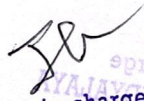


**KALINAGAR MAHAVIDYALAYA**  
**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Geo-tectonics and Geomorphology (GEOACOR01T)**

**1<sup>ST</sup> SEMESTER**  
 4 Credit, 50 Marks (60 classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Geo-Tectonics</b>		
1. Earth's tectonic and structural evolution with reference to geological time scale.	05	05
2. Earth's interior with special reference to seismology Isostasy:Models of Airy and Pratt.	05	05
3. Plate Tectonics as a unified theory of global tectonics: Processes and landforms at plate margins and hotspots.	06	06
4. Folds and Faults—origin and types	07	07
<b>Unit:2: Geomorphology</b>		
4. Degradational processes: Weathering, mass wasting and resultant landforms.	05	05
5. Development of river network and landforms on uniclinaland folded structures	05	05
7. Development of landforms on granites, basalts and Limestones.	04	04
8. Coastal processes and landforms.	05	05
9. Glacial and glacio-fluvial processes and landforms.	05	05
10. Aeolian and fluvio-aeolian processes and landforms.	05	05
11. Models on landscape evolution: Views of Davis, Penck and Hack.	08	08
<b>Total classes/ Teaching Hours=90</b>	<b>60</b>	<b>60</b>

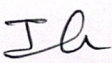
  
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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Geo-tectonics and Geomorphology (GEOACOR01P)**

**1<sup>ST</sup> SEMESTER**  
 2 Credit, 25 Marks (30 Hours/ 15 classes)

Topic	Teaching Hour	No of Classes
1. Megascopic identification of (a) <i>mineral samples</i> : Bauxite, calcite, chalcopryrite, feldspar, galena, gypsum, hematite, magnetite, mica, quartz, talc, tourmaline; and (b) <i>rock samples</i> : Granite, basalt, dolerite, laterite, limestone, shale, sandstone, conglomerate, slate, phyllite, schist, gneiss, quartzite, marble	12	06
2. Interpretation of geological maps with unconformity and intrusions on uniclinal and folded structures	18	09
TOTAL	30	15


NB: 01 Practical Class= 02 Hours

  
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**GEOGRAPHY (HONS)**  
Distribution of Classes and Teaching Hours  
**Cartography Techniques (GEOACOR02T)**

**1<sup>ST</sup> SEMESTER**  
4 Credit, 50 Marks (60 classes)

Topic	Teaching Hour	No of Classes
1. Maps: Classification and types. Components of a map	10	10
2. Concept and application of scales: Plain, comparative, diagonal and vernier	08	08
3. Survey of India topographical maps: Reference scheme of old and open series. Information on the margin of maps	08	08
4. Coordinate systems: Polar and rectangular	07	07
5. Concept of generating globe and UTM projection	07	07
6. Grids: angular and linear systems of measurement	06	06
7. Map projections: Classification, properties and uses	14	14
<b>Total classes/ Teaching Hours=60</b>	<b>60</b>	<b>60</b>

  
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**GEOGRAPHY (HONS)**  
**Distribution of Classes and Teaching Hours**  
**Cartographic Techniques (GEOACOR02P)**

**1<sup>ST</sup> SEMESTER**

2 Credit, 25 Marks (30 Hours/ 15 classes)

Topic	Teaching Hour	No of Classes
1. Graphical construction of scales: Plain, comparative, diagonal and vernier	08	04
2. Construction of projections: Polar Zenithal Stereographic, Simple Conic with two standard parallels, Bonne's, Cylindrical Equal Area, and Mercator's	08	04
3. Delineation of drainage basin from Survey of India topographical map. Construction and interpretation of relief profiles (superimposed, projected and composite), relative relief map, slope map (Wentworth), and stream ordering (Strahler) on a drainage basin.	10	05
4. Correlation between physical and cultural features from Survey of India topographical maps using transect chart	04	02
<b>Total</b>	<b>30</b>	<b>15</b>

NB: 01 Practical Class= 02 Hours

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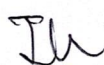
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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Human Geography (GEOACOR03T)**

