

## **DEPARTMENT OF GEOGRAPHY**

### **Course Outcome or Learning Outcome Three year B.A. /B.Sc. degree course Under CBCS semester system HONOURS COURSE IN GEOGRAPHY With effect from 2022-23**

Course Name:	Core Course-1
Course Code:	GEOACOR01T & GEOACOR01P
Topic Name:	Geotectonics and Geomorphology
Course Outcome:	After successful completion of this course students will be able to: <ol style="list-style-type: none"><li>1. Understand the geological time scale, interior of the earth, isostasy, plate tectonics and various types of fold and faults</li><li>2. Students will able to know weathering, mass wasting, different types of structure, development of landforms, granite, basalt and lime stone.</li><li>3. Identify different minerals and rocks.</li><li>4. Interpretation of geological maps with unconformity and intrusions on uniclinal and folded Structures. Draw geological cross sections.</li></ol>
Course Name:	Core Course-2
Course Code:	GEOACOR02T & GEOACOR02P
Topic Name:	Cartographic Techniques
Course Outcome:	After successful completion of this course students will be able to: <ol style="list-style-type: none"><li>1. Understand the components and types of a map. Learn about topographical maps. Delineate of drainage basin from Survey of India topographical map. Construct and interpret relief profiles and order streams on a drainage basin.</li><li>2. Learn about different types of scale and Graphically construct plain, comparative, diagonal and vernier scales</li><li>3. Know about map projection. Understand coordinate system, concept of UTM projection, system of measurement. Construct different map projections.</li><li>4. Learn about reference scheme of old and open series topographical map of Survey of India and also it's margin concept. Identify the correlation between physical and cultural features from Survey of India topographical maps</li></ol>
Course Name:	Core Course-3
Course Code:	GEOACOR03T
Topic Name:	Human Geography
Course Outcome:	After successful completion of this course students will be able to: <ol style="list-style-type: none"><li>1. human civilization evolution,</li><li>2. population distribution</li><li>3. anthropological aspects of Geography.</li></ol>

Course Name: Core Course-4  
Course Code: GEOACOR04T & GEOACOR04P  
Topic Name: Cartogram and Thematic Mapping  
Course Outcome: After successful completion of this course students will be able to:  
1. learn the basic aspects of map drawing, techniques of map drawing, distribution of pattern of map and scale.  
2. Draw thematic maps: choropleth, dots and spheres, pie.  
3. Perform traverse survey using prismatic compass.  
4. Perform profile survey using dumpy Level.

Course Name: Core Course-5  
Course Code: GEOACOR05T & GEOACOR05P  
Topic Name: Climatology  
Course Outcome: After successful completion of this course students will be able to:  
1. Understand the Nature, composition and layering of the atmosphere  
2. Comprehend the elements of weather and climate and their impacts.  
3. Learn different approaches to climate classification and the climatic regions.  
4. Draw weather maps, hythergraph, climograph, and wind rose diagram.

Course Name: Core Course-6  
Course Code: GEOACOR06T  
Topic Name: Geography of India  
Course Outcome: After successful completion of this course students will be able to:  
1. Understand detailed physiographic, climatic, soil, vegetational features of India.  
2. Understand about population of India.  
3. Understand details of different tribes of India.  
4. Learn about the agricultural regions and green revolution in India.  
5. Know about the physical perspectives, forest, water, economic resources of West Bengal.

Course Name: Core Course-7  
Course Code: GEOACOR07T & GEOACOR07P  
Topic Name: Statistical Methods in Geography  
Course Outcome: After successful completion of this course students will be able to:  
1. Learn the significance of statistics in geography.  
2. Understand the importance of the use of data in geography.  
3. Detailed knowledge of statistical techniques to analyse the quantitative data  
4. Gain knowledge about correlation, regression, and time series analysis.  
5. Construct data matrix.  
6. Compute and interpret frequency table, measures of central tendency and dispersion.  
7. Compute and interpret scatter diagram, correlation and regression.

Course Name: Core Course-8  
Course Code: GEOACOR08T  
Topic Name: Regional Planning and Development  
Course Outcome: After successful completion of this course students will be able to:  
1. Understand types of region as an integral part of geographical study.  
2. They can know about delineation of region  
3. Gain knowledge about types, objectives, tools and needs of regional planning with special reference to India

Course Name: Core Course-9  
Course Code: GEOACOR09T  
Topic Name: Economic Geography  
Course Outcome: After successful completion of this course students will be able to:  
1. Assess the significance of Economic Geography, the concept of economic man  
2. They will also gain knowledge about economic distance and transport cost  
3. Understand the concept of economic activity  
4. Analyse the factors of location of agriculture and industries

Course Name: Core Course-10  
Course Code: GEOACOR10T & GEOACOR10P  
Topic Name: Environmental Geography  
Course Outcome: After successful completion of this course students will be able to:  
1. They can know how prepare a questionnaire for perception survey on environmental problems  
2. Develop concepts and skills regarding preparation of check list for Environmental Impact Assessment  
3. Develop skills regarding interpretation of air quality using secondary data sources  
4. Prepare questionnaire for perception survey on environmental problems.  
5. Prepare check-list for Environmental Impact Assessment of an urban / industrial project.  
6. Interpret of air quality data.

