SYLLABUS CLASS XI (2023-24) ENVIRONMENT EDUCATION

TIME 2 Hrs Theory: 40 Marks IA And Project: 10 Marks Total: 50 Marks

Unit-I Man and Environment

1. Environment

- Dimensions of Environment- physical, biological and social.
- Human being as rational and social partner in environmental actions.
- Society and environment in India: Indian traditions, customs and culture in past and present.

2. Population and Environment

• Demography, causes of increase in population and its ill effects on environment, urbanization.

3. Impact of human activities on Environment

- Environmental problems of urban and rural areas.
- Natural resources and their depletion
- Stress on civic amenities, supply of water and electricity, waste disposal, transport, health services.
- Vehicular emissions.
- Urbanization- land use, housing, migrating and floating population.

Unit-II Environment and Development

4. Economic and Social Development

- Economic and social needs as basic considerations for development.
- Agriculture and industry as major sector of development.
- Social factors affecting development- poverty, affluence, education, employment, child marriage and child labour, human health- HIV/AIDS, social culture and ethical values.

5. Impact of Liberalization and Globalization

• Impact of liberalization and globalization- agriculture and industries, dislocation of manpower and unemployment implications for social harmony.

6. Role of Society in Development and Environment

 Role of society in development and environment- public awareness through education, ecoclubs, population education programmes and campaigns, public participation in decision making.

Unit-III Environmental Pollution and Global Issues

7. Environmental Pollution

• Air water (fresh and marine), soil pollution- sources and consequences.

- Noise and radiation pollution- sources and consequences.
- Solid, liquid and gaseous pollution.

8. Pollution and Diseases

- Handling of hazardous material, process and management of hazardous wastes.
- Pollution related diseases.
- Strategies for reducing pollution and improving the environment.

9. Global Issues and Improvement of Environment

- Ozone Layer depletion and its effects.
- Greenhouse effect, global warming, climate changes and their effects on human society, agriculture plants and animals.

10. Disaster

• Disaster- natural (earthquakes, droughts, floods, cyclones, landslides) and man made (technological and industrial), their impact on the environment, prevention, control and mitigation.

Unit- IV Energy

11. Energy Consumption

- Changing global pattern of energy consumption -from ancient to modern times.
- Energy consumption as a measure of quality of life.
- Rising demand for energy gap between demand and supply (Indian context.)

12. Conventional Sources of Energy

• Conventional energy sources- fossil and firewood, potential (India context) and limitations of each source, methods of harnessing energy and environment consequences of their use.

13. Non- conventional Source of Energy

Non Conventional energy sources- type of non -conventional sources(biomass, solar, wind, ocean, hydel, geothermal, nuclear),potential(Indian context) and limitations of each source, methods of harnessing and their environmental consequences, need to promote non-conventional energy sources.

14. Conservation of Energy

- Conservation of energy sources- efficiency in production, transportation and utilization of energy.
- Future sources of energy- hydrogen, alcohol, fuel cells.

Unit V Safe work Environment and Occupational Hazards

15. Safe Work Environment

Safe work environment- adequate light, ventilation, cleanliness, good housekeeping.

16. Safety Laws, Accidents and First- Aid

- Safety awareness management- safety precautions- home and work (laboratory, workshop, work site), safe handling of equipment and material.
- Occupational hazards- physical, chemical, mechanical, electrical, biological, radiational and psychological.
- Accidents and major hazards in industries and occupations- fire, explosion, toxic release.
- First aid measures.
- Laws and regulations related to occupational health and safety.

17*. Drugs- ill Effects Part-I

- Importance of health, Drug-addiction, symptoms (Material upload on website)
- Drugs of abuse and their health consequences, academic and occupational consequences, consequences for family, social, legal and criminal consequences.
- Prevention of Drug, Government initiatives, the narcotic drug and psychotropic substances act-1985, offences and penalties.
- * Chapter 17 is added in the syllabus as a compulsory topic, Matter is available on the Board's website www.pseb.ac.in.