# BSC GEOGRAPHY

## Courses and Course Outcome

| **CORE COURSES** | | |
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| SEMESTER 1 | | |
| Course Code | Course Name | Course Outcome |
| GRY1B01 | Fundamentals of Geomorphology | • Describing human-environment, and nature-society interactions as well as global human and environmental issues.<br>• Identifying and explaining the planet's human and physical characteristics and processes, from global to local scales.<br>• Evaluating the impacts of human activities on natural environments.<br>• Applying knowledge of global issues to local circumstances to evaluate the local effects of the issues.<br>• Showing an awareness and responsibility for the environment. |
| SEMESTER 2 | | |

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| GRY2B02 | Process Geomorphology | • Identifying and explaining the planet's human and physical characteristics and processes, from global to local scales.<br>• Evaluating the impacts of human activities on natural landforms.<br>• Describing geomorphic process on the surface and within the Earth. |
| SEMESTER 3 | | |
| GRY3B03 | Climatology | • Understand the structure, composition of the Atmosphere. Understand weather phenomena winds, humidity, precipitation. Understand heat balance. Understand forecasting methods.<br>• Understand that although a growing scientific consensus has become established through the IPCC, the complexities and uncertainties of the science provide opportunity for climate sceptics to challenge the Panel's findings.<br>• Know something of the way various human activities are increasing emissions of the natural greenhouse gases, and are also contributing to sulphate aerosols in the |

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| | | troposphere.<br><br>• Demonstrate an awareness of the difficulties involved in the detection of any unusual global warming "signal" above the "background noise" of natural variability in the Earth's climate and of attributing (in whole or in part) any such signal to human activity.<br><br>• On successful completion of this course, students should be able to understand the mean global atmospheric circulations and disturbances, world climate systems, climatic variability and change. |
| SEMESTER 4 | | |

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| GRY4B04 | Oceanography | • To Analyze and evaluate scientific data to create a conclusion about oceanographic processes.<br>• Provide examples of the interdisciplinary nature of oceanography. Explain interrelationships of oceans to other Earth Systems.<br>• Predict distribution of organisms based on physical and chemical hydrographic data. |
| GRY4B01 (P) | Core Course Practical - Representation of Geographical Data and Weather Map Analysis | • Know about diagrammatic data presentation like line, bar and circle. Develop an idea about different types of thematic mapping techniques.<br>• Gain knowledge about representation of state wise variation in occupational structure and work participation rate using proportional circles and proportional divided circles and also composite index.<br>• Learn to use of various meteorological instruments. Gain knowledge about Indian daily weather report. Learn to draw monthly temperature and rainfall graphs. Gain knowledge about measuring arithmetic |

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| | | growth rate of population and also measures of inequality.<br>• Students learn to use of various meteorological instruments and also learn to interpret of the Indian daily weather report. That's help students to predict the weather report in future.<br>• Understand forecasting methods and understand the process of weather forecasting |
| SEMESTER 5 | | |
| GRY5B05 | Human Geography | • Develop an idea about space and society.<br>• Build an idea about population growth and distribution of population.<br>• Know about population –resource relationship.<br>• Gain knowledge about major themes of human geography |
| GRY5B06 | Cartography | • Know about the history and developments of cartography.<br>• Understand the cartographic process.<br>• Apply mapping of |

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| | | socio-economic data. |
| GRY5B07 | Introduction to Geoinformatics | • Understand about the sensors and platform of remote sensing.<br>• Apply RS and GIS techniques in water resources and disaster management.<br>• Understand the foundation of GIS.<br>• Know about the history and evolution of remote sensing |
| GRY5B08 | Methodology of Geographical Studies | • Understands the models and paradigms in geography.<br>• Understand about sampling.<br>• Apply the methods of geographical analysis |
| SEMESTER 6 | | |
| GRY6B10 | General Geography of India | • Gain factual knowledge about India and its Physical divisions, Climatic conditions, Drainage system, Agricultural regions, Distribution of Mineral and Energy resources, Population, |

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| | | Trade and Commerce.<br>• Acquire a comprehensive understanding of their own country.<br>• Able to define the geographical location of country. |
| GRY6B09 | World Regional and Economic Geography | • Understand the concept of economic activity, factors affecting location of economic activity.<br>• Gain knowledge about different types of primary activities.<br>• Develop an idea about different types of secondary activities.<br>• Acquire knowledge about different types of tertiary activities. |
| GRY6B11 | Geographical Appraisal of Kerala | • Equipped with knowledge of Kerala as follows<br>• Agriculture-Cereal and other crops-their area under cultivation-plantation crops-horticulture problems and prospects of agriculture.<br>• Industries in Kerala: - Major industries - Cottage and small-scale industries - tourism industry – potentialities – major tourist centers.<br>• Distribution and |