**2<sup>nd</sup> SEMESTER**  
 6 Credits, 75 Marks (90 classes)

Topic	Teaching Hour	No of Classes
<b>Unit: 01 Nature and Principles</b>		
1. Nature, scope and recent trends. Elements of Human Geography	08	08
2. Approaches to Human Geography; Resource, Locational, Landscape, Environmental	12	12
3. Concept and classification of race; ethnicity	10	10
4. Space, society and cultural regions (language and religion)	10	10
<b>Unit: 02 Society Demography and Ekistics</b>		
5. Evolution of human societies: Hunting and food gathering, pastoral nomadism, subsistence farming and industrial society	08	08
6. Human adaptation to environment: Eskimo, Masai and Maori	06	06
7. Population growth and distribution, composition; demographic transition	12	12
8. Population-Resource regions (Ackerman)	08	08
9. Types and patterns of rural settlements	08	08
10. Morphology of urban settlements	08	08
<b>Total classes/ Teaching Hours=90</b>	<b>90</b>	<b>90</b>

  
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**GEOGRAPHY (HONS)**  
**Distribution of Classes and Teaching Hours**  
**Cartograms and Thematic Mapping (GEOACOR04T)**

**2<sup>nd</sup> SEMESTER**

4 Credits, 50 Marks (60 classes)

Topic	Teaching Hour	No of Classes
1. Concepts of rounding, scientific notation, logarithm and anti-logarithm, natural and log scales	10	10
2. Diagrammatic representation of data: Line, Bar, Isopleths	08	08
3. Representation of area data: Dots and spheres, proportional circles and Choropleth	06	06
4. Preparation and interpretation of land use land cover maps	08	08
5. Preparation and interpretation of socio-economic maps	08	08
6. Bearing: Magnetic and true, whole-circle and reduced	08	08
7. Basic concepts of surveying and survey equipment: Prismatic Compass, Dumpy Level, Theodolite	12	12
<b>Total classes/ Teaching Hours=90</b>	<b>60</b>	<b>60</b>

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**GEOGRAPHY (HONS)**  
Distribution of Classes and Teaching Hours  
**Cartograms and Thematic Mapping (Lab) (GEOACOR04P)**

**2<sup>nd</sup> SEMESTER**  
2 Credits, 25 Marks (15 classes/ 30 Hours)

Topic	Teaching Hour	No of Classes
1. Thematic maps: – Choropleth showing density of population  – Dots and Spheres diagram showing distribution of rural and urban population.  – Proportional pie-diagrams representing economic data and land use data	16	08
2. Traverse survey using prismatic compass  Profile survey using dumpy Level	14	07
<b>Total</b>	30	15

NB: 01 Practical Class = 02 Hours

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**GEOGRAPHY (HONS)**  
**Distribution of Classes and Teaching Hours**  
**Climatology (GEOACOR05T)**

**3<sup>rd</sup> SEMESTER**

04 Credits, 50 Marks (60 classes)

Topic	Teaching Hour	No of Classes
<b>UNIT 1: Elements of the Atmosphere</b>		
1. Nature, composition and layering of the atmosphere	03	03
2. Insolation: controlling factors. Heat budget of the atmosphere	05	05
3. Temperature: horizontal and vertical distribution. Inversion of temperature: types, causes and consequences	04	04
4. Greenhouse effect and importance of ozone layer	04	04
<b>Classification</b>		
5. Condensation: Process and forms. Mechanism of precipitation: Bergeron-Findeisen theory, collision and coalescence. Forms of precipitation	08	08
6. Air mass: Typology, origin, characteristics and modification	04	04
7. Fronts: warm and cold; frontogenesis and frontolysis	05	05
8. Weather: stability and instability; barotropic and baroclinic conditions	06	06
9. Circulation in the atmosphere: Planetary winds, jet stream, index cycle	06	06
10. Tropical and mid-latitude cyclones	05	05
11. Monsoon circulation and mechanism with reference to India	04	04
12. Climatic classification after Köppen, Thornthwaite (1955) and Oliver	06	06
<b>Total classes/ Teaching Hours=60</b>	<b>60</b>	<b>60</b>

