAJOR**		**1.Interpretation of daily weather map in India (any two): Pre-Monsoon, Monsoon and post-Monsoon** **2. Construction and interpretation of hythergraph and climograph (G. Taylor)** **3. Construction and interpretation of monthly**	**S.D** **S.D**	**20**	**February-April**	

			rainfall dispersion diagram (quartile method). Climatic water budget 4. Viva voce based on laboratory notebook				

PAPER CODE: GEOADS05T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES(75)	DISTRIBUTION	PROJECT/ IF ANY
IV	MAJOR	I	1. Meaning and approaches to Economic Geography. 2. Concepts in Economic Geography: Goods and services, production, exchange and consumption 3. Concept of economic man, theories of choices 4. Economic distance and transport costs 5. Factors affecting location of economic activity with special reference to agriculture (Von Thunen), and industry (Weber)	S.D S.D	20	February-April	
IV	MAJOR	II	6. Primary activities: Agriculture,forestry, fishing and mining 7. Secondary activities: Manufacturing(cotton textile, iron and steel), concept of manufacturing regions, special economic zones and technology parks 8. Tertiary activities: Transport, trade and services 9. Economic globalization: Concepts and contemporary issues 10. international trade, role of WTO. 11. Emergance of economic blocs(Post W-II): BRICS: Evolution, structure and signlificance	SDH MB	27	March April May June	

PAPER CODE: GEOADS06T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES(75)	DISTRIBUTION	PROJECT/ IF ANY
IV	MAJOR	I	1.Tectonic and stratigraphic provinces, physiographic divisions 2.Climate, soil and vegetation regions 3. Tribes of India with special reference of Gaddi,Toda, Santal and Jarwa 4. Agricultural regions. Green revolution (Phase I and II) and their impacts 5.Mineral and power resources distribution and utilization of iron ore, coal, petroleum and natural gas 6. Industrial development:	MB	20	February-April	

			Automobile and information technology **7. Regionalisation of India: Physiographic (R.L. Singh) and economic (P. Sengupta)**				
IV	**MAJOR**	**II**	**8. Physical perspectives: Physiographic divisions, forest and water resources** **9. Resources: Agriculture, mining, and industry** **10. Population Growth, distribution and human development** **11. Regional issues: Darjeeling Hills and Sundarban**	SDH	**27**	**March** **April** **May** **June**	

PAPER CODE: GEOADS07T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES(75)	DISTRIBUTION	PROJECT/ IF ANY
IV	**MAJOR**		**1.Scientific notation, concepts of rounding, logarithm and anti-logarithm, natural and log scales** **2. Maps: Classification and types. Components of map** **3. Concept and application of scales: Comparative, diagonal and vernier** **4. Coordinate systems: Polar and rectangular** **5. Concept of generating globe and UTM projection** **6. Map projections: Classification, properties and uses** **7. Representation of data: Line, Bar, Isopleths** **8. Representation of area data: Dots and spheres, proportional circles and Choropleth** **9. preparation and interpretation of land use land cover maps** **10. preparation and interpretation of socio-economic maps**	**S.D** **S.D**	**20**	**February-April**	

PAPER CODE: GEOADS07P

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES(75)	DISTRIBUTION	PROJECT/ IF ANY
IV	**MAJOR**		**1. Graphical construction of scales: Comparative, diagonal and Vernier.** **2.Construction of projections: Polar Zenithal Gnomonic, Stereographic, Orthographic, Simple Conic with one standard parallel, Bonne's, Cylindrical Equal Area, and Mercator's**	**S.D** SR	**20**	**February-April**	

			3. Preparation of Thematic maps: **- Age-Sex Pyramid** **-Dots and Sphere diagram showing distribution of rural and urban population.** **-Flow chart**	SDH			

CBCS

PAPER CODE: GEOACOR11T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
V	HONOURS	I	1.Research Methodology: literature review, research problem, materials &methods, report writing	S.R	60	July-September	
V		II	2. Fieldwork- significance, techniques &tools, landscape survey, sample collection, tabulation	S.R		September-December	

