**SIXTH SEMESTER**

**ENVIRONMENTAL SCIENCE**

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**Lecture No. – 1**

UNIT – 1

THE EARTH

Earth originated approximately 5 billion years back. 3.5 billion years ago, traces of living organisms were reported in the hydrosphere. At present there is about 1.4crores of species of which only 17.5 lakhs have been identified.

The lower layer of the atmosphere is called troposphere. The part of atmosphere where temperature increases with increasing altitude is collectively called stratosphere and thermosphere and the region where life is found on earth is called is called biosphere. The land region of earth is known as lithosphere which accommodates plants, organisms, animals and human beings. The water body of the earth is called hydrosphere. The layer of atmosphere that contains ozone is stratosphere.

The earliest continent is Pangaea. The Earth Day is celebrated on 22nd April and 5th June is observed as the World Environment Day.

 Types of Environment :

There are two types of environment,

1)- Natural Environment

2)- Social Environment

1. Natural Environment: Refers to all the biotic and abiotic elements of the Earth such as water, air, soil, light, flora, fauna etc.

a)- Biotic Component – Biotic components are the living components of environment which include water, air, soil, flora and fauna and the related things which together make up the biodiversity of environment.

b)- Abiotic Component - These are the non-living components that are required for the functioning of life such as temperature, rain, snow, hails, different kinds of soil etc.

Importance of Environmental Studies :

1. Environmental Studies make people aware of Nature and the environmental problems so that people can know about its causes, effects and ways of control.
2. It creates awareness among people about importance of scientific utilization and conservation of the resources.
3. It helps in bringing sustainable development and continued economic growth without compromising with the needs of present generation.
4. Knowledge of environmental studies is a must for conservation of life and biodiversity of our Earth.

 Answer these MCQs. Key is given with every question.

1. The earliest continent was
2. Gondwanaland b)Pangaea c)Laurasia

Key- b

1. The lowest part of the atmosphere is
2. Ionosphere b) Troposphere c) Stratosphere

Key- b

1. The earliest traces of life on the Earth have been found about how many billion years ago?
2. 3.5 b)4.5 c) 2.5

Key- a

1. The Earth originated approximately how many billion years back?
2. 10 b) 5 c) 2
3. Key- b
4. The region where life is found on Earth is called
5. Biosphere b) Atmosphere c) Hydrosphere

Key- a

1. The part of the atmosphere where temperature increases with increasing altitude is
2. Stratosphere and Thermosphere b) Troposphere c) Mesosphere

Key- a

1. The World Environment Day is observed on
2. 5th September b) 5th November c) 5th June

Key- c

1. Much of the atmosphere’s air is present in the
2. Stratosphere b)Mesosphere c)Troposphere

Key- c

1. The mean temperature(in degree centigrade) of the Earth is approximately
2. 10 b) 15 c)20

Key- b

1. The Earth is a
2. Planet b)galaxy c)star

Key- a

1. Ozone layer is found in
2. Troposphere b)Stratosphere c)Ionosphere

Key- b

1. The layer of atmosphere which has the lowest temperature is
2. Mesosphere b)Troposphere c)Stratosphere

 Key- b

1. Lithosphere means
2. Layer of a gases b) Layer of sand c)Layer of gravel

Key- c

1. Biosphere is made of
2. Atmosphere b)Lithosphere c) Hydrosphere d) All of them

Key- d

1. Number of species(in lakhs) which have been identified is
2. 19.5 b)17.5 c)18.5

Key- b