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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Climatology (Lab) (GEOACOR05P)**

**3<sup>rd</sup> SEMESTER**  
 2 Credits, 25 Marks (30 Hours/15 Classes)

Topic	Teaching Hour	No of Classes
1. Interpretation of daily weather map of India (any two): Pre-Monsoon, Monsoon and Post-Monsoon	14	07
2. Construction and interpretation of hythergraph and climograph (G. Taylor)	06	03
3. Construction and interpretation of wind rose	06	03
4. A Project File, comprising of one exercise from each of the following is to be prepared and submitted	04	02
<b>Total</b>	30	15

NB: 01 Practical Classes = 02 Hours

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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Geography of India (GEOACOR06T)**

**3<sup>rd</sup> SEMESTER**  
 6 Credits, 75 Marks (90 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit 01 : Geography of India</b>		
1. Tectonic and stratigraphic provinces, physiographic divisions	07	07
2. Climate, soil and vegetation: Characteristics and classification	08	08
3. Population: Distribution, growth, structure and policy	09	09
4. Tribes of India with special reference to Gaddi, Toda, Santal and Jarwa	06	06
5. Agricultural regions. Green revolution and its consequences	06	06
6. Mineral and power resources distribution and utilisation of iron ore, coal, petroleum and natural gas	07	07
7. Industrial development: Automobile and information technology	06	06
8. Regionalisation of India: Physiographic (R.L. Singh) and economic (P. Sengupta)	09	09
<b>Unit 02: Geography of West Bengal</b>		
9. Physical perspectives: Physiographic divisions, forest and water resources	08	08
10. Resources: Agriculture, mining, and industry	08	08
11. Population: Growth, distribution and human development	10	10
12. Regional Issues: Darjeeling Hills and Sundarban	06	06
<b>Total classes/ Teaching Hours=90</b>	<b>90</b>	<b>90</b>

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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Statistical Methods in Geography (GEOACOR07T)**

**3<sup>RD</sup> SEMESTER**  
 4 Credits, 50 Marks [60 classes]

Topic	Teaching Hour	No of Classes
<b>Unit: 01 Frequency Distribution and Sampling</b>		
1. Importance and significance of statistics in Geography	05	05
2. Discrete and continuous data, population and samples, scales of measurement (nominal, ordinal, interval and ratio),	05	05
3. Sources of geographical data for statistical analysis	06	06
4. Collection of data and formation of statistical tables	07	07
5. Sampling: Need, types, and significance and methods of random sampling	05	05
6. Theoretical distribution: frequency, cumulative frequency, normal and probability	05	05
<b>Unit:02 Numerical Data Analysis</b>		
7. Central tendency: Mean, median, mode, partition values	04	04
8. Measures of dispersion range: mean deviation, standard deviation, coefficient of variation	06	06
9. Association and correlation: Rank correlation, product moment correlation	06	06
10. Regression: Linear and non-linear	06	06
11. Time series analysis: Moving average	05	05
<b>Total classes/ Teaching Hours=60</b>	<b>60</b>	<b>60</b>

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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Statistical Methods in Geography (Lab) (GEOACOR07P)**

**3<sup>RD</sup> SEMESTER**  
 2 Credits, 25 Marks (30 Hours/15 Classes)

Topic	Teaching Hour	No of Classes
1. Construction of data matrix with each row representing an areal unit (districts / blocks / <i>mouzas</i> / towns) and corresponding columns of relevant attributes	04	02
2. Based on the above, a frequency table, measures of central tendency and dispersion would be computed and interpreted using histogram and frequency curve	08	04
3. From the data matrix a sample set (20%) would be drawn using, random, systematic and stratified methods of sampling and locate the samples on a map with a short note on methods used	08	04
4. Based on 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	10	05
<b>Total</b>	30	15

NB: 01 Practical Classes = 02 Hours


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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Regional Planning and Development (GEOACOR08T)**