Course Name: Core Course-11  
Course Code: GEOACOR11T & GEOACOR11P  
Topic Name: Field work and Research Methodology  
Course Outcome: After successful completion of this course students will be able to:  
1. Learn the significance of field work and research in geographical studies.  
2. Know about different types of field techniques and develop ideas about research design, problems.  
3. Understand the field ethics and different tools of field study.  
4. Conduct field work on physical and socio-economic aspects of geographical landscapes.  
5. Learn the process to collect primary data from the field and to use secondary data.  
6. Prepare field report with suitable tables, maps and diagrams based on collected data and to represent the realities of the study area.  
7. Prepare different field maps and diagrams.

Course Name: Core Course-12  
Course Code: GEOACOR12T & GEOACOR12P  
Topic Name: Disaster Management  
Course Outcome: After successful completion of this course students will be able to:  
1. Have comprehensive knowledge on various disasters in India with special reference to the consequences and mitigation measures.  
2. Write a report on disaster incorporating a preparedness plan.  
3. Prepare one individual report based on case study on disasters that have occurred in West Bengal.

Course Name: Core Course-13  
Course Code: GEOACOR13T  
Topic Name: Evolution of Geographical Thought  
Course Outcome: After successful completion of this course students will be able to:  
1. Identify the evolution of the philosophical thoughts of Geography/Earth Sciences.  
2. Escalate the contribution of the great thinkers in Geography/ Earth Sciences.  
3. Discussing the evolution of geographical thought from ancient to modern to post modern times.  
4. Changing scenario of man-environment relationships through time.

Course Name: Core Course-14  
Course Code: GEOACOR14T & GEOACOR14P  
Topic Name: Remote Sensing and GIS  
Course Outcome: After successful completion of this course students will be able to:  
1. Perform georeferencing of maps and images using open-source software.  
2. Prepare FCC and identify features using standard FCC and other band combinations.  
3. Digitise features and attach data.  
4. Perform overlay analysis and prepare annotated thematic maps: choropleth, pie chart and bar graphs.

Course Name: Discipline Specific Elective-1  
Course Code: GEOADSE01T  
Topic Name: Soil and Bio Geography  
Course Outcome: After successful completion of this course students will be able to:  
1. Have knowledge of the soil formation processes, soil profiles.  
2. Learn about the physical and chemical properties of soil.  
3. Have comprehensive knowledge of soil erosion and degradation and soil classification.

Course Name: Discipline Specific Elective-2  
Course Code: GEOADSE03T  
Topic Name: Population Geography  
Course Outcome: After successful completion of this course students will be able to:  
1. Learn about the development of Population Geography.  
2. Have comprehensive knowledge of population distribution and theories related to it.  
3. Gain knowledge of various contemporary issues on population studies.

Course Name: Discipline Specific Elective-3  
Course Code: GEOADSE04T  
Topic Name: Hydrology and Oceanography  
Course Outcome: After successful completion of this course students will be able to:  
1. Understanding the concept of hydrological cycle  
2. Assessing the physical and chemical properties of ocean water including T-S diagram  
3. Concept of Sea Level Change: Global and Regional

Course Name: Discipline Specific Elective-4  
Course Code: GEOADSE06T  
Topic Name: Resource Geography  
Course Outcome: After successful completion of this course students will be able to:  
1. Understand the concept and classification of resources  
2. Assessing different management practices of Energy Resources: Conventional and Non-Conventional  
3. Appreciate the concept of Limits to Growth, resource sharing and sustainable use of resources.

Course Name: Skill Enhancement Course-1  
Course Code: GEOSSEC01M  
Topic Name: REMOTE SENSING  
Course Outcome: After successful completion of this course students will be able to:  
1. Understand the principles of remote sensing.  
2. Classify Remote Sensing satellites and sensors.  
3. Understand the principles of image rectification and enhancement.  
4. Learn the principles of image interpretation and feature extraction.  
5. Prepare inventories of land use land cover features from satellite images.  
6. Develop an idea about satellite image interpretation.

Course Name: Skill Enhancement Course-2  
Course Code: GEOSSEC02M  
Topic Name: Advanced Spatial Statistical Techniques  
Course Outcome: After successful completion of this course students will be able to:  
1. Learn about probability theory and their application in geography.  
2. Understand various sampling techniques and sampling estimates  
3. Gain knowledge about correlation and regression