# **COURSE OUTCOMES**

#### **GEOTECTONICS** :

Acquiring the knowledge of geotectonics students are able

- 1) To understand the tectonic history, past geological environments, as well as events which may have transformed or disfigured the rocks.
- 2) Provide advanced knowledge of a wide range of geological techniques and application on geological methods/principles in other interdisciplinary domains.
- 3) Advanced understanding of earth 's surface processes which can be used in solving modern earth science puzzles.

### GEOMORPHOLOGY:

1) Geomorphology is the science of landform that helps students understand their origin, evolution and distribution across the other physical landscape.

2) The course will provide an understanding of the conceptual and dynamic aspects of landform developments.

3) Student will also learn the relevance of applied aspects of Geomorphology in various fields.

### CLIMATOLOGY, SOIL & BIO- GEOGRAPHY

- Studying the climate helps the learners to predict how much rain the next winter might bring, or how far sea levels will rise due to warmer sea temperature. We can also see which regions are most likely to be affected by extreme weather, or which wildlife species are threatened by climate change.
- 2) Pupils can also be able to identify the thermal energy from the sun that is accessible to a region.
- 3) Bio- geography provides an insightful study of geographic variation across terrestrial and marine environments and how it influences the fundamental process of immigration, extinction, and evolution to shape species distributions and nearly all patterns of biological diversity.
- 4) Bio-geography is also crucial as it helps the learners to understand the underlying reasons behind various species living in various locations. Moreover it helps us better understand how to protect Earth's natural habitats effectively.

### **GEOGRAPHY OF INDIA**

After completion of the course, students are able to,

- 1) Identify and explain Indian geographical environment, from global to local scales.
- 2) Evaluate the impact of human activities on natural environments special reference to India.
- 3) To get an introduction to the main regions of the India in terms of both their uniqueness and similarities.

4) Identify the historical, economic, cultural, social and physical characteristics of India.

#### REMOTE SENSING AND GIS:

The students on the completion of this course are able to,

- 1) Evaluate effective sensors and advance technique to extract and mapping the features for various applications.
- 2) Acquiring skills to extract or detecte features from SOI Toposheets using image analysis sign & symbols.
- 3) Using acquired basics of GIS Students will explore mapped data.
- 4) Relate GIS with Remote Sensing technologies.
- 5) Analyze spatial data using GIS analysis tools.

### ECONOMIC GEOGRAPHY

By explaining, synthesize, applying key concepts, techniques and theoretical approaches of economic geography students are able to –

- 1) Establish, and analyze spatial patterns of economic development.
- 2) Explain the role of historical, environmental, cultural and other factors in determining economic activities.
- 3) Students will become sensitize to concept of resources.
- 4) Showing an awareness and responsibilities for the environment.

### SOCIAL AND CULTURAL GEOGRAPHY

1) By acquiring the knowledge of social & cultural geography learners can best understand why people and societies make the choices that they do. This reguires examining the big picture of a culture, including its language, communication, religion, history, current economy and government, its role in globalisation.

2) With the overview of cultural geography students can better understand cultural values, practical, discursive and material expressions and artefacts of people, the cultural diversity and plurality of society, and how cultures are distributed over space, how places and identities are produced, how people make sense of places etc.

### POPULATION AND SETTLEMENT GEOGRAPHY

By the end of this section, the student will be able to –

1) Describe the models of rural and urban structure, comparing and contrasting urban patterns in different regions of the world.

2) Connect the nature and causes of the problems associated with over urbanization in developing countries.

3) Understand population dynamics.

4) understand population policies & its importance.

## DISASTER MANAGEMENT

1) Warning, reduced vulnerability or the prevention of disasters during the next iteration of the cycle and plans that either modify the causes of disasters or mitigate their effects on people, property and infrastructure.

2) Introducing disasters management in the curriculum with help the youth understand how to anticipate , absorb and adapt to such events.

# HYDROLOGY

1) At the end of the semester students will know different physical aspects of water as a natural resource.

2) They will learn some strategies of water resource management.

3) Learn also about the conservation of water.

4) Students can compute critical flow and critical depth in floodplain hydraulics.

5) Students can delineate watersheds and stream polylines from digital elevation data.

### PRACTICAL GEOGRAPHY

1) Knowledge of cartography help students understand our place in the world, analyze positional relationships, and reflect on geography's effect on daily lives.

2) Using the concepts of maps student can represent the real world on a much smaller scale. They can help someone travel from one location to another, help to organize information, help people figure out where they are and how to get where they want to go.

3) By constructing a accurate scale students enables to prepare accurate maps and it also helps in measuring distance.