**4<sup>th</sup> SEMESTER**  
 6 Credits, 75 Marks (90 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Regional Planning</b>		
1. Concept of Regions: Types of regions and their delineation.	8	8
2. Regional planning: Types, principles, objective, tools and techniques.	8	8
3. Need for regional planning in India, multi-level planning in India	8	8
4. Metropolitan concept and urban agglomeration.	8	8
<b>Unit:2: Regional Development</b>		
5. Concept of growth and development.	8	8
6. Indicators of development: Economic, social and environmental.	7	7
7. Human development: Concept and measurement.	6	6
8. Theories and models for regional development: Cumulative causation( Myrdal).	8	8
9. Theories and models for regional development: Stages of development(Rostow), growth pole model( Perroux).	8	8
10. Concept and causes of underdevelopment.	5	5
11. Regional development in India: Disparity and diversity.	8	8
12. Need and measures for balanced development in India.	8	8
<b>Total classes/ Teaching Hours=90</b>	90	90

  
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**GEOGRAPHY (HONS & GENERAL)**  
 Distribution of Classes and Teaching Hours  
**Remote Sensing (GEOSSC01M)**

**3<sup>RD</sup> SEMESTER**

2 Credits, 25 Marks (30 Classes)

Topic	Teaching Hour	No of Classes
1. Principles of Remote Sensing (RS): Classification of RS satellites and sensors	06	06
2. Sensor resolutions and their applications with reference to IRS and Landsat missions, image referencing schemes and data acquisition.	08	08
3. Preparation of False Colour Composites from IRS LISS-3 and Landsat TM and OLI data. Principles of image rectification and enhancement.	08	08
4. Principles of image interpretation and feature extraction. Preparation of inventories of land use land cover features from satellite images.	08	08
<i>A project file consisting of four exercises on the above themes is to be submitted</i>		
<b>Total</b>	<b>30</b>	<b>30</b>


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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**ECONOMIC GEOGRAPHY (GEOACOR09T)**

**4<sup>th</sup> SEMESTER**  
 6 Credits, 75 Marks (90 classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Concepts</b>		
1. Meaning and approaches of economic geography.	5	5
2. Concepts of Economic Geography: Goods and services, production, exchange and consumption.	8	8
3. Concept of economic man, theories of choices	6	6
4. Economic distance and transport costs	8	8
<b>Unit:2: Economic Activities</b>		
5. Concept and classification of economic activities.	7	7
6. Factors affecting location of economic activity with special reference to agriculture(Vonthunen) and industry( Weber)	9	9
7. Primary activities: Agriculture, forestry, fishing and mining	7	7
8. Secondary activities: Manufacturing ( cotton textile, iron and steel), concept of manufacturing regions, special economic zones and technology parks.	7	7
9. Tertiary activities: Transport, trade and services.	8	8
10. Agricultural systems: Case studies of tea plantations in India and mixed farming in Europe.	8	8
11. Transitional sea routes, railways and highways with reference to India	8	8
12. International trade and economic blocks: WTO, GATT and BRICS: Evolution, structure and functions	9	9
<b>Total classes/ Teaching Hours=90</b>	90	90

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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**ENVIRONMENTAL GEOGRAPHY (GEOACOR010T)**

**4<sup>th</sup> SEMESTER**  
 4 Credits, 50 Marks (60 Classes)

Topic	Teaching Hour	No of Classes
<b>Concepts</b>		
1. Geographers' approaches to environmental studies	7	7
2. Concepts of holistic environment and system approach.	7	7
3. Ecosystem: Concept, structure and functions.	7	7
4. Space-time hierarchy of Environmental problems: Local, regional and global	7	7
<b>Environmental problems and policies</b>		
5. Environmental pollution and degradation: Land water and air.	8	8
6. Urban environmental issues with special reference to waste management.	8	8
7. Environmental policies- National Environmental policy, 2006, Earth summits (Stockholm, Rio, Johannesburg)	8	8
8. Global initiatives for environmental management ( special reference to Montreal Protocol, Kyoto Protocol, Paris Climate Summit.	8	8
<b>Total classes/ Teaching Hours=60</b>	60	60

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**GEOGRAPHY (HONS)**  
Distribution of Classes and Teaching Hours  
**ENVIRONMENTAL GEOGRAPHY (GEOACOR010P)**

