| Date | 03 September 2022 |
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| Team ID | PNT2022TMID41393 |
| Project Name | Project – Smart Waste Management System for Metropolitan Cities |
| Maximum Marks | 04 Marks |

# LITERATURE SURVEY
# SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES

| S.NO | TITLE OF THE PAPER | AUTHOR NAME | YEAR OF PUBLICATION | REMARKS | OUTPUT |
|---|---|---|---|---|---|
| 1 | IOT based smart waste bin monitoring and municipal solid waste management system for smart cities | Muhammed irfan, Abdullah saeed, Al wadie , adam | 4-June/2020 | Environmental Pollution. Improper collector and disposal mechanism | Collect the waste effectively. Detection of fire in waste material. Wirelessly connected with he central hub Of transmit the info about the bins filling level with existing collection. Avoid the overflow of bins. |

| 2 | Smart garbage segregator and IOT based waste collector system | Mrigank goel, Amogh harsh goyal, Preeti dhiman, Vikas deep, Purshottam sharma | 05-March/2021 | All wet waste are not used for urban agriculture, organic farming. | It segregates the metallic dry and wet waste. It also convert that it can be further used in urban agriculture, organic farming. It alert the waste management Center through IOT system |
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|  |  |  |  |  | whenever any of the metallic or dry garbage Bins is full to avoid serious environment hazards |

| 3 | A novel strategy for waste prediction using machine Learning algorithm with IOT based intelligent waste management system | G.Uganya, D.Rajalakshmi, Arun Radhakrishnan Ramya , Yuvaraja teeka, -raman | 10-Feb/2022 | Low cost Method High accuracy Complicated method Because of using machine learning algorithm | Automatic method, predicting the possibility of waste things. The waste capacity ,gas level, metal level monitored continuously Using IOT based dustbins. Tested by random forest algorithm gives the accuracy of 92.15% and give time consumptions of 0.2 ms. |

| 4 | System waste management | Arafat ali khan Farhana shetu Saimum bari Lawshik shikder | 7-Jan/2021 | Good enough to prevent the garbage overflow and ensures the partial<br><br>is perfect waste management and monitoring system | Microcontroller, sensor, GSM are used in the system. This proposed system would have an automated waste level detection process and also a smart monitoring and overall management process. |
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| 5 | Real time smart garbage bin mechanism | Dominic Abuga N.S.Ragava | 23-Oct/2021 | Fuzzy logic is applied Hence real | This mechanism proposed |

| | for solid waste management in smart cities | | | time decision making avoid real time monitoring | accesses<br><br>real time information of any smart garbage<br><br>bin deployed across the city and helps to resolve |
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| | | | | | the problem of waste overflow from garbage bins and keeps cities clean |

| 6 | Smart waste management system using IOT | V.Pavan sankeeth V.Bhavana V.Santhosh Markandeya | 3-Nov/2019 | Easy process but garbage truck driven must have cell phones | The server monitors garbage bins that are spread across the city at multiple location sever sends SMS to assigned mobile number which provide route to the driver based on all the data collected from bins |

| 7 | Automated waste garbage monitoring system<br><br>with optimal route generation for collection | Aarati medehal<br>Aniruddha<br>Annaiuru<br>Shalini<br>T.S.Chander | 1-Oct/2020 | Using of machine learning algorithm improve the redundant inefficient | This purpose of this system is use powerful tools of IOT for completely automated the process of garbage monitoring using ultrasonic sensor<br>    and node MCU And provide an optimal route for garbage |
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| | | | | | collection using cluster first route several ml algorithm |

| 8 | An IOT based garbage monitoring a disposal support system. | T.M.N Vamsi G.Kalyan chakravathi B.Divakar Protibha | 10-April/2021 | Consumption of fuel<br><br>in garbage truck is reduced but clean personal must<br><br>have smart phone to active<br><br>this process | This system monitors garbage bins located at different locations and notifies about the level of garbage accumulated in<br><br>garbage bins through android application to cleaning personnel and provides shortest path to the garbage bin location |
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| 9 | IOT based solar powered smart waste management system with real time monitoring an advancement for smart city planning | Md.humaun Kabir,sujit roy, Md.tofail ahmed, Mahmudul alam | 21-Oct/2020 | Project costs complicated but this can be suitable for any kind of cities or town and ensures proper collection and disposal of garbage | It enables real time monitoring of solar powered several smart bins located in different point in the city which are connected to control system through long range (LDRA) Communication device and also supervises the waste collection and disposal time using automated |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | vehicles locating system |

| 10 | Intelligent sensor based waste disposal system for smart cities | Chinmai shetty B.Dhenanyaya Deepa N.Rashmi | 1-Nov/2020 | Intelligent sensor makes a person to through garbage the bins | Sensor helps is identify the quality of garbage and real collected information the info is send to the drivers and the garbage collected information is updated on the web page this system also ensure that there is no waste thrown around the trash bin the intelligent sender should make beeping sound if any person through around the trash bin and not into the trash bin |