

ENVIRONMENTAL EDUCATION

SYLLABUS FOR HIGHER SECONDARY FIRST YEAR COURSE

Introduction :

The present status of Environment Education in schools had its genesis in the National Policy of Education (NPE) 1986 (modified in 1992), in which 'Protection of the Environment' is stated as a common core around which a National Curriculum Framework would be woven. The NPE, 1986 emphasized the need to create awareness of environmental concerns by integrating it in the educational process at all stages of education and for all sections of the society. Accordingly, the National Curriculum for Elementary and Secondary Education : A Framework-1988 presented the NCERT's view: "The school curriculum should highlight the measures of protection and care of the environment, prevention of pollution and conservation of energy." Understanding of the environment in its totality, both natural and social, and their interactive processes, the environmental problems and the ways and means to preserve the environment was one of the General Objectives of Education as per National Curriculum Framework, 2005.

Considering the relevance of Environmental Education, as per National Curriculum Framework-2005, the new syllabi being proposed here aim at generating among young students an awareness and sensitivity to the total environment in a holistic manner and the problems associated with it. Again, the Hon'ble Supreme Court of India has also served a directive to introduce Environmental Education in all stages as a compulsory subject.

As per guidelines of honorable Supreme Court, Assam Higher Secondary Education Council has introduced a new subject i.e. Environmental Education for higher secondary First Year from the session 2012-13 with the aim of creating awareness and interest among the students.

Again as per indication of honourable Supreme Court "Road Safety" issue and as per indication of government of Assam, "Disaster Management", these two new units are incorporated in Environmental Education in view of the importance and significance of the two topics as per decision of Assam Higher Secondary Education Council.

Main objectives of Environmental Education :

The main focus of Environmental Education should be to expose students to the real - life world, natural and social, in which they live, to enable them to analyse, evaluate, and draw inference about problems and concerns related to the environment and 'to add' where possible, to our understanding of environmental issues, and to promote positive environmental actions in order to facilitate the move towards sustainable development. To achieve these goals, the curriculum may be based on:

- Learning about the environment;
- Learning through the environment;
- Learning for environment;

In the course curricula of AHSEC, the subject Environmental Education is compulsory for the students of all the streams in HS 1st year course. The students will be assessed through written examination and project work. Though total marks 50 are allotted for the subject but the obtained mark is not calculated in the overall result. Instead of it, grade is awarded on the basis of the marks obtained by the learner. The grading scheme for the subject is as follows...

Grade	Percentage	Marking Range
A	80%-100%	40 – 50
B	60%-79%	30 – 39
C	40%-59%	20 – 29
D	0%-39%	0 – 19

SYLLABUS FOR ENVIRONMENTAL EDUCATION**One Paper****Time : One hour****Marks : 50****Marks in Theory (Written Examination) : 40**

Unit	Topics	Marks	Periods
Unit-1	Environmental Education	20	30
Unit-2	Disaster Management	10	15
Unit-3	Road Safety	10	15
Marks in Project		10	
Total :		50	

Unitwise Distribution of Course contents:**Unit-1 : Environmental Education (Marks 20)****Chapter -1 Basic Concept of Environment**

Components of Environment, Environmental Segments, Environmental Education, Multidisciplinary nature, Need for Environmental Awareness.

Chapter - 2 Ecological Concept

Meaning of ecology and ecosystem, Types of Ecosystem, Structure of Ecosystem, Function of an Ecosystem, Food chain, food web and trophic levels.

Chapter - 3 Biodiversity and its conservation

The term Biodiversity, Value of biodiversity, Threats to biodiversity, Conservation of biodiversity, National Conservation Strategies.

Chapter - 4 Natural Resources

Natural Resources, Different types of Natural Resources, Forest Resources, Conservation of Natural Resources, Water Resource, Land Resource, Mineral Resources.

Chapter - 5 Environmental Pollution

Introduction, The term pollution, Different types of pollution, Classification of pollutants, Causes of environmental pollution, Air Pollution, Deforestation, Vehicular emissions, Burning of fossil fuels, Rapid industrialization, Classification of air pollutants, Water Pollution, Water borne diseases, Soil Pollution, Noise Pollution, Environmental effects of solid wastes.

Chapter - 6 Social Issues and Environment

Concept of Sustainable Development, Sources of energy, Energy Conservation, Environment and Health, Greenhouse Effect, Global warming, Climate change, Depletion of ozone layer, Acid rain.

Unit 2 : Disaster Management (Marks 10)**Responsibilities and Precautions**

Introduction, Natural Disasters, Man-made Disasters, Disaster Management, Role of Students in Disaster Management, Steps to be taken during Search and Rescue Operation, What 'Not to DO' during Disaster, Disaster management Initiatives in India.

Unit 3 : Road Safety**(Marks 10)**

What does road safety mean, Causes of road accidents, Issues of road safety, Some Statistics of Road Accidents, Rules of the Road, Must obey, While traveling by bus, Helmet, Vehicular emission pollution, Seat belt, Driving licence, International Driving Permit, Major Motor Vehicle Laws, Traffic Light, Road signs.

PROJECT
(Total Marks - 10)

Each student should carry out and submit a project under the supervision of a teacher. Ten marks allotted for the project is to be credited in the final examination of Environmental Education.

Students may perform their projects on anyone of the following topics. Besides students may also perform their projects under the guidance of teacher on topics related to the subject matter.

- (a) To collect data by visiting a local environmental resource like– River / Forest / Grassland / Agriculture land / Hill.
- (b) To prepare a note by visiting some polluted areas like- city, village, industrial area etc.
- (c) To prepare a list on daily basis by observing a nearby plant / insect / bird / animal for three months enlisting their changes, movements and impacts on environment.
- (d) Submit a report by visiting a particular place during summer vacation and note down its natural environment, natural resources, environment dependent economy, social issues related to conservation of environment.
- (e) Prepare a first-aid-box to be used during a disaster.
- (f) Prepare a list of emergency service related phone numbers and addresses like - Police Station, Fire Station. Hospital. Disaster Management divisional office, Municipal office, Deputy Commissioner's office, Block Development office etc.
- (g) Prepare a report by visiting disaster affected neighbouring area with details of causes, results, measures for rescue operations and steps to neutralize future probabilities.
- (h) Prepare a pictorial table on mandatory / alarming road symbols as per traffic rules.
- (i) Prepare a pictorial note on movement of traffic, around your school and rules to be followed to make the institution pollution free and maintain a healthy environment.
- (j) To form eco club in the school and celebrate various environment related programmes / World Environment Day / Road Safety Week / National Disaster Management Day (29 October) etc.

Textbook : Environmental Education, prepared and published by Assam Higher Secondary Education Council