**4<sup>th</sup> SEMESTER**  
2 Credits, 25 Marks (30 Hours/15 Classes)

Topic	Teaching Hour	No of Classes
1. Preparation of questionnaire for perception of survey on environmental problems.	10	05
2. Preparation of check-list for Environmental Impact Assessment of an urban/ industrial project.	10	05
3. Interpretation of air quality using CPCB/WBCPB data.	10	05
<b>Total</b>	30	15

NB: One practical class= Two hours

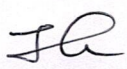
  
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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Advanced Spatial Statistical Techniques (GEOSSEC02M)**

**4<sup>TH</sup> SEMESTER**  
 2 Credits, 25 Marks (30 Classes)

Topic	Teaching Hour	No of Classes
1. Probability theory, probability density functions with respect to Normal, Binomial and Poisson distributions and their geographical applications.	08	08
2. Sampling: Sampling plans for spatial and non-spatial data, sampling distributions. Sampling estimates for large and small samples tests involving means and proportions.	08	08
3. Correlation and Regression Analysis: Rank order correlation and product moment correlation; linear regression, residuals from regression, and simple curvilinear regression. Introduction to multi-variate analysis.	08	08
4. Time Series Analysis: Time Series processes; Smoothing time series; Time series components.	06	06
<i>Any statistical Software Package (e.g., SPSS, MS Excel, R, etc.) may be used for practice. A project file consisting of four exercises on the above themes is to be submitted.</i>		
<b>Total</b>	30	30

  
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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**FIELDWORK AND RESEARCH METHODOLOGY (GEOACOR011T)**

**5<sup>th</sup> SEMESTER**  
 4 Credits, 50 Marks (60 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Research Methodology</b>		
1. Research in geography: Meaning, types and significance.	4	4
2. Literature review and formulation of research design.	6	6
3. Defining research problem, objectives and hypothesis.	5	5
4. Research materials and method.	6	6
5. Techniques of writing scientific reports: Preparing notes, references, bibliography, abstract and keywords.	6	6
<b>Unit:2: Economic Activities</b>		
6. Fieldwork in Geographical studies: Role and significance. Selection of study area and objectives. Pre-field academic preparations. Ethics of fieldwork.	8	8
7. Field techniques and tools: Observation (participant, non-participant), questionnaires (open, closed, structured, non-structured). Interview.	7	7
8. Field techniques and tools: Landscape survey using transects and quadrants, constructing sketch, photo and video recording	8	8
9. Positioning and collection of samples. Preparation of inventory from field data.	5	5
10. Post field tabulation, processing and analysis of quantitative and qualitative data.	5	5
<b>Total classes/ Teaching Hours=60</b>	60	60

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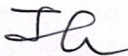
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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Fieldwork and Research Methodology (GEOACOR11P)**

**6<sup>th</sup> SEMESTER**  
 2 Credits, 25 Marks (30 Hours / 15 Classes)

Topic	Teaching Hour	No of Classes
1. Each student will prepare a report based on primary data collected from field survey and secondary data collected from different sources. 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. 3. The fieldwork should be completed within seven days. 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. 5. Maps and diagrams should not exceed 15 pages. 6. All sections of the report should contain relevant maps, diagrams and photographs using primary and secondary data, clearly citing sources. 7. A copy of the bound report, duly signed by the concerned teacher, will be submitted during examination.	30	15
<b>Total</b>	30	15

NB: 01 Practical Class= 02 Hours

  
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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**REMOTE SENSING AND GIS (GEOACOR012T)**

**5<sup>th</sup> SEMESTER**  
 4 Credits, 50 Marks (60 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Remote sensing</b>		
1. Principles of remote Sensing (RS): Types of RS satellites and sensors.	7	7
2. Sensor resolutions and their applications with reference to IRS and Landsat missions.	7	7
3. Preparation of False Colour Composition from IRS LISS-3 and Landsat TM and OLI data.	7	7
4. Principles of image correction and interpretation. Preparation of inventories of land use land cover (LULC) features from satellite images.	7	7
<b>Unit:2: Geographical Information Systems and Global Navigation Satellite System</b>		
5. Concept of GIS and its applicability; DIS data structure: types: spatial and non-spatial, raster and vector.	8	8
6. Principles of preparing attribute tables and data manipulation and overlay analysis.	8	8
7. Principles of GNSS positioning and waypoint collection.	8	8
8. Transferring waypoints to GIS. Area and length calculations from GNSS data.	8	8
<b>Total classes/ Teaching Hours=60</b>	<b>60</b>	<b>60</b>

