

# Swarnamoyee Jogendranath Mahavidyalaya

At+P.O.: Amdabad, P.S.: Nandigram, Dist.: Purba Medinipur, PIN 721650

## DEPARTMENT OF GEOGRAPHY

### COURSE OUTCOMES OF COURSES IN BSc HONOURS MAJOR IN GEOGRAPHY

4-YEAR UNDERGRADUATE PROGRAMME w.e.f. 2023-24

BASED ON CCFUP 2023 & NEP 2020

#### MAJOR COURSES (MJ)

##### Semester I

##### MJ1T Geotectonics and Geomorphology (Theory)

3 credits

Upon completion of the course, students will be able to:

- Understand the association between geotectonic processes and geomorphological landforms.
- Critically evaluate and connect geomorphic processes.
- Gain a theoretical and empirical framework for understanding landscape evolution and the characteristics of geomorphic landscapes.
- Develop the ability to:
  - Analyze the impact of natural and anthropogenic factors on landform development.
  - Differentiate between the mechanisms that control geomorphic processes.
  - Assess the roles of structure, stage, and time in shaping landforms, interpret geomorphological maps, and apply knowledge in geographical research.

##### MJ1P Geotectonics and Geomorphology (Practical)

1 credit

Upon completion of the course, students will be able to:

##### *1. Identify and classify rocks and minerals:*

- Gain hands-on skills in recognizing and distinguishing different types of rocks and minerals based on their physical properties, composition, and formation processes.

- Develop an understanding of the geological significance of various rocks and minerals and their role in Earth's tectonic and geomorphic processes.

2. *Interpret geological maps:*

- Develop proficiency in reading and analyzing geological maps to understand the topography, structural features, and geological formations of a region.
- Understand the relationship between surface topography and underlying geological structures such as folds, faults, and rock strata.

3. *Construct geological sections:*

- Learn how to create geological cross-sections that illustrate the subsurface structure of Horizontal, Homoclinal, Folded, and Faulted formations.
- Develop the ability to visualize and interpret the 3D arrangement of rock layers and structures based on 2D map data.

4. *Analyze geological succession and history:*

- Gain the ability to deduce the chronological order of geological events and formations through the study of rock strata and structural features.
- Understand the geological history of an area by analyzing the sequence of rock layers and their structural deformation over time.

5. *Relate Tectonic and Geomorphic Processes:*

- Understand the connections between tectonic forces and landform development through practical observation and map analysis.
- Apply knowledge of geotectonics and geomorphology in understanding how different landforms are created and modified by natural processes such as folding, faulting, and erosion.

## Semester II

### MJ2T Cartographic Techniques (Practical)

4 credits

Upon completion of the course, students will be able to:

- Create professional and aesthetically pleasing maps using cartographic conventions.
- Understand map projections and scales to meet mapping purposes.
- Develop expertise in ground surveying techniques.
- Read and prepare maps effectively.
- Understand the spatial and locational aspects of the earth's surface.
- Recognize the importance of maps for regional development and decision-making.

### SKILL ENHANCEMENT COURSES (SEC)

## Semester I

### SEC 1 Computer Basics and Applications (Practical)

3 credits

Upon completion of the course, students will:

- Gain an overview of computer systems and their applications.
- Gain a foundational understanding of managing files, folders, and basic computer operations.
- Acquire a working knowledge of computer hardware and software.
- Be able to manage files and folders efficiently.
- Be able to operate common applications like MS Word, MS Excel, and MS PowerPoint for practical tasks.

## Semester II

### SEC 2P: Coastal Management (Practical)

3 credits

Upon completion of the course, students will be able to:

- Understand the components and morphodynamic variables of coastal zones and their role in the evolution of coastal landforms.
- Analyze the environmental impacts of activities such as mining, oil exploration, salt manufacturing, land reclamation, and tourism on coastal areas.
- Evaluate coastal hazards (e.g., erosion, flooding, sand encroachment) and management strategies using structural and non-structural measures.
- Learn the principles of Coastal Zone Management, including India's Coastal Regulation Zones, Exclusive Economic Zones, and Integrated Coastal Zone Management (ICZM).

