

Classes I – V

Aims:

1. To recognize common objects, plants and animals in the immediate surroundings.
2. To acquire skills of observation, collection of information, classification, description and self-expression concerning various environmental phenomena.
3. To observe simple rules for healthy living and safe storage of food and water.
4. To practice proper ways of waste disposal.
5. To develop habits for protection of self as well as the surroundings.
6. To express love for the environment through drawing, painting, dancing, singing, gardening, tree plantation and other activities.
7. To take care of and shows concern for all living beings.
8. To develop attitudes desirable for conservation of environment; and
9. To imbibe values like love for nature, respect for rights of animals, care of plants and other living beings and protection of the environment.

Classes I – II

In classes I and II the entire transaction process should be woven around the child's immediate environment with the teacher being perceived as a curriculum constructor. The curriculum for Environmental Education for these classes should be transacted through language, mathematics and the Art of Healthy and Productive Living (AHPL).

I. Child's Environment

- Child's immediate environment (family and home, school and friends, animals, plants and objects).
- Common animals, birds and plants in the local environment.
- Physical features of the local area like flora, fauna, landscape.

II. Environment and Child's Needs

- Need for food, water, shelter, play and recreation.
- Protection from accidents, sharp objects, fire and the like.

III. Cleanliness and Care of the Environment

- Personal cleanliness and good habits.
- Keeping personal belongings neat and tidy.
- Keeping the surroundings clean (home, play area, classroom and school).
- Taking care of plants and animals.

Suggested list of Activities

The activities given below are only suggestive and not exhaustive. Teachers may innovate and design activities suitable to their own surroundings and the level and interest of children.

1. Provide experiences to observe beauty, symmetry, rhythm and variety in nature.
2. Encourage observation of plants, animals, objects, sites, situations, happenings and occurrences.
3. Encourage collection of different types of objects from the environment.
4. Conduct nature walks.
5. Narrate stories and real life incidents.
6. Promote use of charts, pictures, puzzles and cut-outs.

7. Encourage care of plants and animals.
8. Encourage participation in activities like clay modelling, paper cutting and folding.
9. Involve children in drawing and painting of objects and pictures.
10. Help children in taking care of self and maintaining cleanliness of surroundings.
11. Organise dramas, role plays and simulations.
12. Guide children in developing proper healthy habits and strengthening them periodically through follow-up.
13. Share children's experiences through simple discussions.
14. Conduct nature and environment related games.
15. Organise recitation of songs and poems.
16. Organise visits to parks, orchards, farms, gardens and museums.

Classes III – V

Environmental Education is to be taught as a separate subject in these classes in the form of environmental studies. Greater focus would be needed to develop skills, proper habits and positive attitudes towards environment.

Themes	Class III	Class IV	Class V
1. <i>The Environment: Near and Far</i>	<ul style="list-style-type: none"> Things around us – living and non-living. Living things – plants and animals. Physical similarities and differences between human beings and animals. External body parts. Physical features of the locality. The earth, the sun, the moon and the stars. 	<ul style="list-style-type: none"> Similarities and differences between living and non-living things. Parts of a plant and their functions – roots, stem, leaf, flower and seed. Main internal organs of the body – names and their recognition. Physical features of the locality – natural and man-made changes like roads, buildings, dams, canals, drains, markets, factories, boats, railways. Simple natural phenomena – day and night, thunder and lightning, rainbow. 	<ul style="list-style-type: none"> Meaning of the environment – living and non-living and interaction between them. Similarities and differences between plants and animals. Main internal organs (lungs, heart and stomach) of the human body and their functions. Physical features of hills, plains, deserts, valleys. General features of people, plants and animals of the regions. Importance of plants and animals – land and water. Weather and climate (local), their effects on daily life.