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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**Remote Sensing and GIS (GEOACOR012P)**

**5<sup>th</sup> SEMESTER**  
 2 Credits, 25 Marks (30 Hours / 15 Marks)

Topic	Teaching Hour	No of Classes
1 .Georeferencing of maps and images using Open Source software	08	04
2. Preparation of FCC and identification of features using standard FCC and other band combinations	10	05
3. Digitisation of features. Data attachment, overlay and preparation of annotated thematic maps (choropleth, pie chart and bar graphs).	12	06
4 Note: All exercises to be done using QGIS (2.10 and above)		
<b>Total</b>	30	15

**NB: 1 Practical Class=2 Hours**


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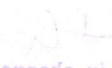
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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**EVOLUTION OF GEOGRAPHICAL THOUGHT (GEOACOR013T)**

**6<sup>th</sup> SEMESTER**  
 6 Credits, 75 Marks (90 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Nature of Pre-modern Geography</b>		
1. Development of Geography: Contributions of Greek and Chinese geographers	12	12
2. Impact of 'Dark Age' in Geography and Arab contributions	10	10
3. Geography during the age of 'Discovery' and 'Exploration' (contributions of Columbus, Vasco da Gama, Magellan, Thomas Cook)	12	12
4. Transition from cosmography to scientific Geography (contributions of Bernard Varenius and Immanuel Kant). Dualism and Dichotomies (Ideographic vs. Nomothetic, Physical vs. Human, Regional vs. Systematic, Determinism vs. Possibilism,)	12	12
<b>Unit:2 : Foundations of Modern Geography and Trends</b>		
5. Evolution of Geographical thoughts in Germany, France, Britain and United States of America	08	08
6. Contributions of Humboldt and Ritter	06	06
7. Contributions of Richthofen, Hettner, Ratzel and Vidal de LaBlaché	08	08
8. Trends of geography in the post-World War-II period: Quantitative Revolution, systems approach.	06	06
9. Evolution of Critical Geography: Behavioural, humanistic and radical.	08	08
10. Changing concept of time-space in geography in the 21st Century	08	08
<b>Total classes/ Teaching Hours=90</b>	<b>90</b>	<b>90</b>

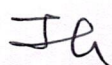
  
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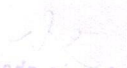
  
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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**DISASTER MANAGEMENT (GEOACOR014T)**

**6<sup>th</sup> SEMESTER**  
 4 Credits, 50 Marks (60 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Concepts</b>		
1. Classification of hazards and disasters	06	06
2. Approaches to hazard study: Risk perception , vulnerability assessment. Hazard paradigms.	08	08
3. Responses to hazards: Preparedness, trauma and aftermath. Resilience and capacity building.	08	08
4. Hazards mapping: Data and geospatial techniques (for hazards enlisted in Unit II and Core 14P)	06	06
<b>Unit:2: Hazard-specific Study with focus on India</b>		
5. Earthquake: Factors, vulnerability, consequences and management	08	08
6. Landslide: Factors, vulnerability, consequences and management	06	06
7. Tropical Cyclone: Factors, vulnerability, consequences and management	08	08
8. Riverbank erosion: Factors, vulnerability, consequences and management	05	05
9. Radioactive fallout: Factors, vulnerability, consequences and management	05	05
<b>Total classes/ Teaching Hours=60</b>	<b>60</b>	<b>60</b>

  
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**GEOGRAPHY (HONS)**  
Distribution of Classes and Teaching Hours  
**Disaster Management (GEOACOR14P)**

**6<sup>th</sup> SEMESTER**  
2 Credits, 25 Marks (30 Hours / 15 Classes)

Topic	Teaching Hour	No of Classes
1. Thunderstorm 2. Landslide 3. Flood 4. Coastal/ riverbank erosion 5. Fire 6. Industrial accident 7. Structural collapse	30	15
<b>Total</b>	30	15