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| | | growth of population, density, literacy, sex-ratio: Trend of urbanization – major urbanization problems; roads, railways, waterways and airways.<br><br>• Mineral resources-occurrence-distribution; rare earths and their distribution; power resources – hydroelectric projects-capacity and production – thermal power generation; marine resources – fisheries; fishing villages – importance of fishing in the economy of Kerala. |
| GRY6B12E2 | Biogeography | • Get to know about the factors responsible for plant growth. Students can learn the scope and significance of biogeography.<br><br>• Know, factors affecting the growth and distribution of natural vegetation. They also gather knowledge about biome, ecotone and community, types and component parts of ecosystem, bio-energy cycle, food chain and trophic level.<br><br>• Help them to predict the future change of biogeographical components. They can illustrate the importance about bio- |

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| | | diversity and wetlands. |
| GRY6B02(P) | Map Projections and Geoinformatics | • Develop an idea about scale and draw different types of scale like linear, diagonal and vernier. Acquire knowledge different types of map projection. Gain knowledge about topographical maps and apply this knowledge in ground surface.<br>• Learn the use of various minor instruments like rotameter, Planimeter and Pantograph. Developing an idea about scales and how to draw different types of scales; conversion of scales. Forming a clear concept on map projections.<br>• Know about the interpretation of Air photographs and Satellite imagery. Gain knowledge about image processing, classification of georeferencing, editing and output, overlays.<br>• Topographical maps and its application in practical. Getting familiar with underlying structures |

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| | | with the help of geological maps. |
| GRY6B03(P) | Topographic Map Analysis and Surveying | • Gain knowledge about geological maps and drawing of sections and interpretations of the relief and structure of the geological maps.<br>• To learn graphically about the enlargement and reduction of maps. Learning about chain surveying and prismatic surveying. Getting to know superficially about remote sensing and aerial photo interpretation with the help of pocket stereoscope.<br>• Brings direct interaction of different types of surveying instruments like chain survey, Prismatic Compass, Plane table, Dumpy level, Theodolite with environment.<br>• Necessity of field report in practical geography; collection of data and how to prepare a report from the data collected. Gain knowledge about topographical maps and apply this knowledge in ground surface. |

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| GRY6B (PR) | Course Project | • know how prepare a questionnaire on the basis of perception survey on environmental problems.<br>• Gain knowledge about doing project on environmental problems |
| **COMPLEMENTARY COURSES** | | |
| SEMESTER 1 | | |
| GRY1C01.1 | Development of Geographical Thought | • Gain knowledge about development of geographical thought.<br>• Build an idea about between environmental determinism and Possibilism, systematic and regional.<br>• Know about the trends of geographical thoughts.<br>• Develop an idea about evolution of geographical thinking and disciplinary trends in Germany, France, Britain, and United States of America. |
| SEMESTER 2 | | |

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| GRY2C01.2 | SOIL GEOGRAPHY | • Understand the genetic soil classification and U.S.D.A. soil taxonomy.<br>• They can know the soil formation processes, development and soil physical and chemical composition. |
| SEMESTER 3 | | |
| GRY3C01.3 | Geography of Water Resources | • Geography of Water Resources.<br>• Explain the natural processes of aquatic ecosystems, discuss why conflicts arise over freshwater.<br>• Identify the challenges facing water management in varied climate types around the world and finally compare how humans interact with aquatic ecosystems.<br>• How and why freshwater is distributed unevenly in space and time around the Earth. |
| SEMESTER 4 | | |

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| GRY4C01.4 | Introduction to Disaster Management | • Understand the definition, classification of hazards and disasters.<br>• Develop an idea about factors, consequences and management of earthquake, landslide, and flood and riverbank erosion.<br>• Acquire knowledge about human induced disaster.<br>• Gain knowledge about approaches to hazard study. |
| GRY4C01 (P) | Practical I – Resource Mapping Techniques | • Understand the meaning of field and identifying the resources includes the Natural and Man Made.<br>• Know about different types of field techniques.<br>• Their knowledge about primary and secondary data collection helps them to prepare their survey reports and resource map of a given area.<br>• Learn the significance of field work in geographical studies |