BA/BSc Geography Subject Programme Outcome

Students who have graduated with geography honors will be able to understand the spatial organization of physical features and human activities in different spatial scales from local to global; locate features on the surface of the earth and explain why it is so; examine interactions of humans with the environment and describe how physical and cultural landscape change through time, describe the processes that drives earth's climate; create landforms and govern the distribution of plants and animals; analyze and describe cultural phenomenon such as population, development, agriculture, language and religion; get equipped with handling of GPS, acquaint with basic techniques of processing, analysing and interpreting geospatial data using GIS software.

A Geography degree will provide knowledge and skills to begin a variety of rewarding careers such as - Environmental Scientists, Environmental Consultants, Demographers, Urban Planners, GIS Technicians and Analyst, Remote Sensing Analysts, Disaster Preparedness Planners, Urban and Rural Development/ Community Development, Teachers in universities, colleges and schools, Transportation Planners, Hydrologists, Climatologists, Pedologists, Civil Services, Economic and Statistical Analysts, Home Affairs, SOI, Soil and Water conservation and in varieties of other areas.

Programme Specific Outcomes: BA/BSc Geography

Following are the programme specific outcomes for Geography as Honours paper:

- PSO 1: Understand the geographical origin of Earth and inter-relation of geography with natural and social science
- PSO2: Get in-depth knowledge of Geomorphology, Climatology, Hydrology and Oceanography
- PSO3: Acquaint with the geographical pattern of resources and their utilization, regional planning along with sustainable development
- PSO4: Understand the human-environment relationship, population, distribution of racial groups, and the settlement pattern.
- PSO5: Gain an understanding of the dynamic aspect of economic geography and related economic development
- PSO6: Comprehensive study of India along with broader geographical concepts on North-east India.
- PSO7: The knowledge of Geography to better understand productivity in agriculture, tourism, urban-rural relation, and understand aspects of political and social geography
- PSO8: Understand emerging environmental issues, response and mitigation techniques
- PSO9: Enhance and apply theoretical knowledge through fieldworks and practical, learn concepts on surveying, GIS/remote sensing, and map techniques.

Course Outcomes:

The following are the course outcomes for specific papers in each semester for the entire 3-year degree course:

Semester 1:

1. **Course code GGC 1.11: Physical Geography (Theory)**
   - CO1: Introduce students to the field of physical geography, and understand earth's origin and its various landforms and learn the importance of the nature and scope of Physical Geography

- CO2: Gain knowledge on composition and structure of atmosphere, earth's movement, origin and types of rocks, how temperature influences earth, the salinity of ocean water and variation in its temperature.
- CO3: Learn about soil and its formation and major biomes in the world.

2. **Course code GGC 1.12: Fundamental Cartography (Practical)**
   - CO1: Understand the field of Cartography, mostly focused on types of map scale and their construction
   - CO2: Understand the importance of maps, types, scales and acquaint with drawing different types of maps

3. **Course Code GGC 1.21: Human Geography (Theory)**
   - CO1: Acquaint students with the nature of man-environment relationship
   - CO2: Understand the spatial distribution of different racial groups, population, movement and its consequences, and settlement
   - CO3: Develop ideas on man-environment issues

4. **Course Code GGC 1.22: General Cartography I (Practical)**
   - Understand the basic fundamental knowledge of cartography and application of geographical signs and symbols, and how to represent data through different cartographic techniques/methods
   - Understand the technique to construct different types of cartograms (line, bar, pie diagrams)

Semester 2:

5. **Course Code GGC 2.11: Geomorphology (Theory)**
   - CO1: Grasp the fundamental and principles of the dynamic geomorphic earth's processes
   - CO2: Understand various landforms and their associated processes

6. **Course Code GGC 2.12: Cartographic Technique I (Practical)**
   - CO1: Gain general understanding of map scale and map contents for topographical map interpretation
   - CO2: Learn cartographic techniques for measurement and representation of various facets of terrain or topography of any area

7. **Course Code GGC 2.21: Resource Geography (Theory)**
   - CO1: Get in-depth knowledge regarding the geographical pattern in utilization of resources and the economic aspect related to the resources
   - CO2: Understand the spatial distribution of resources and the need for sustainable development and management of resources