Themes	Class III	Class IV	Class V
2. The Environment and Child's Needs <i>Food, Water and Air</i>	<ul style="list-style-type: none"> ▪ Need for clean food, air and water. ▪ Different types of food. 	<ul style="list-style-type: none"> ▪ Sources of food and water. ▪ Need for variety of food items. ▪ Safe storage and ways of handling of food and water. 	<ul style="list-style-type: none"> ▪ Dependence on environment for food. ▪ Healthy combination of food items. ▪ Different types of food – body building, energy providing and protective (against diseases).
<i>Shelter</i>	<ul style="list-style-type: none"> ▪ Shelters of other living beings (nests, caves, burrows, water bodies). ▪ Qualities of a good shelter (house) for safe and healthy living (sunlight, ventilation and sanitation). 	<ul style="list-style-type: none"> ▪ Types of houses in relation to different climates. ▪ Materials used to construct houses. 	<ul style="list-style-type: none"> ▪ Buildings in the locality – school, panchayat ghar, health centre, post office, railway station, police station, need for their proper maintenance.
<i>Clothing</i>	<ul style="list-style-type: none"> ▪ Need for clothes, types of clothes, keeping them clean. 	<ul style="list-style-type: none"> ▪ Sources of raw material for clothes (plants and animals). ▪ Different types of clothes worn in various physical and cultural environments. 	<ul style="list-style-type: none"> ▪ Different types of fibres and their sources (plants, animals and man made). ▪ Various stages in making of fabrics.

Themes	Class III	Class IV	Class V
<i>Functions and Festivals</i>	<ul style="list-style-type: none"> ▪ Celebration in the school and community singing. ▪ Family functions and their importance. ▪ Various means of recreation at home – story books, games, radio, television. 	<ul style="list-style-type: none"> ▪ Celebration of festivals and national days. ▪ Types of recreational activities in locality – fairs, games, folk dances, music, weekly market, story books, games, radio, television, drama and puppetry. 	<ul style="list-style-type: none"> ▪ Celebration of important national and international days. ▪ Types of recreational activities in the locality – fairs, games, folk dances, music, weekly market, story books, games, radio, television, drama and puppetry.
<i>Health and Hygiene</i>	<ul style="list-style-type: none"> ▪ Need to take care of different parts of the body. ▪ Proper habits for personal cleanliness and good health. ▪ Care of belongings and immediate surroundings (School, home and neighbourhood). 	<ul style="list-style-type: none"> ▪ Different kinds of waste at home and in school. ▪ Effect of waste on surroundings – littering, flies, mosquitoes, rodents, foul smell. ▪ Proper ways of waste disposal at home, school and neighbourhood. 	<ul style="list-style-type: none"> ▪ Some common infectious diseases – common cold, flu, diarrhoea. ▪ Precautions for maintaining proper health and protection against infectious diseases. ▪ First aid as a safety measure. ▪ Personnel responsible for community, health and hygiene.

Themes	Class III	Class IV	Class V
<i>Transport and communication</i>	<ul style="list-style-type: none"> Means of transport in the locality. Modes of communication. Need for following safety rules at home, at the school and on the road. 	<ul style="list-style-type: none"> Various modes of transport. Need for communication, its means and utility (post, telephone, newspaper, radio and television). Traffic symbols, safety rules and need for following them. 	<ul style="list-style-type: none"> Effect of advancement in transport and communication systems on the environment and human life. Simple measures to be practised to reduce pollution – air, water and noise.
3. Care and Protection of the Environment	<ul style="list-style-type: none"> Natural resources – air, water and soil. Factors responsible for the contamination of air and water. Simple ways to minimize contamination of air and water. Keeping the surroundings clean – avoiding spitting, littering, plucking leaves and flowers, scratching/ defacing walls/tree trunks, throwing things in drains/water bodies. 	<ul style="list-style-type: none"> Acquaintance with natural resources – forest, water, animals, food, energy and land. Need for preserving resources. Ways of saving food, water, fuel and electricity at home and in school. Pollution of air, water, land and factors responsible for this. Ways of minimizing pollution – re-use and recycling of waste material. Local agencies responsible for waste disposal. 	<ul style="list-style-type: none"> Major natural resources – need for their preservation and conservation. Renewable and non-renewable sources of energy. Interdependence of human beings, plants and animals. Deforestation and urbanization and their effect on the environment. Common ways of water conservation – water harvesting.

