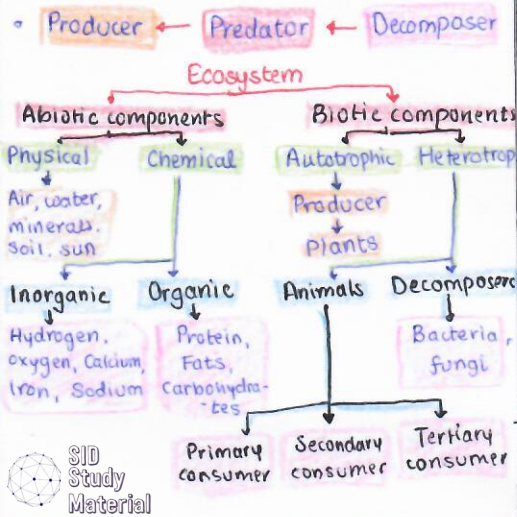


ENVIRONMENTAL MANAGEMENT

ECOSYSTEM

↳ is formed by biotic and abiotic factors and their interactions with each other.



RELATIONSHIP BETWEEN ECOSYSTEM & ENVIRONMENT

ENVIRONMENT:
 ↳ Physical, Chemical and biological factors affecting living organisms in any possible way is called environment.

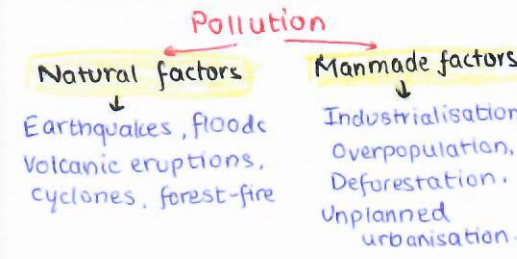
Environment { Natural, Artificial

ECOLOGY:
 ↳ The science that studies interactions between biotic and abiotic factors of the environment.

ECOSYSTEM
 ↳ Biotic and abiotic factors occupying a definite geographical area and their interactions collectively include Ecosystem. e.g. Earth is largest Ecosystem.

ENVIRONMENTAL POLLUTION

↳ Unnecessary and unacceptable change in the surrounding environment due to natural events or human activities is environmental pollution.



RADIOACTIVE POLLUTION

Natural: UV and IR radiations.
 Artificial: X Rays & Radiations from atomic energy plants.

Effects of radiations:

- 1) Cancerous ulceration.
- 2) Tissues in body are destroyed.
- 3) Genetic changes occur.
- 4) Vision is adversely affected.

ENVIRONMENTAL CONSERVATION

NEED:

- 1) To maintain balance in nature.
- 2) To solve natural & artificial problems.
- 3) To maintain pollution free environment.
- 4) To save natural resources.
- 5) To protect and conserve biodiversity.
- 6) To give quality of life and sustainable future to next generation.

MEASURES:

- 1) Reduce water consumption.
- 2) Preserve biodiversity.
- 3) Minimum use of natural resources.
- 4) Use renewable sources of energy.
- 5) Public awareness.
- 6) Control of pollution.

SOME ACTS & LAWS

FOREST CONSERVATION ACT, 1980
 forest land is prohibited to use for any purpose.

ENVIRONMENTAL CONSERVATION ACT, 1986
 control pollution and punish people harming environment.

WILDLIFE PROTECTION ACT, 1972

Clause 49A, trading of rare animals is banned.

Clause 49B, use of articles made from skin of wild animals is banned.

Clause 49C, disclosure of stock of artefacts made from rare wild animals is compulsory.

MOLAI JUNGLE

↳ located in Kokilambukh in Jorhat district Assam.
 ↳ Result of hardwork of Jadav Molai Payeng of 30 years.

BIODIVERSITY

↳ is richness of living organisms in nature due to presence of varieties of organisms, ecosystems and genetic variations within species.

GENETIC DIVERSITY:
 Occurrence of diversity among the organisms of same species is genetic diversity. e.g. Each human is different.

SPECIES DIVERSITY:
 Innumerable species of organisms occur in nature which is called species diversity. e.g. various types of plants.

ECOSYSTEM DIVERSITY:
 Many ecosystems are present which includes diffn animals and plants. This is ecosystem diversity. e.g. Pond ecosystem, Forest ecosystem.

SACRED GROVES

↳ forests conserved in the name of God and considered to be sacred are Sacred groves.
 ↳ conserved by society not government.
 ↳ 13,000 sacred groves are reported in India.

CONSERVATION OF BIODIVERSITY

↳ Protecting rare species of organisms.
 ↳ Establishing national parks and sanctuaries.
 ↳ Declaring some regions as biosphere reserves.
 ↳ Projects for conservation of special species.
 ↳ Conserving all plants & animals.
 ↳ Observing the rules.
 ↳ Maintaining record of traditional knowledge.

HOTSPOTS OF BIODIVERSITY

↳ regions where biodiversity is in danger.
 ↳ 34 hotspots are reported all over world.
 ↳ At present, 26% of these are already destroyed.
 ↳ Only 2.3% of earth is left with sensitive spots which include 1,50,000 plant species which is 50% of whole!!

ENDANGERED HERITAGE PLACES IN INDIA

- 1) Western ghats due to mining. Habitat of Asiatic Lion & wild bison.
- 2) Manas Sanctuary due to dams. Habitat of lion tiger & Rhino.
- 3) Sunderban Sanctuary due to dams, deforestation. Habitat of Tigers.

THREATENED SPECIES

ENDANGERED SPECIES:
 Either their number is declined or habitat is shrunk so that they might be extinct in near future.
 e.g. lion tailed monkey, lesser florican, etc.

RARE SPECIES:
 No. of these species is considerably declined and being endemic they may become extinct very fast.
 e.g. Red panda, musk deer, etc.

VULNERABLE SPECIES:
 Their number is extremely less and continuously decline.
 e.g. Tiger, Lion, etc.

INDETERMINATE SPECIES:
 They appear to be endangered but there's no complete information due to their behaviour (shyness). e.g. Giant squirrel (Sheekhru).

NOTE: 22 May - World Biodiversity Day.

IUCN: International Union of Conservation of nature publishes 'Red List' where
 Pink pages: endangered species.
 Green pages: previously endangered now safe.