

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar- 799022

West Tripura

Four Years Undergraduate Programme

(As per NEP- 2020)

Ability Enhancement Compulsory Courses:

1. Understanding and connecting with Environment
2. Communicative Bengali
3. English Communication
4. Personal Communication Skill


30/5/23
Prof. B.M. Datta
संकाबाध्यक्ष / Dean
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त्रिपुरा विश्वविद्यालय
Tripura University

ABILITY ENHANCEMENT COMPULSORY COURSE (AECC)
Syllabus for Undergraduate 1st Semester
Under NEP 2020

Understanding and Connecting with Environment
(Number of Theory Credits -3)
Total marks-100

Unit 1 : Introduction to Environmental Studies and Natural Resources (Renewable and Non--renewable Resources)

- Multidisciplinary nature of environmental studies;
- Scope and importance; the need for environmental education. Concept of sustainability and sustainable development
- Land resources and land use change; Land degradation, soil erosion and desertification.
- Forest resources: Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.
- Water resources: Use and over--exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter---state).
- Energy resources: Renewable and non renewable energy sources, use of alternate energy sources, growing energy needs

10 hrs

Unit 2 : Ecosystems and Biodiversity Conservation

- What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food pyramids, food webs and ecological succession.
- Levels of biological diversity : genetic, species and ecosystem diversity; Biogeographic zones of India; global biodiversity hot spots
- India as a mega--biodiversity nation; Endangered and endemic species of India
- Threats to biodiversity : Habitat loss, poaching of wildlife, man---wildlife conflicts, biological invasions; Conservation of biodiversity : In---situ and Ex---situ conservation of biodiversity.
- Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

10 hrs

Unit 3 : Environmental Pollution and Environmental Policies & Practices

- Environmental pollution : types, causes, effects and controls; Air, Water, Soil and Noise pollution
- Nuclear hazards and human health risks
- Solid waste management: Control measures of urban and industrial waste.
- Climate change, global warming, ozone layer depletion, acid rain

10 hrs