PAPER CODE:GEOACOR11P

SEMESTER	HONS/GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
V	HONOURS		Preparation of field reports	M.B	60	July-January	Submission of field reports

PAPER CODE:GEOACOR12T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
V	HONOURS	I	1.PrinciplesofRemote sensing- satellites, sensors, FCC, Landsat TM,OLI,LULC	M.B	30	July-December	
V		II	2. GIS & GNSS- raster, vector, overlay analysis, waypoints, area & Length calculation	S.D	30	July-December	

PAPER CODE:GEOACOR12P

SEMESTER	HONS/GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
V	HONOURS		1. Remote Sensing & GIS-georeferencing, digitization, preparation of thematic maps 2. Preparation of FCC	S.R M.B	60	July-January	

PAPER CODE:-GEOADSE01T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
V	HONOURS	I	Soil Geography-formation, profile, texture, structure, moisture PH, Organic matter, NPK, Soil erosion, Soil classification	MB	35	February-May	
V		II	Bio Geography- Biosphere, Eco system, Biome, Eco tone, Niche, trophic structure, Bio-geochemical cycles, Taiga, Tropical and grassland Biome, Conservation of Biodiversity	SDH	40	February-May	

PAPERCODE:-GEOADSE03T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
V	HONOURS	I	Population dynamics- Concept of demography, population data, population distribution density, growth, classical and modern theories in population distribution and growth	SD	30	February-March	
V	HONOURS	II	Population and development- 1. Fertility, Mortality, Urbanisation, Migration 2. Age-Sex composition, Rural-Urban composition, Human Development 3. Population Policies, Contemporary issues in population	SDH SD	30 15	March-May April-May	

PAPER CODE:-GEOACOR13T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
VI	HONOURS	I	Nature of pre-modern Geography- contributions of Greek and Chinese, Arab, Dark age, Dualism in Geography	SD	45	February-March	
VI	HONOURS	II	Foundations of modern Geography and recent trends- concept of Germany, France, Britain, USA, Contributions of Humboldt, Ritter, Ratzel, Richthofen, Vidal de La Blache Quantitative revolution, system approach	SD	45	March-May	

PAPER CODE-GEOACOR14T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
VI	HONOURS	I	Concept of Hazard and Disaster, Vulnerability, preparedness, Hazard mapping	SDH	30	February-March	
VI	HONOURS	II	Hazard specific study- earth quake, land slide, tropical cyclone, river bank erosion, Radioactive fallout	SDH	30	March-May	

PAPERCODE:-GEOACOR14P

SEMESTER	HONS/GENERAL	UNIT	TOPIC	TEACHER	NO.OFLECTURES	DISTRIBUTION	PROJECT/IFANY
VI	**HONOURS**		**Project report based on any one case study of the following- Thunderstorm, landslide, Flood, River bank erosion, Fire, industrial accident, structural collapse**	SDH	**60**	February-May	

PAPER CODE:-GEOADSE04T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
VI	**HONOURS**	**I**	**Hydrology-Hydrological cycle, Runoff, Infiltration, evapotranspiration, Ground water, Drainage basin**	MB	**40**	**February-March**	
VI	**HONOURS**	**II**	**Oceanography-ocean floor, Physical and chemical properties of ocean water, salinity, marine resources, sea level change**	MB	50	**March-May**	

PAPER CODE:-GEOADSE06T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
VI	**HONOURS**	**I**	**Resource and development-concept, classification, utilization, economic growth and development, global scenario of resource depletion, sustainable development**	SR	**40**	**February-April**	
VI	**HONOURS**	**II**	**Resource conflict and management- mineral resources, energy resources, energy crisis and future scenario, limits to growth and sustainable use of resources**	SR	50	**March-May**	