NB: 1 Practical Class=2 Hours Duration

  
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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**SOIL AND BIOGEOGRAPHY (GEOADES01T)**

**5<sup>th</sup> SEMESTER**  
 6 Credits, 75 Marks (90 Classes)


Topic	Teaching Hour	No of Classes
<b>Unit:1: Soil Geography</b>		
1. Factors of soil formation. Man as an active agent of soil transformation.	6	6
2. Soil profile. Origin and profile characteristics of Lateritic, Podzol and Chernozem soils	8	8
3. Definition and significance of soil properties: Texture, structure and moisture,	8	8
4. Definition and significance of soil properties: pH, organic matter and NPK	6	6
5. Soil erosion and degradation: Factors, processes and mitigation measures	8	8
6. Principles of soil classification: Genetic and USDA. Concept of land capability and its classification	8	8
<b>Unit 2: Biogeography</b>		
7. Concepts of biosphere, ecosystem, biome, ecotone, community, niche, succession and ecology	6	6
8. Concepts of trophic structure, food chain and food web. Energy flow in ecosystems	8	8
9. Geographical extent and characteristic features of: Tropical rain forest, Taiga and Grassland biomes	12	12
10. Bio-geochemical cycles with special reference to carbon dioxide and nitrogen	8	8
11. Spatial distribution of world fauna.	6	6
12. Measures for conservation of bio-diversity in India: Man and Biosphere Programme	6	6
<b>Total classes/ Teaching Hours=90</b>	<b>90</b>	<b>90</b>

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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**SETTLEMENT GEOGRAPHY (GEOADES02T)**

**5<sup>th</sup> SEMESTER**  
 6 Credits, 75 Marks (90 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Rural Settlement</b>		
1.Scope and content of Settlement Geography; rural, urban and peri-urban areas	6	6
2. Rural Settlement: Definition, nature and characteristics	8	8
3. Morphology of rural settlements: site and situation, layout-internal and external	8	8
4. Rural house types with reference to India, Social segregation in rural areas; Census categories of rural settlements.	6	6
5. Problems and policies related to rural infrastructure with reference to India	8	8
<b>Unit:2 : Urban Settlement</b>		
6. Urban Settlements :Census definition (Temporal) and categories in India	8	8
7. Urban morphology: Classical models: Burgess, Homer Hoyt, Harris and Ullman Metropolitan concept.	6	6
8. City-region and Conurbation , Functional classification of cities: Harris, Nelson and McKenzie	10	10
9. Aspects of urban places: Location, site and situation, Size and spacing of cities: the rank size rule, the law of the primate city	8	8
10. Urban hierarchies : Central Place Theory; August Lösch's theory of market centres	10	10
11. Spatial distribution of world fauna.	6	6
12. Measures for conservation of bio-diversity in India: Man and Biosphere Programme	6	6
<b>Total classes/ Teaching Hours=90</b>	<b>90</b>	<b>90</b>

  
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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**POPULATION GEOGRAPHY (GEOADES03T)**  
**5<sup>th</sup> SEMESTER**  
 6 Credits, 75 Marks (90 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Population Dynamics</b>		
1. Development of Population Geography as a field of specialization. Relation between population geography and demography. Sources of population data, their level of reliability and problems of mapping.	8	8
2. Population distribution: density and growth. Classical and modern theories in population distribution and growth, Demographic transition model.	8	8
3. World patterns determinants of population distribution and growth. Concept of optimum population.	8	8
4. Population distribution, density and growth profile in India.	6	6
<b>Unit2: Population and development</b>		
5. Concepts of Age-Sex Composition; Rural and Urban Composition; Literacy and education	8	8
6. Measurements of fertility and mortality. Concept of cohort and life table	6	6
7. Population composition of India: Urbanisation and Occupational structure.	6	6
8. Migration: Causes and types	8	8
9. National and international patterns of migration with reference to India.	6	6
10. Population and development: population-resource regions.	8	8

