Chapter No. 16.

• Envoirmental Issue •

Q. No. 1 What are the various Constitutes of domestics Sewage ? Discuss the effects of Sewage discharge on a river ?

→ . The wastes generated from households - from the toilet, kitchen, laundry & other related source are termed as domestic Sewage.

- Domestic Sewage primarily contains biodegradable organic matter, which readily decomposes thanks to bacteria and other ~~organic~~ micro organisms, which can multiply using these organic substances as substrates & hence utilise some of the components of Sewage.
- It is possible to estimate the amount of biodegradable organic matter in Sewage water by measuring Biochemical oxygen Demand. (BOD).
- Presence of large amounts of nutrients in waters also causes excessive growth of planktonic algae, called algal bloom which imparts a distinct colour to the water bodies.
- Algal blooms cause deterioration of the water quality & fish mortality.

Q.No-2 Discuss the causes and effects of global warming, what measures need to be taken to control global warming?

→. An Increase in the average temperature of the surface of the Earth is termed global warming. It can be caused due to the following reasons-

- Increase level of greenhouse gasses has led to considerable heating of Earth leading to global warming.
- During the past century, the temperature of Earth has increased by 0.6 °C, most of it during the last three decades.
- Scientists belive this rise in temperature is leading to deleterious changes in the enviornmental & resulting in odd climatic changes, thus leading to increased melting point of polar ice caps as well as of other places like sea level Himalayan snow caps.
- over many year this will result in a rise sea level that global warming can submerge many costal areas.

The following are the preventive measures-

(i) cutting down use of fossil fuel.
(ii) Improving effeciency of energy usage.
(iii) Reducing deforestation.
(iv) Planting trees & slowing down the growth of human population.

(III) Ecological diversity :-

- At the ecosystem level India for Instance with its deserts, rain, forests, mangroves, coral reefs, wetland, estuaries & alpine have a greater ecosystem diversity than a Scandinavian country like Norway.

Q. No-3 How is biodiversity important for ecosystem functioning

→ • ecologists belived that ecosystem that community with more species generally ~~is stability for biological~~ tend to be more stable ~~fan~~ than those with less species

- Highe biodiversity causes the ecosystem to be more stable in productivity, hence more resitant to any disturbance, such as floods, or alien species invasions.
- Increase diversity contributes to higher productivity.
- Species richness contributes to the well being of an ecosystem.
- Rich biodiversity is not only essential for ecosystem health but imperative for the very survival of the human race on this planet.
- If an ecosystem is rich in species, each trophic level will have other food ~~alt~~ alternativies, which would increase the life

expectancy rate of entities.
Therfore biodiversity has a significand role in preserving health & ecological balance of an ecosystem.

Q No.4 what are Scared groves & what is their role in Conservation?

→ Scared groves are forest patches that are exhilarated around places of worship.
- India has 14 biosphere reserves, 90 national parks & 448 wildlife Sanctuaries.
- India has also a history of religious and cultural traditions that emphasised protection of nature.
- In man cultures, tracts of forest were set aside & all the trees & wildlife within were venerated & given total protection.
- Such sacred groves are found in Khasi & Jaintia Hills in meghalaya, Aravalli Hills of Rajsthan western ghat region of karnataka & maharashtra & sarguja, chanda & Bastar areas of madhya pradesh.

Q. NO. 5

Q. No. 5. Describe briefly Radioactive waste?

→ • These are the waste produced when nuclear energy is generated from radioactive materials.

• The use of nuclear energy has two very serious inherent problems first is ~~acc~~ accidental leakage & second is safe disposal of radioactive wastes.

• Radiation that is given off by nuclear waste is extremly damaging to organisms because it causes mutations at a very high rate.

• At high doses, nuclear radiation is lethal but a lower doses, it creates various disorder, the most frequent of all being cancer.

• Therefore nuclear waste is an exteemly potent pollutant & has to be dealt with utmost caution.

• It has been recomended that storage of nuclear waste, after sufficient pre-treatment should be done in suitably shielded containers buried within the rocks about 500 mts deep below the earth's surface.

Q. NO 6. Muncipal Waste :-

→ Muncipie solid wastes are wastes from home office, stores, School, Hospital etc. that collected & disposed by muncipally.

• The muncipal solid waste generally comprise paper, food waste, plastics, glass, metals, rubber, leather, textile etc.

• The Burning reduces the volume of wastes ~~thought~~ although it is generally not burnt to

completion & open dump often serve as the breeding ground rats & flies.
- Sanitary landfills were adopted as the substitute for open burning dumps.
- All waste that we generate is can be categorised in three types.
(a) Bio degradable (b) recyclable
(c) non-biodegradable.
- It is important that all garbage generated is stored. what can be reused or recycled should be separated out our kabadiwalas & rag-pickers do a great job of seperation of material for recycling.
- The biodegradable material can be put into deep pits in the ground & be left for natural breakdown.
- The need to reduce our garbage generation should be a prime goal, instead we are increasing the use of non biodegrdable product.
- Hospital generate hazardous waste that contain disinfectant and other harmful chemicals & also pathogenic micro-organisms. Such waste also careful treatment & disposal.
- The use of ~~Incineration~~ Incinerators is crucial to disposal of hospital waste.