



BHARAT INSTITUTE OF SECONDARY EDUCATION

— EMPOWERING EDUCATION —

SYLLABUS ENVIRONMENTAL STUDIES

Unit I – Environment and Ecosystems

- ★ **Meaning, components and importance of the environment**
- ★ **Biotic and abiotic components of an ecosystem**
- ★ **Types of ecosystems: terrestrial and aquatic**
- ★ **Food chain, food web and ecological balance**
- ★ **Energy flow and basic nutrient cycles in ecosystems**

Unit II – Natural Resources

- ★ **Renewable and non-renewable natural resources**
- ★ **Conservation and sustainable use of natural resources**
- ★ **Water resources – uses, conservation and rainwater harvesting**
- ★ **Forest resources – importance, deforestation and conservation**
- ★ **Soil resources – soil erosion, causes and prevention**
- ★ **Energy resources and importance of energy conservation**



BHARAT INSTITUTE OF SECONDARY EDUCATION

EMPOWERING EDUCATION

Unit III – Biodiversity and Conservation

- ★ **Meaning and importance of biodiversity**
- ★ **Levels of biodiversity: genetic, species and ecosystem**
- ★ **Major threats to biodiversity**
- ★ **Endangered and threatened species**
- ★ **In-situ and ex-situ conservation**
- ★ **Role of individuals and communities in biodiversity conservation**

Unit IV – Environmental Pollution

- ★ **Meaning, types and sources of environmental pollution**
- ★ **Air pollution – causes, effects and control measures**
- ★ **Water pollution – causes, effects and prevention**
- ★ **Soil pollution and its impact on ecosystems**
- ★ **Noise pollution – sources, effects and control**
- ★ **Solid waste and plastic waste management**



BHARAT INSTITUTE OF SECONDARY EDUCATION

— EMPOWERING EDUCATION —

Unit V – Climate Change and Sustainable Development

- ★ **Weather and climate – basic concepts**
- ★ **Greenhouse effect and global warming**
- ★ **Causes and effects of climate change**
- ★ **Ozone layer and its importance**
- ★ **Meaning and principles of sustainable development**
- ★ **Sustainable lifestyle and responsible consumption**

Practical / Activity Work

- ★ **Prepare a chart showing components of an ecosystem and a simple food chain.**
- ★ **Prepare a report on local sources of air, water or noise pollution.**
- ★ **Prepare a waste-segregation plan for home or school.**
- ★ **Carry out a local environmental cleanliness or awareness activity**
- ★ **Conduct an energy-use survey and suggest practical energy conservation measures.**