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**GEOGRAPHY (DSE)**  
 Distribution of Classes and Teaching Hours  
**HYDROLOGY AND OCEANOGRAPHY (GEOADES04T)**

**6<sup>th</sup> SEMESTER**  
 6 Credits, 75 Marks (90 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Hydrology</b>		
1. Systems approach in hydrology. Global hydrological cycle: Its physical and biological role	10	10
2. Run off: controlling factors. Infiltration and evapotranspiration. Run off cycle	10	10
3. Drainage basin as a hydrological unit. Principles of water harvesting and watershed management	8	8
4. Groundwater: Occurrence and storage. Factors controlling recharge, discharge and movement	10	10
<b>Unit-2: Oceanography</b>		
5. Major relief features of the ocean floor: characteristics and origin according to plate tectonics	10	10
6. Physical and chemical properties of ocean water	10	10
7. Water mass, T-S diagram	8	8
8. Ocean temperature and salinity: Distribution and determinants	8	8
9. Marine resources: Classification and sustainable utilisation	8	8
10. Sea level change: Types and causes	8	8
<b>Total classes/ Teaching Hours=90</b>	90	90



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Concept of human development index and its components.		
11. Population policies in developed and less developed countries. India's population policies, population and environment, implication for the future.	9	9
12. Contemporary Issues – Ageing of Population; Declining Sex Ratio; Population and environment dichotomy, HIV/AIDS.	9	9
<b>Total classes/ Teaching Hours=90</b>	<b>90</b>	<b>90</b>

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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**SOCIAL GEOGRAPHY (GEOADES05T)**  
**6<sup>th</sup> SEMESTER**  
 6 Credits, 75 Marks (90 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Social, Identity and Crisis</b>		
1. Social Geography: Concept, Origin, Nature and Scope	8	8
2. Concept of Space, Social differentiation and stratification; social processes	8	8
3. Social Categories: Caste, Class, Religion, Race and Gender and their Spatial distribution	9	9
4. Basis of Social region formation; Evolution of social-cultural regions of India	6	6
5. Peopling Process of India: Technology and Occupational Change; Migration.	8	8
6. Social groups, social behaviour and contemporary social environmental issues with special reference to India	8	8
<b>Unit2: Social Wellbeing and Planning</b>		
7. Concept of Social Well-being, Quality of Life, Gender and Social Well-being	6	6
8. Measures of Social Well-being: Healthcare, Education, Housing, Gender Disparity	8	8
9. Social Geographies of Inclusion and Exclusion, Slums, Gated Communities, Communal Conflicts and Crime.	9	9
10. Social Planning during the Five Year Plans in India	8	8
11. Social Policies in India: Education and Health	6	6
12. Social Impact Assessment (SIA): Concept and importance	6	6
<b>Total classes/ Teaching Hours=90</b>	<b>90</b>	<b>90</b>

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**GEOGRAPHY (HONS)**  
 Distribution of Classes and Teaching Hours  
**RESOURCE GEOGRAPHY (GEOADSE06T)**

**6<sup>th</sup> SEMESTER**  
 6 Credits, 75 Marks (90 Classes)

Topic	Teaching Hour	No of Classes
<b>Unit:1: Resource and Development</b>		
1. Natural Resources: Concept and classification	8	8
2. Approaches to Resource Utilization: Utilitarian, Conservational, Community based adaptation	10	10
3. Significance of Resources: Backbone of Economic growth and development	10	10
4. Pressure on resources. Appraisal and Conservation of Natural Resources	10	10
5. Problems of resource depletion—global scenario (forest, water, fossil fuels).	10	10
6. Sustainable Resource Development	8	8
<b>Unit2: Resource Conflict and Management</b>		
7. Distribution, Utilisation, Problems and Management of Mineral Resources: Bauxite and Iron Ore.	8	8
8. Distribution, Utilisation, Problems and Management of Energy Resources: Conventional and Non-Conventional	10	10
9. Contemporary Energy Crisis and Future Scenario	8	8
10. Limits to Growth and Sustainable Use of Resources; Concept of Resource sharing: Water	8	8
<b>Total classes/ Teaching Hours=90</b>	90	90

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