E.V.S Assignment No. 1

Part-A (5 Questions X 2 Marks)

(Q-1): What is environment?

Ans: Everything that surrounds an effect of living organism is environment. It includes both physical and biotic factors such as air, water, soil, climate, plants, and animals, as well as human-made elements like buildings, roads, and pollution.

(Q-2): Write names of five international days that are celebrated to make awareness for the environment.

Ans:  There are five international days celebrated to raise awareness about the environment.

1.  World Environment Day - Celebrated on June 5th.

2. International Day of Zero Waste- Celebrated on March 30th.

3. **World Wildlife Day** - Celebrated on March 3rd.

4. **International Day for Biological Diversity** – Celebrated on May 22nd.

5. **International Day of Forests** - Celebrated on March 21st.

(Q-3): Write names of environmentalists who won noble peace prize for their contribution to save the environment.

Ans: There are many people who won noble peace prize but out of them there are two environmentalists who won noble peace prize for their contribution to save the environment.

1. **Wangari Maathai** (2004).

2. **Al Gore** (2007, shared with the Intergovernmental Panel on Climate Change).

(Q-4): What is meant by Ecomark?

Ans: Ecomark typically refers to a type of eco-label or environmental certification that indicates a product meets certain environmental standards or criteria. It is a symbol or logo that signifies that the product has been manufactured and distributed with consideration for environmental impacts such as resource use, energy consumption, emissions, and waste generation.

(Q-5): Name four government initiatives for public awareness.

Ans: There are four government initiatives for public awareness to protect environment.

1: Swachh Bharat Abhiyan - Launched on October 2, 2014, on the birth anniversary of Mahatma Gandhi.

2: Green Skill Development Programme - Launched June 2017.

3: **Namami Gange Programme –** Launched in 2014.

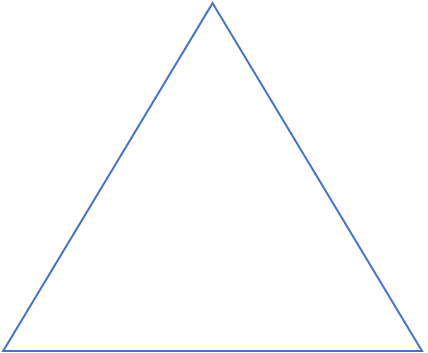
**4: Nagar Van Scheme -** Launched on the occasion of World Environment Day 2020.

Part-B (3 Questions x 7 Marks)

(Q-1): What are the major components of environment? Explain their role.

Ans.

Atmosphere

                    LithosphereHydrosphere

Biosphere: The biosphere refers to the global sum of all ecosystems, encompassing all living organisms and their interactions with each other and their environments. It extends to about 22.5km in thickness from ocean bottom to mountain top.

But all parts of Biosphere are not suitable for life because

1. low temperature

2. Less concentration of oxygen

3. too high cosmic radiation

Subdivision of biosphere

|  |  |  |
| --- | --- | --- |
| Hydrosphere | lithosphere | Atmosphere |
| * It covers ¾ part of earth surface      * It includes all components i.e. sea, river, etc. | * It comprises all solid particles and rocky substance it consists 3 main layers.      1. Crust   2. Mantle   3. Core | * The atmosphere is the layer of gases that surrounds a planet and is held in place by the planet's gravity. |

Atmosphere:

|  |  |  |
| --- | --- | --- |
| **Name of layer** | **Distance** | **Example** |
| * **Exosphere**        * **Thermosphere**        * **Mesosphere**        * **Stratosphere**        * **Troposphere** | * 700 to 10000 km        * 80 to 700 km        * 50 to 80 km        * 12 to 50 km        * 0 to 12 km | * Satellite        * Space craft        * Meteoroid        * Radio sounds        * clouds |

(Q-2): Describe Chipko movement.

Ans: Chipko movement nonviolent social and ecological movement by rural villagers, particularly women, in India in the 1970s, aimed at protecting trees and forests slated for government-backed logging.

1. Origin: The movement originated in the Himalayan region of Uttarakhand (then part of Uttar Pradesh) in India.

2. **Protest Against Deforestation**: It was a protest against the large-scale deforestation that was taking place in the region due to commercial logging.

3. Symbolic Action: The movement is known for its unique method of protest where villagers, mainly women, would hug trees to prevent them from being cut down, thus giving rise to the term "Chipko," which means "to hug" or "to cling to" in Hindi.

4. Led by Local Communities: The movement was led by local activists such as Chandi Prasad Bhatt, Sunderlal Bahuguna, and many women from rural communities who were directly affected by deforestation.

5. Environmental Awareness: It helped raise awareness about the ecological significance of forests.

6. Impact: The Chipko Movement played a crucial role in influencing forest conservation policies in India.

8. Recognition: The Chipko Movement is regarded as a pioneering example of environmental activism and has left a lasting legacy in the environmental movement globally.

(Q-3):  Who are entitled as the green Judge and the green advocate? Discuss their role for this recognition.

