

**RAJA RAMMOHUN ROY MAHAVIDYALAYA
RADHANAGAR, NANGULPARA, KHANAKUL,
HOOGHLY: 712 406**

A Report and details of the activities undertaken (with Photographs) by our Mahavidyalaya on implementation of Hon'ble Supreme Court's mandate and UGC guidelines and Curriculum framework for environment education at the undergraduate level

According to the communication through the letter no.:1-1/2023(Environment Education) dated 6th Feb, 2025 through the e-mail, on 08th February, 2025; as per the Supreme Court guidelines and UGC instructions, and being an affiliated college of The University of Burdwan our Mahavidyalaya had taken some of the significant steps to implement the Environment Education. It is also to mention here that The University of Burdwan had already mandatorily implemented the Environment education for all the students at the Undergraduate level. Through the implementation of Environment education at the undergraduate level the main motto of promoting a sense of awareness and sustainable practices is achieved. The following initiatives are taken by our Mahavidyalaya:

Initiatives:

- 1. Incorporation of Environmental Studies:** As per the guideline and given Syllabus of The University of Burdwan, Environmental studies have been incorporated into the curriculum as a compulsory paper/subject for all undergraduate students. *(Syllabus given below as enclosure)*
- 2. Green Campus Initiative:** Our Mahavidyalaya had carried out green campus initiatives, like plantation programmes, Rain water harvesting system and energy conservation measures like installation solar power system.
- 3. Awareness Programmes:** During different observable National Days the Mahavidyalaya through its NSS, NCC and Alumni association had carried out awareness programme not only among the students but also among the local peoples. During this Independence day the National Disaster Response Force (NDRF) had also done an environment awareness programme for our students and the faculty members.
- 4. Projects:** During the end of First Semester all the students are encouraged to undertake projects on environmental issues and sustainable development.

Implementation:

1. **Syllabus:** Being an affiliated college of The University of Burdwan and as per the given guideline and syllabus on Environment education the syllabus was implemented as per the UGC guidelines.
2. **Student Participation:** All the students of our Mahavidyalaya are encouraged to involve in environmental activities and awareness programme.

Result:

1. Being a college of extremely rural area the implementation of the Environmental Education had resulted in increased awareness not only among the college undergraduate students but also among the neighbouring peoples.
2. Being a Mahavidyalaya of the extremely rural area the most significant change we have found among the neighbouring peoples in terms of their behaviour and attitude towards the environment and sustainability.

Challenges Faced:

Being a Mahavidyalaya of the extremely rural area we have

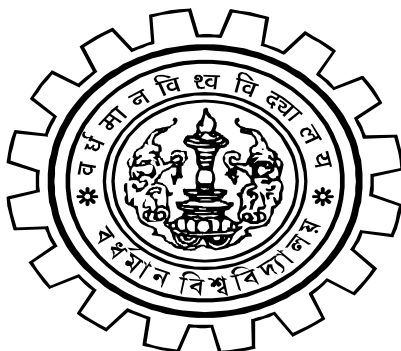
- Limited Resources
- Limited Infrastructure
- Motivating all the students, faculty members and the neighbouring peoples for their active participation in the environment awareness programme is a major challenge.

As per the guidelines of the Honourable Supreme Court, Instruction of the UGC and The University of Burdwan our Mahavidyalaya had implemented the environment education for the Undergraduate students and also put the best foot forward to motivate the people of the local community to make them aware and protect the surrounding environment.





