

**ENVIRONMENTAL EDUCATION
CLASS – XII
SEMESTER -1**

**Theory Marks: 30
CCE : 10
Total Marks:40**

Time:2hrs

Structure of Question Paper

1. There will be one theory paper comprising of 14 questions. All questions will be compulsory.
2. Question No. 1-5 are very short answer type questions carrying 1 mark each. Answer to each question will be in one line or few words only.
3. Question No. 6-9 are short answer type questions carrying 2 marks each. Answer to each question will be in 20-30 words.
4. Question No. 10-13 are short answer type questions carrying 3 marks each. Answer to each question will be in 40-50 words.
5. question No. 14 is long answer type question carrying 5 marks. Answer to this question will be in 80-100 words.

Questions	No. of Ques	Division of Mark	Total Marks
1 - 5	5	$5 \times 1 = 5$	5
6 - 9	4	$4 \times 2 = 8$	8
10 -13	4	$4 \times 3 = 12$	12
14	1	$1 \times 5 = 5$	5
Total	14		30

SYLLABUS

Unit 1 Biodiversity

- Concept and value of biodiversity
- Levels of biodiversity species, eco and genetic.
- Balance in nature.
- Biodiversity for sustenance of mankind.
- Resource limitation.
- Ecological role of biodiversity.
- Interdependence between different species.
- India as a mega diversity nation.
- Economic potential of biodiversity.
- Loss of biodiversity-threatened, endangered and extinct.
- Strategies for conservation of biodiversity in situ and ex situ.
- Mitigating the people-wildlife conflict.

Unit II Environmental Management

- Need for environment management vis-à-vis development.
- Aspects of environmental management-ethical, economic, technological and social.
- Legal provisions for environmental management.
- Approaches for environmental management-economic policies, environmental indicators, setting of standards, information exchange and surveillance.

Unit V Environmental Actions

- Meeting basic human needs, food, water, shelter and fuel for all.

SEMESTER-1

- To study the status of an endangered species listed for region by collecting information through different sources and observation and to assess the reasons for its diminishing number. Suggest ways and means to protect the species.
- To conduct a survey of plants and trees in the locality and collect information about their cultural, economic and medicinal values from the local people and available literature. To prepare an action plan for a forestation and planting of trees as trees are the most valuable in terms of their cultural, economic importance and medicinal use.

**ENVIRONMENTAL EDUCATION
CLASS – XII
SEMESTER –II**

Time:2Hrs

**Theory marks :40
CCE :20
Total Marks : 60**

Structure of Question Paper

1. There will be one theory paper comprising of 17 questions. All questions will be compulsory.
2. Question No 1-5 are very short answer type questions carrying 1 mark each. Answer to each question will be in one line or few words only.
3. Question No. 6-10 are short answer type questions carrying 2 marks each. Answer to each question will be in 20-30 words.
4. Question No. 11-15 are short answer type questions carrying 3 marks each. Answer to each question will be in 40-50 words.
5. question No. 16-17 are long answer type questions carrying 5 marks each. Answer to each question will be in 80-100 words.

Questions	No. of Ques	Division of Mark	Total Marks
1 – 5	5	5x 1 = 5	5
6 – 10	5	5x 2 = 10	10
11 – 15	5	5x 3 = 15	15
16 -17	2	2x 5 = 10	10
Total	17		40

Unit III Sustainable Development

- Concept of sustainable development.
- Concept of sustainable consumption.
- Need for sustainable development for improving the quality of life for the present and future.
- Challenges for sustainable development-political and administrative will, dynamic and flexible policies, appropriate technologies, comprehensive review and revision mechanism, human approach.
- Development of skilled manpower.
- Role of individual and community.
- Role of national and International agencies (both governmental and non-governmental).

Unit IV Sustainable Agriculture

- Need for sustainable agriculture.
- Green revolution-impact on environment.
- Importance of soil for crops. Irrigation systems use of manure and fertilizers.
- Crop protection-major plant pests and diseases (wheat, rice, cotton sugarcane, potato),measures for their control-agrochemicals.
- Impact of agrochemicals on environment.
- Elements of sustainable agriculture-mixed farming, mixed cropping, crop rotation, biological and economic considerations, use of bio fertilizers and bio pesticides, biological pest control, integrated pest management.
- Application of biotechnology in crop improvement.
- Management of agricultural produce-storage, preservation, transportation and processing.

Unit V Environmental Actions

- Population control
- Changing consumption patterns.
- Prevention and control of environmental pollution,
- Waste management- reduce, reuse and recycle;
- Community movement for ecological restoration and conservation of environment like joint forest Management (JFM), student's participation in tree rearing, social and agro-forestry.

CCE SEMESTER-II

Example projects and Activities

- To study the practices followed in the region for storage, preservation, transportation and processing of perishable or non perishable farm products and to assess the extent of their wastage due to faulty practices.
- To make a list of raw materials used by the family for preparing different types of dishes. To identify the plants and their parts from which food material is obtained. To make a list of plants on which the animals depend for their food. To prepare a report supported by diagrams/photographs/pictures/ graphs to focus on the importance of biodiversity in providing food to human population.
- To study the impact of changes in agricultural practices or animal husbandry including poultry, piggery, fishery and apiculture over a period of time in the local environment or in a given locality or village. The components for analysis may include; types of crop, land area under cultivation, mechanization, use of electricity, mode

of irrigation and agrochemicals, agro wastes and their disposal, types of animal breed and their feed, types of shelter and health care, method of preservation and processing of products and animals wastes and their disposal. To suggest an action plan for modifying the prevailing practices so as to make them environment friendly and sustainable.