Project Design Phase-I
Proposed Solution Template

Date	**19th September 2022**
Team ID	**PNT2022TMID07013**
Project Name	**Smart Waste Management System for Metropolitan Cities**
Maximum Marks	**2 Marks**

Problem Statement	• **The collection and disposal of garbage waste is in an unordered, inefficient way which leads to overfilling of bins, rotting garbage smell and more fuel consumption of collecting trucks.**
Purpose Statements (Goal)	• **The purpose of this project is to focus on problems of detection of emptying of a recycling container using sensor measurements**
Solution Description	• **Using sensors, weighing machines; real time monitoring the level of waste in bins.** • **The information gets shared with appropriate authorities through web application.**
Uniqueness/ Novelty	• **Citizens & industries behaviours during specific festivals, events at different seasons are monitored and are predicted for garbage overflowing.** • **Also, to find the shortest path to reach the destiny for trucks on the basis of fuel and time consumption.**
Social Impact / Customer Satisfaction	• **Informative, effective management of waste in big cities reduces waste impacts over environment pollution**

Business Model (Revenue Model)	• **Eco-friendly.** • **Optimised route navigation system.** • **Reduce fuel consumption.** • **Alerts authority by real-time monitoring**
Scalability of the Solution	• **Timely Alerts: The garbage truck receives timely alerts when bins are ready to be emptied.** • **Reduce operation cost.**