THE UNIVERSITY OF BURDWAN



SYLLABUS for 3-Year Degree/4-Year Hons. in ENVIRONMENTAL SCIENCE/EDUCATION (Value Added Course)

Under

**Curriculum and Credit Framework for
Undergraduate Program (CCFUP), as per N.E.P. 2020)**

w.e.f 2023 – ‘24

SEMESTER- I
VALUE ADDED COURSE
PAPER CODE: CVA 1061 [COURSE NO. 1]
ENVIRONMENTAL SCIENCE/EDUCATION
TOTAL CREDITS: 4
[3:1:0 :: 60+20+20]

TIME: 1 h 30 min

MARKS: 60

Learning objectives

- *To create awareness and understanding of the environment and its different components*
- *To get knowledge on different current environmental problems and issues in national and international levels*
- *To impart knowledge about the management practices of different environmental problems*
- *To get real life experiences of different environmental resources, ecosystems and environmental degradation*

Unit 1: Basics of Environmental Studies: (05)

Definition, Nature, Scope and Importance; Components of environment: Environmental education

Unit 2: Natural Resources: Renewable and Nonrenewable Resources (10)

Nature and natural resources their conservation and associated problems:

- Forest resources: Uses, types and importance, Joint Forest Management & symbiotic relationship between tribal population and forests, Deforestation and its effects
- Water resources: Distribution of water on Earth; Use, over exploitation of surface and ground water; Dams: Benefits and problems; Flood and Drought
- Mineral resources: Mineral resources in India; Use and exploitation, Social impacts of mining
- Food resources: World food problems and food insecurities.
- Energy resources: Renewable and Nonrenewable energy sources; Use of alternate energy sources - Case studies
- Land resources: Land as a resource; Land degradation, landslides, soil erosion, desertification
- Use of resources for sustainable development (Concepts & Goals)

Unit 3: Ecology and Ecosystems (08)

- Concept of ecology, Population ecology, Community ecology
- Concept of an ecosystem, different types of ecosystem
- Food chains, food webs and ecological succession
- Energy flow in the ecosystem and energy flow models

Unit 4: Biodiversity and its conservation (08)

Biodiversity: Levels of biological diversity

- Values of biodiversity
- Hot-Spots of biodiversity, IUCN Red Data Book, Mega-biodiversity countries
- Threat to biodiversity
- Threatened and endemic species of India

- Conservation of biodiversity (*In-situ* and *Ex-situ*)
- Ecosystem services: Ecological, Economic, Social, Ethical, Aesthetical and Informational values

Unit 5: Environmental Pollution and Management (08)

- (a) Nature, Causes, Effects and Control measures of – Air pollution, Water pollution, Soil pollution, Noise pollution
- (b) Solid waste management: Causes, effects and disposal methods; Management of biomedical and municipal solid wastes
- (c) Disaster management: Floods, Earthquake, Droughts, Cyclone and Landslides

Unit 6: Environmental Policies and Practices (10)

Constitutional Provisions for protecting environment- Article 48(A), 51A(g)

- Environmental Laws: The Environment (Protection) Act, 1986; The Air (Prevention and Control of Pollution) Act, 1981; The Water (Prevention and Control of Pollution) Act 1974; Forest (Conservation) Act, 1980
- The wildlife Protection Act, 1972
- Climate change, Global warming, ENSO, Acid rain, Ozone layer depletion; Montreal and Kyoto Protocols

Unit 7: Human Communities and Environment (06)

- Human population growth; Impacts on environment
- Environment and human health: Concept of health and disease; Common communicable and Non- communicable diseases; Public health awareness programmes in India
- Environment movements in India: Chipko Movements, Silent Valley Movement, *Narmada Bachao Andolan*

Unit 8: Field Work Report/Project Report/Term paper Marks: 20

[Based on any one of the following topics and to be evaluated by internal teachers only]

(05)

- Environmental assets - River/Forest/Grassland/Hill/Mountain *etc.*
- Environmental pollution - Urban/Rural/Industrial/Agricultural
- Study of common Plants/Insect /Birds/Wild life *etc.*
- Study of simple ecosystems: Pond/River/Hill slope *etc.*

Learning outcomes

- *Understanding on environment and its importance*
- *Knowledge on different natural resources, causes of depletion and its sustainable uses*
- *Understanding the significance of biodiversity and its conservation*
- *Ideas on provisions of Indian Constitution for environmental protection*
- *Understanding the interrelationship among human population growth, environment and human health*
- *Knowledge of on-field experience on environmental issues through project work*