

महाराष्ट्र शिक्षण समिती द्वारा संचलित

महाराष्ट्र महाविद्यालय, निलंगा



प्रमाणपत्र

प्रमाणपत्र देण्यात येते की, कुमार / कुमारी टीपन्ना उमिद्वैक मीदन

इयत्ता B.A III year हजेरी क्रमांक

शैक्षणिक वर्ष २०-२०-२३ मधील प्रकल्प कार्य जनप्रदुषण

या विषयावर मार्गदर्शक शिक्षक / प्राध्यापकाच्या मार्गदर्शनाखाली अपेक्षित सर्व कामकाज, माहिती संकलन व अहवाल लेखन विद्यापीठाच्या कला लेखन नियमाप्रमाणे प्रकल्प कार्य तयार केलेले आहे. सदर प्रकल्प कार्य हे संबंधित विद्यार्थ्याने स्वतः संकलित केलेले आहे.

सदर प्रकल्प कार्य हे संबंधित विद्यार्थ्याने स्वतः संकलित केलेल्या लेखन सामग्रीवर आधारित असून स्वतःच्या हस्ताक्षरात लिहिले आहे.

दिनांक : 17 - 10 - 23

Reddy
मार्गदर्शक

परिक्षक

प्राचार्य / उपप्राचार्य
Principal

Maharashtra Mahavidyalaya
Nilanga 413521 Dist Latur



अनुक्रमणिका

अ.क्र.	घटकाचे नाव	पान क्र.
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- Water Pollution -

Water pollution is the contamination of water bodies, usually as a result of human activities, so that it negatively affects its uses. Water bodies include lakes, rivers, oceans, aquifers, reservoirs and groundwater. Water pollution results when contamination are introduced into these water bodies.

Water pollution can be attributed to one of four sources. Sewage discharges, industrial activities, agricultural activities and Urban runoff including storm water. It can be grouped into surface water pollution or groundwater pollution. For ex. releasing inadequately treated waste water into natural waters can lead to degradation of these aquatic ecosystem.

Water pollution can also lead to water borne diseases for people using polluted water for drinking, bathing, washing or irrigation. Water pollution reduces the ability of the body of water to provide to the ecosystem services that it would otherwise provide.



Sources of water pollution are either Point Sources or non point sources. point Sources have one identifiable cause. Such as a storm drain, a wastewater treatment plant or an oil spill. Non point sources are more diffuse, such as agricultural runoff. Pollution is the result of the cumulative effect over time. pollution may take the form of toxic substances.

eg. metals, oil, plastic, pesticides, persistent organic pollutants.

A common cause of thermal pollution is the use of water as a coolant by power plants and industrial manufacturers.

Control of water pollution requires appropriate infrastructure and management plans as well as legislation.

Technology solution can include improving sanitation, sewage treatment, industrial wastewater treatment, agricultural waste water treatment, erosion control.

Sediment control and control of Urban runoff including stormwater management effective control of Urban runoff includes reducing speed & quantity of flow.



- Definition -

A practical definition of water pollution is water pollution is the addition of substances or energy forms that directly or indirectly alter the nature of the water body in such a manner that negatively affects its legitimate uses. Therefore pollution is associated with concepts attributed to humans namely the negative alterations and the uses of the water body.

Water is typically referred to as polluted when it is impaired by anthropogenic contaminants. Due to these contamination it either does not support a human use such as drinking water, or undergoes a marked shift in its ability to support its biotic communities. Such as fish.



- Contaminants -

- Contaminants with an origin in Sewage

- The following Compounds can all reach water bodies via raw sewage or even treated sewage discharges.

- Various chemical Compounds found in Personal hygiene and Cosmetic products.

- Disinfection by Products found in chemically disinfected drinking water chemicals can be a pollutant in the water distribution network.

- Insecticides and herbicides, often from agricultural runoff.



- Inorganic Compound -

- Ammonia from food processing waste.
- Heavy metals from motor vehicles and acid mine drainage.
- Nitrates and phosphates, from sewage and agriculture.
- Silt in runoff from construction sites or sewage, logging, slash and burn practices or land clearing sites.
- Salt :- Freshwater salinization is the process of salty runoff contaminating freshwater ecosystem.
- Human-induced salinization is termed as secondary salinization with the use of de-icing road salts as the most common form of runoff.



- Solid waste & plastics -

Solid waste can enter water bodies through untreated sewage, combined sewer overflows, Urban runoff, People discarding garbage into the environment wind carrying municipal solid waste from landfills and so forth.

This results in macroscopic pollution the large visible items polluting the water - but also microplastics pollution that is not directly visible. The terms marine debris & marine plastic pollutant are used in the context of pollution of oceans.

Microplastics persist in the environment at high level particularly in aquatic & marine ecosystem. where they cause water pollution. 35% of all ocean microplastics come from textiles / clothing. Primarily due to the erosion of polyester, acrylic or nylon based clothing.

