SYLLABUS

2021-22

CLASS XII (OPEN SCHOOL)

ENVIRONMENT EDUCATION

TIME 2 Hrs Theory: 45 Marks

IA: 05 Marks

Total: 50 Marks

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 among 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-a-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.
- Problem of stubble and its management (study material uploaded on website)

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 polices, 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 consideration, use of bio-fertilizers and bio pesticides, biological pest control, integrated pest management.
- Application of biotechnology in crop improvement.
- Management of agricultural produces- storage, preservation, transportation and processing.

Unit-V Environmental Actions

- Meeting basic human need, food, water, shelter and fuel for all.
- 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.
- Drugs-ill effects(Part-II) Consequences of use of different dugs, The narcotic drugs and psychotropic substances Act-1985 offences as penalties.(study material uploaded on website)