

Assignment -1 22MUN0117

- 1] Differentiate b/w renewable and non-renewable resource with example
- 2] Mention any two awareness programme of environment an issue to subject
- 3] By means of neat sketch explain the characteristic multi disciplinary nature of environmental studies
- 4] By means of neat sketch explain the characteristics, functions of eco-system structure
- 5] Write major natural resource explain any three resources
- 6] What is the use of pyramid of energy and pyramid of number? Explain by means of sources
- 7] Write characteristics, features, structure & function of the following
 - a] Forest ecosystem
 - b] Grassland ecosystem
 - c] Desert ecosystem.

Answer: 23AMINOW17

Renewable resources :-

The resources which cannot be exhausted even after continuous utilisation are termed renewable resources. Examples of renewable resources are the sun, wind and tidal energy.

Non-renewable resources :-

These resources which cannot be immediately replaced once they are depleted are called non-renewable resources. Examples of non-renewable resources include fossil fuel, such as coal, petroleum, natural gas and rare minerals typically found in meteorites.

Difference b/w Renewable & non-renewable resources

<u>Renewable</u>	<u>Non-renewable</u>
<ul style="list-style-type: none"> * Renewable resources cannot be depleted over time * Renewable resources include sunlight, water, wind and also geothermal source such as hot spring and fumaroles 	<ul style="list-style-type: none"> * Non-renewable resources depleted over time * Non-renewable resources include fossil fuel such as coal & petroleum

* most renewable resources have low carbon emissions and low carbon-foot print

* The cost of renewable energy is high

* Infrastructure for harnessing renewable energy is prohibitively expensive and not easily accessible in most countries

* Requires a large land area especially for wind farms and solar

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* non-renewable energy has a comparatively higher carbon foot print and carbon emission.

* non-renewable energy has a comparatively higher upfront cost.

* Cost effective & accessible infrastructure is available for non-renewable energy across most countries.

* Comparatively lower area requirement

② Environmental awareness activities and programmes in schools :-

Students nowadays are quite inquisitive and always ready with a "why" or "how" when being taught something new. It's in the first few years of a person's life that we learn new concepts quickly. Children catch on to a new language more naturally than an adult. A child's brain is like a sponge.

It soaks up all the information it receives school have a responsibility toward future leaders not just teaching them how to read and write, but also education them about environmental awareness should be a part of Curriculum in all school.

Students are made aware of the importance of environment and how planting trees play an essential role. They adopt trees on their birthdays and other special days schools even invite local foundation to plant trees on their premises.

Anti-littering and Anti-plastic bag Campaign including waste minimization and management - Clean Yamuna Campaign.

→ Anti-fire crackers Campaign on the occasion of Diwali festival.

→ prohibiting burning of leaves Campaign.

→ science projects students can work on science projects related to environmental issues.

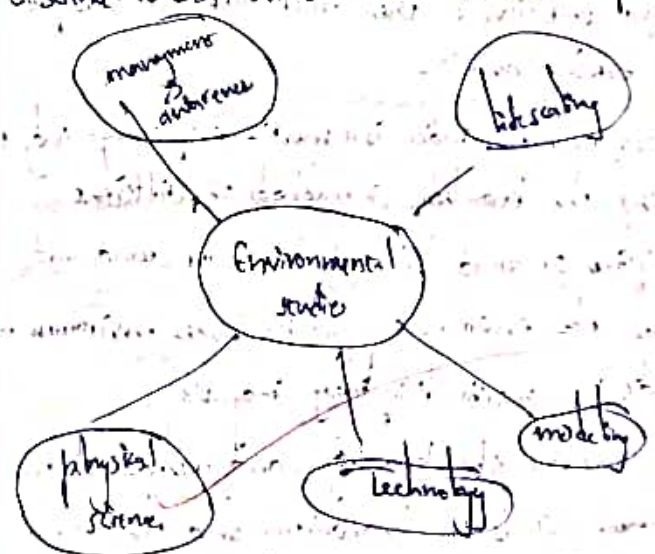
Blog :- students can write blogs about environmental issues.

Helping younger students can help learn environmental issues.

surveys students can conduct surveys together information about environmental issues.

3) interdisciplinary nature of environmental studies :-

→ It utilizes information from different streams of science to deal with various environmental problems.



Environmental studies is a multi disciplinary field that integrates knowledge from the natural science, the humanities, and the social science.

Environmental studies cover various aspects of physical, biological, social, economic process that affect the environment and human well being.

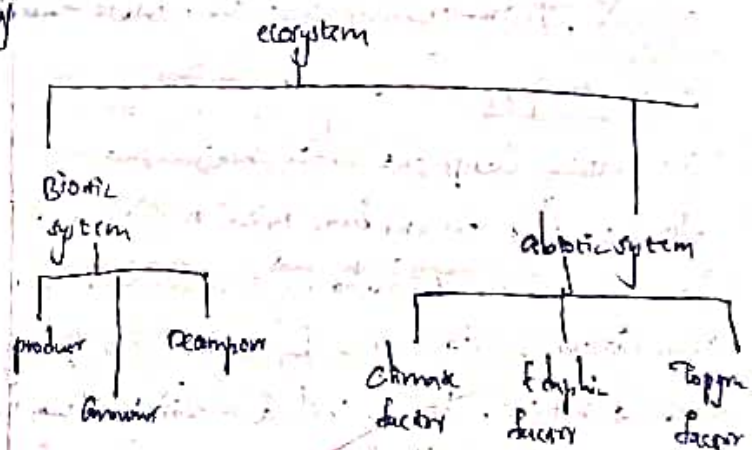
Environmental studies can be defined as the study of the interaction b/w humans and study of the interaction natural environment, and the amplification and appreciation of these interactions for the present & future generations.