8. **Course Code GGC 2.22: Map Projection (Practical)**
   - CO1: Learn the latitudinal and longitudinal significance of locations of a area (state or country)and transfer them to a plane surface

Semester 3:

9. **Course Code GGC 3.11: Climatology (Theory)**
   - CO1: Understand the importance of various atmospheric factors that control the climate
   - CO2: Know about the global climate change and response of man to this change

10. **Course Code GGC 3.12: Graphical Representation of Weather Data (Practical)**
    - CO1: Understand utilization of weather instruments and weather maps
    - CO2: Learn to represent weather data graphically

11. **Course Code GGC 3.21: Economic Geography (Theory)**
    - CO1: Acquire knowledge on the dynamics of economic geography and associated economic development
    - CO2: Identify various factors responsible for uneven distribution of resources, mode of production, consumption, and exchanges happening among countries
12. **Course Code GGC 3.22: Socio-economic Survey (Practical)**
    - CO1: Introduce and understand the geographical significance of fieldworks
    - CO2: Learn about research methodology and understand the applicability of the right techniques
13. **Course Code GGC 3.31: Settlement Geography (Theory)**
    - CO1: Gain understanding of the spatial and temporal characteristics of human settlement and the influence of environmental factors on settlement
    - CO2: Understand the trend and growth of rural and urban settlement and how urbanization impacts the environment
14. **Course Code GGC 3.32: Survey (Practical)**
    - CO1: Learn the significant role of surveying and prepare maps/plans by applying various types of survey
15. **Course Code GGS 3.12 (a): Remote Sensing (Practical)**
    - CO1: Understand the art and concept of remote sensing and its data
    - CO2: Equip students with technical skills in processing geospatial data and digital image interpretation
16. **Course Code GGS 3.12 (b): Advanced Spatial Statistical Techniques (Practical)**
    - CO1: Thorough understanding of statistical and sampling methods and techniques used in geography
    - CO2: Acquire knowledge on correlation and regression for data analysis, deeper knowledge of time series processes and time series analysis

Semester 4:
17. **Course Code GGC 4.11: Hydrology and Oceanography (Theory)**
    - CO1: Gain understanding on the principles and processes of hydrology, drainage basins, and occurrence of groundwater
    - CO2: Learn the dynamic processes associated with oceans
18. **Course Code GGC 4.12: Map Projection II (Practical)**
    - CO1: Learn the drawing of maps through projections, and represent reliefs through Hypsometric and Bathymetric curves
19. **Course Code GGC 4.21: Environmental Geography and Disaster Management (Theory)**
    - CO1: Enable to understand the close relationship between environment and geography and develop ideas on environmental issues that geographers could address
    - CO2: Learn about the emerging environmental issues, mitigation, and management
20. **Course Code GGC 4.22: Environment and Disaster based Project work (Practical)**
    - CO1: Learn the environmental consequences of disasters in the locality or an area
    - CO2: Identify and suggest better measures for environmental management
21. **Course Code GGC 4.31: Geography of India (Theory)**
    - CO1: Develop perspectives on Indian geography
    - CO2: Understand comprehensively the regional development issues, policies, and programs designed
22. **Course Code GGC 4.32: Cartographic Technique II (Practical)**

- CO: Learn the importance of cartographic techniques in geographical study and apply them to draw thematic maps, projections, and survey areas.

23. **Course Code GGS 4.12 (a): Geographical Information System (Practical)**
    - CO1: Acquire basic knowledge on GIS and its application
    - CO2: Equip students with technical skills in geo-spatial data processing, interpretation, and analysis using GIS software

24. **Course Code GGS 4.12 (b): Research Methods (Practical)**
    - CO: Gain knowledge on how to proceed with research problems along with steps, tools, and craft to be adopted and employed.

Semester 5:

25. **Course Code GGC 5.11: Regional Geography of Northeast India (Theory)**
    - CO1: Understand the geographical settings of North-east India and the region's potentiality
    - CO2: Understand the prevailing resources of North-east India, its spatial distribution, and sustainable development

26. **Course Code GGC 5.12: Data based on North-east India (Practical)**
    - CO1: Equip with technique to cartographically represent data in spatial and temporal settings, develop cartograms and maps, and undergo surveys.

