

### **The Programme Outcomes:-**

The programme learning outcomes relating to B.Sc. (Hons.) Programme in geography:

- Demonstrating the understanding of basic concepts in geography.
- Demonstrating the coherent and systematic knowledge in the discipline of geography to deal with current issues and their solution.
- Display an ability to read and understand maps and topographic sheets to look at the various aspects on the space.
- Cultivate ability to evaluate critically the wider chain of network of spatial aspects from global to local level on various time scales as well.
- Recognize the skill development in Geographical studies programme as part of career avenues in various fields like teaching, research and administration.

### **Course Outcomes:-**

The course level learning outcomes includes:

1. **Basic Concept:** The fundamental concepts and philosophical foundation of each course need to be discussed.
2. **Understanding Landscape:** An understanding of landscape at different levels needs to be discussed and understood for a thorough knowledge of spatial dimensions.
3. **Understanding Ecosystem Structure and Potential:** To comprehend the dynamic dimensions of human and ecosystem relationships.
4. **Human Perception and Behaviour:** Learning human perception and behaviour to acquire the geographical knowledge evolved over time, is essential to improve decision making process.
5. **Identification of Critical Problems and Issues:** Detection and identification of the critical problems and spatial issues are essential for sustainable development.
6. **Field Based Knowledge:** Field based knowledge is essential to understand the ground reality, spatial patterns and processes.
7. **Spatial Tools and Techniques:** The basics and applications of spatial tools and techniques are essential to make the studies more scientific and applicable.
8. **Statistical Techniques:** Use of statistical tools and techniques is essential for precise and objective geographic analysis and interpretation of complex phenomena.

9. **Applied Dimensions:** Identification of the critical problems and spatial issues form the core of the modern geography for various applications and decision making, including Surface and sub-surface Resources, Environment & Disaster Management, River Valley Planning, Industrial Hazards, Land Use Planning, and Urban and Regional Development together with Climate Change Mitigation and Adaptation, etc.

10. **Case Study based Analysis:** There is a need to understand the specificities of the problems in specific areas for their in-depth comprehension and solution. The case studies are essential, especially to find out the solutions to the lagging regions for their solutions based on firsthand information.

11. **Public Policy and Management:** Spatial aspects and dimensions are the integral parts in the policy making for sustainable regional development. Geographical knowledge needs to be inculcated for application and solutions of the various local, regional and national problems.

12. **Communication Skills:** Communication through models, analogue and digital maps, images and other geographical tools form the sound base for the dissemination of geographical information.

## **Learning Outcomes based Curriculum Framework (LOCF) for Geography under CBCS**

### **Semester- I**

**Course Name: Geomorphology**

**Course Code: BSCHGEOC101**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand the functioning of landform systems in real time and analyze how the natural and anthropogenic operating factors affect the development of landforms
2. Distinguish between the mechanisms that control these
3. Assess the role of structure, stage and time in shaping the landforms, interpret geological maps and apply the knowledge in geographical research.

**Course Name: Cartographic Techniques**

**Course Code: BSCHGEOC102**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand the importance of scale in geography.
2. Read and prepare maps, comprehend locational and spatial aspects of the earth surface.
3. Use and importance of maps for regional development and decision making.

### **Semester-II**

**Course Name: Geography of Human and Cultural landscape Course**

**Course Code: BSCHGEOC201**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. To know the diversity of changing human and cultural landscape.
2. Understand of population growth and its implications.
3. Understand the diversity of culture.

**Course Name: Statistical Method in Geography**

**Course Code: BSCHGEOC202**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand the basics of data collection and sampling.
2. Comprehend the representation and interpretation of the results.
3. Practice results in research.

### **Semester- III**

**Course Name: Climatology and Oceanography**

**Course Code: BSCHGEOC301**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand the elements of weather and climate and its impacts at different scales.
2. Comprehend the climatic aspects and its bearing on planet earth.
3. Understand the oceanic process and availability of resources.

**Course Name: Geography of India**

**Course Code: BSCHGEOC302**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand the physical profile of the country.
2. Study the resource endowment and its spatial distribution and utilization for sustainable development
3. Synthesise and develop the idea of regional dimensions at present.

**Course Name: Fundamentals of Remote Sensing**

**Course Code: BSCHGEOC303**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Appreciate the strength and application of remote sensing
2. Map the resources, their location and availability using GIS software.
3. Apply this knowledge for sustainable development at local to global level.

**Course Name: Geographical Techniques**

**Course Code: BSCHGEOSE303**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Gain knowledge about drawing of longitudinal sections and interpretation of structure of the geological maps.
2. Predict Soil fertility (NPK, pH).
3. Acquire practical knowledge about the application of various metrological instruments.
4. Interpret and predict the climatic condition of an area.

#### **Semester-IV**

**Course Name: Introduction to Global Economic System**

**Course Code: BSCHGEOC401**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Know different types of economic activities and their utilities.
2. Understand the theories that are relevant to contemporary world.
3. Examine the importance of economic initiatives that are crucial to development.

