

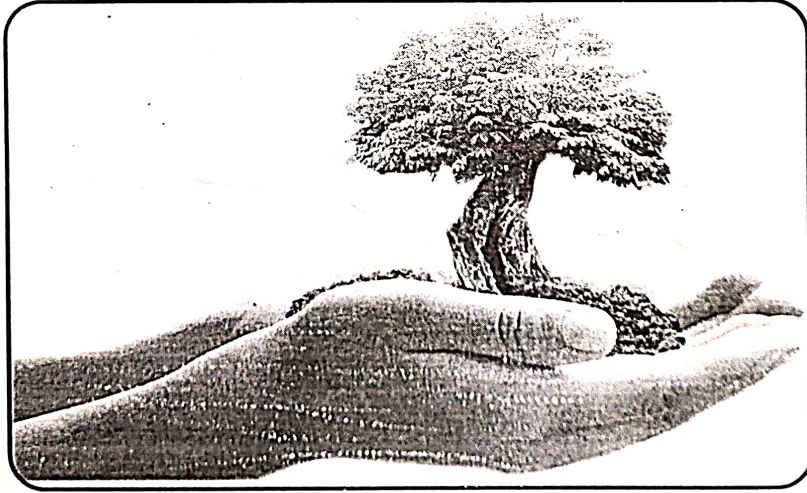
महाराष्ट्र शिक्षण समिती द्वारा संचलित

# महाराष्ट्र महाविद्यालय, निलंगा

ता. निलंगा जि. लातूर



## पर्यावरण प्रकल्प कार्य पुस्तिका



महाराष्ट्र शिक्षण सगिती द्वारा संचलित

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## प्रमाणपत्र

प्रमाणपत्र देण्यात येते की, कुमार / कुमारी AKADE VAISHRANI LAXMAN  
अकडे वसिंठी लक्ष्मण

इयत्ता BCA-TY हजेरी क्रमांक 1

शैक्षणिक वर्ष २०-२०२१ मधील प्रकल्प कार्य Wastewater treatment

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 विद्यार्थ्यांने स्वतः संकलित केलेले आहे.

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

दिनांक : 28/10/21

  
मार्गदर्शक

परिक्षक

  
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Wastewater Treatment



Wastewater is the water that has been used in a household, business, or industry and is no longer needed. It is often contaminated with dirt, chemicals, and other pollutants. Wastewater treatment is the process of removing these pollutants and making the water safe to reuse or discharge into the environment.

Wastewater treatment plants use a variety of methods to clean the water. These include physical processes like screening and sedimentation, chemical processes like coagulation and flocculation, and biological processes like activated sludge treatment. The treated water is then either recycled or discharged into a body of water.

How is wastewater formed?

Wastewater is formed by a number of activities such as bathing, washing, using the toilet, and rainwater runoff. Waste water is essentially used water that has been affected by domestic, industrial and commercial use.

Some wastewaters are more difficult to treat than others, according to the safe drinking water foundation. For instance industrial wastewaters can be difficult to treat due to its high strength nature. Domestic wastewaters, on the other hand, is relatively easy to treat.

There are a number of ways in which wastewater can cause pollution problems, considering not all waste make it to wastewater treatment plants.



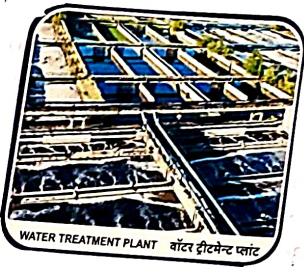
What is the process of wastewater treatment?

There are two main levels of wastewater treatment: Primary and Secondary treatment.

1) Primary treatment :-

- In the primary stage, solids are allowed to settle and be removed from wastewater.
- Primary treatment removes material that will either float or readily settle out by gravity.
- This treatment includes the physical processes of screening, comminution the act of reducing a material to minute particles or fragments for removal and sedimentation.





### Secondary treatment :-

- Secondary treatment removes the soluble organic matter that escapes primary treatment.
- Secondary treatment also removes more of the suspended solids, usually, by biological process in which microbes consume the organic impurities as food and then convert them into carbon dioxide, water and energy.
- The secondary stage of treatment removes about 85% of the organic matter in sewage by making use of bacteria in it, according to EPA.
- The principal secondary treatment techniques used in secondary treatment are the trickling filter and the activated sludge process.