GEOGRAPHY GENERAL

PAPER CODE-GEOHMCO1T/GEOMCO1T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT /IFANY
I	MINOR	I	1. Internal Structure(Earth) 2. Granite and Basaltic Landforms. 3. Exogenetic& Endogenetoic Forces 4. Fluvial processes 5. Hazards in Indian context	SD SDH	90	July-August July-November July-August	
I	MINOR	II	6. Composition & layering of atmosphere 7. Pressure belts, Jet streams 8. Factors of soil formation 9. Ideal soil profile 10. Eco-system,eco-tone,Niche,succession,habitat 11. Biomes	MB SR SDH		July-October July- November- July-November	

PAPER CODE-GEOHM02T/GEOMCO2T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT /IFANY
II	MINOR	I	1. Concept of human geography 2. Approaches to human geography	SD	90	February-May	
II	MINOR	II	3. Evolution of human societies 4. Tribes:-Eskimo,Masai,Maori 5. Population distribution,density growth 6. Demographic transition theory	SDH MB SR		February-May February-May April-May	

II	MINOR	**III**	**7. sectors of economy** **8. types of agriculture** **9. site,situation,patterns of rural settlements** **10. classification of urban settlements**	SDH MB		March-April April-May	

PAPERCODE-GEOHM03T/GEOMC03T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTIO N	PROJECT/IF ANY
III	MINOR		1. Map scale 2. Map projection 3. SOI Topographical maps 4. Representation of data (cartograms)	SD SR MB SDH	60	July-August July-November July-November July-August	

PAPER CODE-GEOHM03P/GEOMCO3P

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT
III	MINOR		1. Construction of Map scale 2. Construction of Map projection 3. Interpretation of SOI Topographical maps	SD SR MB	60	July-August July- November- July-November	

PAPER CODE-GEOMCO4T

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTIO N	PROJECT/IF ANY
IV	MINOR	I	1. Concept of Environmental Geography, man environment relationship in extreme climate 2. System approach, ecosystem 3. Holistic environment 4. Eco-system	SD MB SDH	90	February-May February-May	
IV	MINOR	II	1. Environmental problems and management 2. & Soil erosion 3. Environmental programmes and policies 4. New environmental policy of India	SDH SR SD		February-May February-May March-April	

Multi-disciplinary course

PAPER CODE:-GEOMD-01M

SEMESTER	HONS/ GENERAL	UNIT	TOPIC	TEACHER	NO.OF LECTURES	DISTRIBUTION	PROJECT/IF ANY
	MAJOR/ MINOR	I	1. concept of projection 2. classification of projection,UTM 3. simple conical projection	SD SR SDH	15	Feb-Dec	
	MAJOR/ MINOR	II	4. Concept of surveying:- Dumpy level,theodolite, total station, GNSS 5. bearing,WGS-84 6. traverse survey using smart phone GNSS application	SDH MB	15	Feb-Dec	
	MAJOR/ MINOR	III	7. types of RS satellites,IRS & landsat missions 8. FCCs,supervised image classification 9. GIS data types:- Raster & Vector 10. Attribute tables & overlay 11. Identification of land use/land cover from FCCs 12. Change detection of river bank from multi-dated maps& images	MB SD MB SDH	15	Feb-Dec	

TENTATIVESCHEDULEOFEXAMINATION

SESSION-2024-25

SEMESTER/YEAR	HONS/GENERAL	INTERNALASSESSMENT	UNIVERSITYEXAM
I	MAJOR/MINOR	First exam 2nd week of September 2024 Second exam 2nd week of November2024	January 2025
II	MAJOR/MINOR	First exam 2nd week of March2024 Second exam 2nd week of May 2025	July 2025
III	MAJOR/MINOR	First exam 1STweek of September 2024 Second exam 1stweek of November2024	January 2025
IV	MAJOR/MINOR	First exam 2nd week of March2025 Second exam 2ndweekof May 2025	July 2025
V	HONS/GENERAL	First exam 1ST week of September 2024 Second exam 1st week of November 2024	January 2025
VI	HONS/GENERAL	First exam 2nd week of March2025 Second exam 2nd week of May 2025	July 2025