**Course Name: Environment and Natural Resource Management**

**Course Code: BSCHGEOC402**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand the relationship between man and environment.
2. Have good understanding on distribution, utilization and proper management of natural resources.
3. Know about the necessities that are pre-requisite for assessment and review of planning and policies.

**Course Name: Digital Remote Sensing**

**Course Code: BSCHGEOC403**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Develop the skill so as to use digital satellite data using software
2. Prepare the maps based with satellite data to compare with the ground realities.
3. Classify digital data for the land use/land cover and urban studies

**Course Name: Thematic Atlas**

**Course Code: BSCHGEOSE402**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Have sound knowledge regarding the classification and elements of maps.
2. Have proper utilization of maps for explaining geographical issues.
3. Know the methods of preparation of various thematic maps.

**Semester- V**

**Course Name: Regional Planning and Sustainable Development**

**Course Code: BSCHGEOC501**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Identify notable backward regions and solutions for their overall development
2. Have comprehensive understanding regarding the different regions and application of different models and theories for integrated regional development.
3. Select appropriate indicators for the measurement of socio-economic regional development.

**Course Name: Field Techniques, Surveying and Research Methods**

**Course Coe: BSCHGEOC502**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Conduct proper field work for the collection of primary data to bring out grassroots realities.
2. Make use of proper tools and surveying methods for measurement in context of collection and processing of data.
3. Prepare a report based on field data.

**Course Name: Geography of West Bengal**

**Course Code: BSCHGEODSE501**

After the completion of course, the students will have ability to:

1. Understand physical geography of West Bengal and availability of resources
2. Understand the demography, economy and regional issues of West Bengal
3. Assess the developmental problems of West Bengal in the context of future planning

**Course Name: Population Geography**

**Course Code: BSCHGEODSE503**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Learn the role of demography and population studies as a distinct field of human geography
2. Have sound knowledge of key concept, different components of population along with its drivers
3. Examine population dynamics and characteristic with contemporary issues

**Semester-VI**

**Course Name: Evolution of Geographical Thought**

**Course Code: BSCHGEOC601**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand paradigms in geography discipline through time
2. Understand the development of geographical thinking.
3. Understand the past and future trends of geography as a discipline.

**Course Name: Disaster Management Project Work**

**Course Code: BSCHGEOC602**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand processes and impact of disaster on empirical basis.
2. Distinguish both the natural and man-made disaster.
3. Design and prepare project work on disasters.

**Course Name: Biogeography**

**Course Code: BSCHGEODSE603**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Familiarize the dynamics of climate and related theories.
2. Understand of Vegetation as an index of climate.
3. Assess of different aspects of floral and faunal provinces.

**Course Name: Soil Geography**

**Course Code: BSCHGEODSE606**

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. Understand the concepts related to soil.
2. To know the soil diversities and importance of their preservation
3. To know about soil fertility and its significance

**Structure and Detailed Syllabus for Undergraduate Course  
In Geography  
Under Curriculum and Credit Framework for Undergraduate Programmes  
(CCFUP) - NEP 2020**

**Programme: B.Sc.  
Year: I  
Semester: I  
Subject: Geography  
Course Name: Introduction to Physical Geography  
Course Code: BSCGEOMJ101**

Learning Outcome:

- Students shall obtain an overview of the causes of various geophysical and geomorphic phenomena, their impression on the land surface, and their effect on the habitable world.
- The students will definitely assist people regarding risk reduction from any geomorphic hazards.

**Course Name: Elementary Practicals in Physical Geography  
Course Code: BSCGEOSE101**

Learning Outcome:

- Students will learn about the application of scale in geographic studies.
- Students will be able to interpret landform structures with the help of geological maps and learn to identify minerals and rocks, the fundamental element of landforms.
- Upon completing this course, students will understand the interpretation techniques of topographical maps" and their application.
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**Programme: UG Year: I  
Semester: I  
Subject: Geography  
Course Name: Disaster Management  
Course Code: MD-1**

Learning Outcome:

- Students will have in-depth knowledge about the different parameters during any disaster, which are critical to all life forms, especially humans, in a sustainable way.
- Students will familiarize about the mitigation measures to prevent and mitigate different disasters.



**Semester: II**

**Subject: Geography Course Name: Fundamentals of Human Geography**

**Course Code: BSCGEOMJ201**

Learning Outcome:

- At the end of this course, it is expected that students will be able to understand the social environment from local to global perspectives.
- Students will be able to describe and evaluate relevant issues to the needs of the contemporary world.

**Course Name: Elementary Practicals in Human Geography**

**Course Code: BSCGEOSE201**

Learning Outcome:

- Students shall be able to identify the socio-environmental problems of a locality through field experience in future.
- The students will efficiently extract, represent, analyse and interpret demographic and socio-economic data.