♥ Birpara, Alipurduar, West Bengal, PIN-735204



03563-266217

Date: 20/Feb/2025

Ref. No: **BC/N/440** 

# **General Notice**

This is hereby informed to all the students of Birpara College that an **Add-on Course** entitled " **Climate Change & Disaster Management**" will be started on and from 11.03.2025 to 24.05.2024 organized by Department of Geography, Birpara College. Coordinator of the course is Pranoy Dey, Assistant Professor, Dept. of Geography, Birpara College. Classes of the course will be arranged before or after the regular classes of the college including on Sundays and Holiday if necessary. Enrolled students must attend at least 75 per cent of classes to receive course completion certificate. Interested students are directed to enrol their names of the course by 06.03.2025.

**REGISTRATION LINK:** 

https://forms.gle/Zbenrxig496tDWZRA

Principal Birpara College

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# ADD ON COURSE ON

# **CLIMATE CHANGE AND DISASTER MANAGEMENT**

Organized By: Department of Geography, Birpara College

Course Duration: 11 March – 24 May, 2025

Course Coordinator: Mr. Pranoy Dey, Assistant Professor, Department of Geography

Course Structure: 30 Hours (2 hours per day)

#### **Course Objectives:**

1. To provide a comprehensive understanding of climate change, its causes, impacts, and global mitigation strategies.

- 2. To familiarize students with disaster management concepts, risk assessment, and preparedness strategies.
- 3. To explore the interconnection between climate change and increasing disaster risks.
- 4. To equip students with skills in disaster response, recovery, and resilience-building.
- 5. To enhance awareness of policies, frameworks, and international agreements on climate and disaster risk management.

#### **Course Outcomes:**

Upon successful completion of this course, students will be able to:

- 1. Explain the scientific basis of climate change and its effects on the environment and human societies.
- 2. Analyze different types of natural and human-induced disasters and their impact on communities.
- 3. Apply risk assessment methods and disaster preparedness strategies in real-world scenarios.
- 4. Develop strategies for climate adaptation and disaster mitigation to enhance community resilience.
- 5. Evaluate national and international policies related to climate change and disaster risk reduction.

#### **REGISTRATION LINK**

https://forms.gle/Zbenrxig496tDWZRA

# **Course Outline:**

# **Day 1: Introduction to Climate Change**

- Definition and Importance
- Causes and Evidence of Climate Change
- Greenhouse Effect and Global Warming

# Day 2: Climate Change and Earth's Systems

- Impact on Atmosphere, Oceans, and Land
- Role of Carbon Cycle and Climate Feedback Loops

# Day 3: Global and Regional Climate Change Trends

- Historical Climate Patterns
- IPCC Reports and Global Climate Models

# **Day 4: Human Activities and Climate Change**

- Industrialization, Deforestation, and Urbanization
- Fossil Fuels and Carbon Emissions

# **Day 5: Climate Change and Biodiversity**

- Impact on Ecosystems and Species
- Migration, Extinction, and Habitat Loss

# Day 6: Climate Change and Public Health

- Effects on Air Quality, Water Resources, and Diseases
- Climate-Induced Health Hazards

#### Day 7: Climate Change and Food Security

- Impact on Agriculture and Fisheries
- Droughts, Floods, and Crop Failures

#### **Day 8: Introduction to Disaster Management**

- Definition of Disasters and Classification (Natural & Man-Made)
- Disaster Risk Reduction (DRR) Framework

#### **Day 9: Climate-Induced Disasters**

- Extreme Weather Events (Cyclones, Floods, Heatwaves)
- Sea Level Rise and Coastal Erosion

# **Day 10: Disaster Preparedness and Early Warning Systems**

- Importance of Forecasting and Technology
- Role of Government and International Organizations

# **Day 11: Community-Based Disaster Management**

- Role of Local Communities
- Case Studies of Successful Disaster Mitigation

# **Day 12: Disaster Response and Recovery**

- Emergency Response Planning
- Post-Disaster Rehabilitation and Reconstruction

#### **Day 13: Climate Policies and Global Agreements**

- Paris Agreement, Kyoto Protocol, and SDGs
- Role of National and Local Governments

#### Day 14: Sustainable Development and Climate Resilience

- Role of Renewable Energy and Green Technologies
- Sustainable Urban Planning and Resilient Infrastructure

#### **Day 15:** Course Summary and Final Assessment