Ans: The person who have qualities of Commitment to Environmental Justice, Expertise in Environmental Law, Impartiality and Integrity, Innovative Thinking, Advocacy for Judicial Activism, etc. has to be entitled as green judge.

The person who has qualities of Passion for Environmental Causes, Communication Skills, Strategic Thinking, Knowledge and Expertise, etc.  has to be entitled as green advocate.

Role of green judge: -

1. Upholding Environmental Laws: Enforces and applies environmental regulations to protect natural resources.

2. **Facilitating Public Interest Litigation (PIL)**: Allows citizens and groups to challenge environmental harms and broaden legal standing.

3. **Influencing Policy**: Shapes environmental policy through landmark rulings and advocates for legal reforms.

4. **Promoting Compliance**: Ensures adherence to environmental regulations and monitors enforcement of court orders.

5. **Addressing Climate Change**: Handles climate-related cases and supports mitigation and adaptation measures.

Role of green advocate: -

1. **Raising Awareness**: Educates the public and policymakers about environmental issues and the need for conservation.

2. **Policy Influence**: Works to shape and influence environmental policies and regulations through advocacy and lobbying.

3. **Campaign Leadership**: Leads and organizes campaigns to promote environmental causes and mobilize community action.

4. **Legal Action**: Uses legal tools, such as litigation, to challenge practices that harm the environment and enforce environmental laws.

5. **Research and Education**: Conducts research and provides expertise to support informed decision-making and policy development.

Part-C (3 Questions x 11 Marks)

(Q-1): Write role of an individual to protect and manage the environment. What is the role of community participation in environment management programmes.

Ans: Here are some roles of an individual to protect and manage the environment.

1. **Conservation Practices**: Adopting habits that reduce resource consumption, such as water and energy conservation, and minimizing waste generation.

2. **Sustainable Choices**: Making environmentally friendly choices in daily life, such as using reusable products.

3. **Education and Awareness**: Learning about environmental issues and spreading awareness among family, friends, and community members. Leading by example in adopting sustainable practices, inspiring others to follow suit.

4. **Responsible Consumption**: Making informed decisions as consumers, choosing products with minimal environmental impact and avoiding single-use plastics.

Roles of community in environment management.

1. **Shared Responsibility**: Community participation fosters a sense of ownership and responsibility among residents towards their local environment, encouraging active involvement in conservation efforts.

2. **Local Knowledge and Expertise**: Communities possess valuable local knowledge about environmental issues, resources, and ecosystem.

3. **Enhanced Impact**: By mobilizing community members, environment management programs can achieve larger-scale impact through collective action. This includes organizing community clean-ups, tree planting campaigns, and sustainable practices adoption.

4. **Advocacy Power**: A united community can advocate for environmental policies and regulations at local and regional levels. This advocacy can influence decision-making processes and ensure environmental concerns are prioritized.

5. **Resilience and Adaptation**: Community participation enables proactive responses to environmental changes and disasters. By working together, communities can develop resilience strategies and adapt to evolving environmental conditions.

6. **Long-term Sustainability**: Sustainable environmental outcomes require ongoing commitment and engagement. Community participation ensures continuity and sustainability of efforts beyond initial project phases, fostering a lasting impact on local ecosystems and quality of life.

(Q-2): What is atmosphere? Discuss different layers of atmosphere and their importance to protect the environment.

Ans: A **thin layer of gases** that surrounds the Earth and **protects life** from harmful radiation and extreme temperatures is known atmosphere.

There are five different layers in atmosphere with their own importance.

1. Exosphere

2. Thermosphere

3. Mesosphere

4.Stratosphere

5.Troposphere

1. Exosphere: The exosphere is the outermost layer of the atmosphere. Its limits reach from around 700 km to 10,000 km. There is not much definite boundary between the vacuum of space and the exosphere, as the air gets thinner and thinner moving away from the surface of the Earth.

2. Thermosphere: It is the layer from 80 km to 700 km. It begins at the Karman line and is the space where the space shuttles mostly revolve around the Earth. Even though the temperatures are high, the heat is not felt because of the low atmospheric pressure. The International Space Station also orbits around the Earth in this region.

3. Mesosphere: It expands from 50 km to 80 km. This is the densest layer of atmosphere amongst the top three layers. this layer is responsible for the burning of the meteors and other objects falling from space due to the gravitational force of the Earth. The layer between the mesosphere and the stratosphere known as the mesopause is the coldest place on Earth

4: Stratosphere: It expands from 12 km to 50 km. It contains the ozone layer, which absorbs and blocks a significant amount of the Sun's ultraviolet (UV) radiation. This UV radiation, if not filtered, would be harmful to living organisms, causing skin cancer, cataracts, and genetic damage.

5. Troposphere: It expands from 0 km to 12 km. It contains the air we breathe and is where weather phenomena occur. The troposphere helps regulate temperature through the greenhouse effect, trapping heat and maintaining suitable conditions for life.