

Prepared by :-

Soumyashree Sachadarshini

Sub:- ENVIRONMENT STUDIES

## Chapter-1 The multidisciplinary Nature of Environmental Studies

Q:-1 what do you mean by Environmental studies?

(i) The word environment is derived from the French word "environ" means surrounding. Hence everything surrounding us is called Environment.

(ii) Every Organisms is surrounded by materials and forces that constitute its environment. It is environment from where every Organism must derive its requirements.

(iii) The Environment creates favourable conditions for the existence and development of living Organisms.

(iv) The Survival of any Organism requires a steady supply of materials and removal of waste product from its environment.

(v) The degradation of the Environment has become a serious problem for the existence of human beings. Pollution of soil, water and air causes harm to living Organisms as well as loss to valuable natural resources.

Q:-2 what are the scope <sup>of</sup> Environmental Studies?

(i) Developing an awareness and sensitivity related to the environment and its related problem.

(ii) Motivating people for active participation in environment protection and improvement.

(iii) Developing skills for active identification and development of solution to environmental problem.

(iv) Inbibe and inculcate the necessity for

from further degradation, the Supreme Court has ordered and initiated environmental protection awareness through government & non-govt agencies to take part in protecting our environment.

\* Environmental Pollution cannot be prevented by laws alone. Public participation is equally important with regard to environmental protection.

\* Environmental education is a process of learning by giving an overall perspective of knowledge of environment. (उत्तर ११)

\* ~~and~~ climate change, ozone layer depletion, land degradation, depleting groundwater supplies, environmental pollution, ecosystem in forest, rural, urban, everywhere need to be protected and aware for safety.

\* Both formal and informal education on the environment will give the interested individual the knowledge, values, skills, tools needed to face the environmental challenges on a local & global level.

Q:-5 Write short notes on the atmosphere, hydrosphere, lithosphere and biosphere.

The environment consists of four segments.

- a) Atmosphere
- b) Hydrosphere
- c) Lithosphere
- d) Biosphere

Atmosphere: (i) It consists of the air. This is the protective blanket of gases surrounding the earth. It sustains life on earth.

ii) It saves the earth from the hostile environment of outer space.

(ii) Hydrosphere :-

\* It consists of all types of water resources (Oceans, Seas, river, stream, glacier <sup>and</sup> ground water)

\* Almost 97% of earth water supply is in the Oceans more than 2% of water resources is locked in polar ice caps. The remaining water (less than 1%) is available as fresh water in the form of rivers, streams, lakes & ground water.

Lithosphere :- It consists land. It is the outer mantle of solid earth. It consists of minerals occurring in the earth crust & soil.

Biosphere :-

It indicates the living organisms & their interaction with the environment. (Atmosphere, Hydrosphere & Lithosphere).

(b) Explain the multidisciplinary nature of science with the environment.

The study of environmental sciences implies single subject but its essence is multidisciplinary in study. It includes various applied and basic disciplines. These are studies related to natural science such as physics, chemistry, Biology, Engg. Technology etc. study related to humanities such as arts, religion, history, sociology, economics, literature etc.

The main among these are briefly given as follows.

Botany :-

Mainly deals with plants, tree etc.

Zoology

Mainly about animals etc.

Geography :-

It deals with landscape, Hills, weather & climate etc.

Hydrology :-

It deals with the study of ~~flow water~~ state distribution and circulation of water available in atmosphere, underground and above ground.

Hydraulics :->

It deals with the study of flow of water resources and function of water structure such as dams, Pipelines, rivers, irrigation Canal etc.

Anthropology :-

It refers to the effects of deforestation on life of tribal forest dwellers etc.

Q:- 7. what do you mean by Scientific Assessment & Risk Assessment. (विज्ञानिक आँकड़ों का विश्लेषण)

Scientific Assessment :-

(i) The first step in the scientific evaluation of an Environmental problem is Scientific Assessment. Scientific Assessment is when information is gathered about the problem through observations & experiments.

Ex. Mysterious bird death.

## Risk Assessment :-

The second <sup>step</sup> in the process would be to conduct an Environmental risk assessment and this would occur after the scientific assessment has found the cause of the problem and after potential solutions are determined.

\* The environmental risk assessment would investigate the potential harm to human health or the environment as a result of specific problem.

## Q: Write down the element of Environment?

Environment is constituted by the interactively systems of physical, biologicals and cultural elements inter related in various ways individually as well as collectively. These elements may be explained as under

### \* Physical element :-

Physical element are as space, landforms, water bodies, climate soils, rocks and minerals. They determine the variable character of the human habitat its opportunities as well as limitations.

### \* Biological element :-

Biological element such as plants, animals, micro organisms and men constitute the biosphere

### \* Cultural element :-

Cultural element such as economic, social, and political element are essentially man made features which make cultural elements.