27. **Course Code GGC 5.21: Regional Planning and Development (Theory)**
    - CO1: Acquire theoretical insights and perspectives associated with planning and development
    - CO2: Development an understanding of the paradigm shift on environmental issues and plan for sustainable development

28. **Course Code GGC 5.22: Field work (Practical)**
    - CO: Acquire "real world" experience for the purpose of developing direct leadership, programming, and skills for entry into professional career

29. **Course Code GGD 5.11(a): Population Geography (Theory)**
    - CO1: Understand various facets pertaining to the spatial variation in the distribution of human population with special reference to the physical, cultural, and socio-economic environment
    - CO2: Understand human resources, problems, and factors influencing migration

30. **Course Code GGD 5.11(b): Geography of Health and Wellbeing (Theory)**
    - CO1: Understand concept of human health in the context of geography of health
    - CO2: Acquire knowledge on factors that influence human health and the impact of climate change on human health

31. **Course Code GGD 5.12: Cartographic Technique I (Practical)**
    - CO: Acquire skill to represent statistical data quantitatively and qualitatively, and represent population data using various methods

32. **Course Code GGD 5.21 (a): Social Geography (Theory)**
    - CO1: Understand the concept of social geography, its relation with geography, and gain a clear understanding of societal aspects
    - CO2: Understand various social issues ailing human societies and how to mitigate such differences/rifts

33. **Course Code GGD 5.21 (b): Geography of Tourism (Theory)**
    - CO1: Learn the geographical parameters influencing tourism and its allied activities
    - CO2: Develop an understanding to address issues on development associated with tourism

34. **Course Code GGD 5.22: Paper Presentation (Practical)**
    - CO1: Develop research and analytical skills to apply them in solving practical problems, and develop skills on leadership, critical thinking, verbal communication and acquire broader perspective on matters pertaining to the subject

Semester 6:

35. <u>**Course Code GGC 6.11: Advanced Geomorphology (Theory)**</u>
    - CO1: Gain a deeper understanding of geomorphology, and the geomorphic processes
    - CO2: Learn the applicability of geomorphology on issues ranging from settlement to management of environmental hazards

36. <u>**Course Code GGC 6.12: Cartographic Technique III (Practical)**</u>
    - CO: Learn to determine slopes, drainage related data, and interpret topo-sheets

37. <u>**Course Code GGC 6.21: Geography of Nagaland (Theory)**</u>
    - CO1: Gain knowledge on the geographical settings of the state, and associated characteristics
    - CO2: Develop an understanding on availability, utilization, and management of resources.

38. <u>**Course Code GGC 6.22: Field work: Field study and report writing based on Nagaland**</u>
    - CO: Acquire first-hand knowledge of the surroundings on various geographical aspects, get hands-on experience, and acquire "real world' experience for developing leadership, programming, and skills.

39. <u>**Course Code GGD 6.11 (a): Agricultural Geography (Theory)**</u>
    - CO1: Get familiarized with the importance of agriculture management based on geographical settings
    - CO2: Develop ideas and insights on how geographical factors influence agricultural activities, and address issues on agricultural development.

40. <u>**Course Code GGD 6.11 (b): Urban Geography (Theory)**</u>
    - CO1: Learn how geographical factors influence urban development, problems, and issues
    - CO2: Develop insights on relevance of urban economy and geography in a rapidly urbanizing world

41. <u>**Course Code GGD 6.12: Graphical Representation of Data (Practical)**</u>
    - CO: Learn how to represent data through diagrams, and graphs, and also develop an idea on levelling.

42. <u>**Course Code GGD 6.21 (a): Political Geography (Theory)**</u>
    - CO1: Understand and develop ideas on geopolitics, and allied phenomena
    - CO2: Learn the relevance of political geographical studies, resource-conflict management, and displacements

43. <u>**Course Code GGD 6.22: Cartographic Technique II (Practical)**</u>
    - CO: Learn to draw projections with outline maps, equipped with technique in processing and preparation of data using GIS software, and handling GPS and its data.

44. <u>**Course Code GGD 6.21(b): Dissertation**</u>
    - CO1: Develop research and analytical skills, gain a better understanding on the role of geographers in the society and develop skills on leadership, critical thinking, verbal communication and acquire broader perspective on matters pertaining to the subject
    - CO2: Acquire knowledge on preparing and ascertaining data, proper compilation of data and report, sharpen basic concepts of the topic assigned/chosen, and get hands-on real world experience.