Environmental studies is a multi-disciplinary study as it uses the knowledge & methods of different disciplines or fields of study to understand and address the environment and its issues. Environmental studies is a multi disciplinary study as

→ Combines the knowledge and methods of the natural science, the humanities and the social sciences etc to understand the physical, social,

logical, social, to understand the physical, at environment and its issues.

→ In Geography, the view and experience of different disciplines or fields of study such as environment science, ethics, policy, law, education, communication, justice, history, sociology, psychology, economics, geography, environmental issues.



A ecosystem is a self-regulation and self-sustaining unit of landscape that includes living & non-living components.

The structure of an ecosystem is characterized by the organization of these biotic and abiotic components which are interrelated and influence each other's properties.

Biotic Components :-

Living things that have a direct or indirect influence on other organisms in an environment such as plants, animals, micro-organisms and their waste material.

Abiotic Components :-

Non-living components such as chemical and physical elements that can vary from region to region and from one ecosystem to another ecosystem can be as small as an oasis in a desert or as big as an ocean spanning thousands of miles. They can include a variety of ecosystems such as lakes, grasslands, forests.

Ecosystems have many functions including purifying air and water, generating oxygen, stabilizing the

climate, and decomposing and distributing detritus.

The structure of an ecosystem is related to its species diversity. More species diversity an ecosystem has, the higher its species diversity.

The function of the ecosystem is related to energy flow and material cycling through and within the system. The relative amount of energy needed to maintain an ecosystem depends on its structure.

3) write major natural resources explaining three resources.

These are the resources that are found in the environment and are developed without the intervention of humans. Common examples of natural resources include air, sunlight, water, soil, stone, plants, animals, and fossil fuels.

Natural resources are naturally occurring materials that are useful to man or could be useful under favorable technological, economic or social circumstances or supplies drawn from the earth's supplies such as

land, living and chelating materials, fertilizers, metals, water.

Natural resources are the things present in the environment that can be used by human. Three important natural resources are water, soil, fuel, like coal and petroleum and wildlife. We need to manage our natural resources.

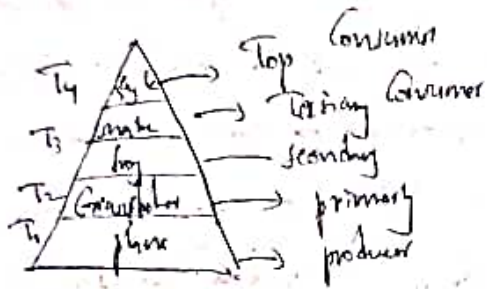
Water - water resources are natural resources of water that are potentially useful, for human. For eg., as a resource of drinking water supply or irrigation water. These resources can be either fresh water from natural sources or water produced artificially from the other source such as from reclaimed water at 1% of the water on earth.

Soil - soil is also one of natural resource body. Composed of solids (minerals and organic matter), liquid and gas that occurs on the land surface, except space areas characterized by one or both of

the following horizon or layer that are distinguishable from the initial material as a result soil is the loose surface material that covers most land.

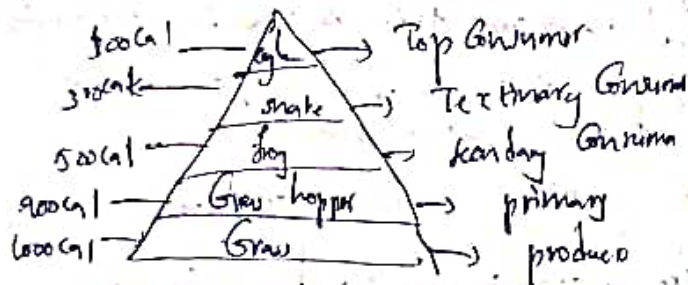
Coal - Coal is sedimentary deposit composed predominantly of carbon that is readily combustible. Coal is black or brownish - black in color and a composition that consists of more than 50 percent by weight and more than 50 percent by volume of carbonaceous material. Coal is fossil fuel that comes from the remains of prehistoric plants and animals.

6a) Pyramid of Numbers - The pyramid shows the relationship b/w procedure & number of different level. It is known as pyramid of numbers.



Pyramid of energy :- This pyramid shows energy accumulation at different trophic level is known as.

Pyramid of energy



7A] Forest ecosystem:-

Forest ecology is the scientific study of the interrelated pattern, processes, flows fauna and ecosystem in forest the management of forest

is known as forestry, silviculture, and forest management. Forest ecosystem are areas of the landscape that are dominated by trees and consist of biological integrated community of plants, animals and microbes.

Grassland and ecosystem:-

Grassland ecosystem is an area where the vegetation is dominated by grasses and other herbaceous plants. It is also called transitional landscape because grassland ecosystem are dominated by the grass with few or no enough trees in the area where there is not enough for a forest and too much of a forest.

Grassland ecosystem is an area where the vegetation is dominated by grasses and other herbaceous is dominated by grasses and other herbaceous (non-woody plants) it is also called Grassland ecosystem.

Desert ecosystem: Desert ecology is the study

of interactions b/w both biotic and abiotic components of desert environment. A desert ecosystem is defined by interactions b/w organisms, the climate in which they live and any other non-living influence on the habitat.

Desert ecosystem are dry ecosystem, are dry environment with vegetation, harsh temperature, and precipitation of fewer than 10 inches a year.

~~Theresa~~
03/9/24

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