# "RESTORATION OF POND IN AIET CAMPUS USING FLOATING WETLANDS TECHNIQUE"



#### PROJECT REPORT

#### Submitted by

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In partial fulfillment of the requirements for the degree of

## **BACHELOR OF ENGINEERING**

In

CIVIL ENGINEERING

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI-590018.

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# ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

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# DEPARTMENT OF CIVIL ENGINEERING

## **CERTIFICATE**

Certified that the project work entitled "RESTORATION OF POND IN AIET CAMPUS USING FLOATING WETLANDS TECHNIQUE" is a bonafide work carried out by

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that all corrections/suggestions indicated for interval assessment have been incorporated in the report deposited in the departmental librar. The project-work prescribed for the Bachelor of Engineering Degree.

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### **ABSTRACT**

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Lakes and ponds are important sources of water. Both have different environmental values. They play vital role in maintaining microclimate of surrounding area. Also, they have major environmental, social, cultural and aesthetical potency. The source of water taken for the technique was from the pond which is situated in AIET campus area. This pond is important from environmental point of view as it supports aquatic as well as terrestrial ecosystem. The aim of this project was to investigate the feasibility and efficiency of Artificial Floating Wetlands for the nutrient removal mainly Biochemical Oxygen Demand (BOD), Dissolved Oxygen (DO), Phosphates, Nitrates and pH. Plant species were selected based on their capacity of removing nutrients that were polluting the pond. Artificial Floating Wetland technique with different vegetation is checked for the pond water. This technique shows the better performance for removal of BOD, DO, Phosphates, Nitrates and pH. Thus we could succeed in restoring of the pond water with the help of Plant species by maintaining the Biodiversity in the pond.

Key words: Restoration, Floating wetlands technique, Plant species, Efficiency.