Themes	Class III	Class IV	Class V
4. Taking care of the surroundings	<ul style="list-style-type: none"> Care for plants and animals including pets in the locality. 	<ul style="list-style-type: none"> Care of the old, the sick, younger children and children with special needs. Need for taking care of public property. Local agencies involved in community services and their roles. 	<ul style="list-style-type: none"> Care of parks, gardens, orchards, ponds, wells, sanctuaries, museums and historical monuments. Simple safety measures in the event of a fire, earthquake, flood.

Suggested list of Activities

These activities are only suggestive and not exhaustive. Teachers may innovate and design activities suitable to their own surroundings and the level and interest of children.

- Provide experiences to observe beauty, symmetry, rhythm and variety in nature.
- Encourage observation of plants, animals, objects, sites, situations, happenings and occurrences.
- Encourage collection of different types of objects from the surroundings and their preservation.
- Conduct activities for comparison and classification of objects based on simple physical characteristics.
- Conduct nature walks.
- Narrate stories and real life incidents.
- Promote collection, preparation and use of charts, posters, pictures, puzzles and cut-outs.
- Organise picnics and visits to different places (local sites, museums, historical monuments, parks, orchards, farms, gardens) and follow them with discussions.
- Encourage care and adoption of plants and animals.
- Encourage participation in activities like clay modelling, making masks, puppetry, paper cutting and folding.
- Involve children in drawing and painting of objects and pictures.
- Help children in taking care of self and maintaining cleanliness.
- Organise dramas, role plays and simulations.

2. Guide children in developing proper healthy habits and strengthening them periodically through follow-up.
3. Share children's experiences through simple discussions.
4. Help children maintain a garden or take care of plants in the school and at school.
5. Involve children in planting and taking care of trees.
6. Guide observations regarding level of cleanliness of different sites and in labelling them as clean or dirty, hygienic or unhygienic and polluted or unpolluted.
7. Organise individual and group activities for maintaining cleanliness of school and classroom.
8. Promote proper ways of waste disposal at home, in school and in the neighbourhood.
9. Make use of dry leaves, flowers, waste materials and natural products in decoration of school and at home.
10. Involve children in activities through eco-clubs, nature clubs, school, health clubs and eco-corners.
11. Conduct nature and environment related games.
12. Organise recitation of songs and poems.

Teaching – Learning Strategies

At the primary stage, strategies of teaching-learning of Environmental Education would vary within different contexts and the teachers will have to select the most appropriate ones according to the needs of the students. Some of the suggested strategies are given below:

- Providing direct experiences through field visits and interactions.
- Encouraging students participation in joyful activities utilizing local resources.
- Providing opportunities for observation of natural phenomena and helping students appreciate them.
- Creating curiosity among students through teacher demonstrations.
- Helping students acquire interpersonal and social skills through group activities.
- Providing opportunities for hands-on-experiences to students.
- Encouraging students to observe and experiment with their ideas.
- Providing opportunities for observation, collection, classification, estimation and measurement.
- Providing opportunities for drawing pictures, charts and maps.

Evaluation

The focus in evaluation of Environmental Education at this stage would be on assessment of socio-emotional development and behavioural patterns (actions) of the students besides their cognitive learning. Continuous and comprehensive evaluation using students' profiles and assigning grades would be desirable. Periodical assessment may be utilized for diagnosis as well as for planning remedial measures. Evaluation practices would be informal in Classes I and II and both informal and formal in Classes III to V.

Multiple approaches and instruments can be used for monitoring and assessing desirable behavioural changes in students. Teachers may select from the following or evolve their own approaches and instruments for assessing the progress of students.

- Observing students when they are involved in activities individually or in groups.
- Maintaining students profile.
- Assessing participation in co-scholastic and field activities.
- Using worksheets periodically.
- Assessing students progress through opinion of teachers, peers, parents and community members.
- Using group evaluation.
- Undertaking institutional evaluation.