

VELAMMAL ENGINEERING COLLEGE

(An autonomous institution)
CHENNAI-600066

REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM USING IoT

Submitted by

KOKILA B	(113219041053)
MADHUMITHA S	(113219041060)
SOWMYA A	(113219041114)
SWATHI A.P	(113219041120)

**BACHELOR OF ENGINEERING IN
ELECTRONICS AND COMMUNICATION
DEPARTMENT**

Project Design Phase-I

Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID23523
Project Name	Real time river water quality monitoring and control system using IOT
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">• In today's world, water is highly polluted.• It is hazardous for aquatic life and people who consume it.• To avoid this problem, we come up with this quality monitoring and control system.
2.	Idea / Solution description	<ul style="list-style-type: none">• So for this problem we have come up with a solution of monitoring the temperature, checking the PH level of water, turbidity of water and altering the people through message or buzzer whether to consume it or not.
3.	Novelty / Uniqueness	The approach of our system includes : <ul style="list-style-type: none">• Temperature parameters measurement• Smart beacon devices to display the quality of river water• An application to measure the PH level• GSM module to alert the society
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">• In our project, the Internet of Things (IOT) is used to collect data and communicate through the internet.• We hope that our project will be beneficial for the people across the world, saving lives from air and water borne diseases.

5.	Business Model (RevenueModel)	<ul style="list-style-type: none"> • Our proposed system includes various measuring technologies like GSM module. • The product will be assigned an initial margin price and price will be updated as we add new features to it.
6.	Scalability of the Solution	<ul style="list-style-type: none"> • Including sensors to monitor temperature and turbidity of river water to avoid negative effects on aquatic life and people who consume river water.