

1. **Project Proposal Reference Number:** 46S\_BE\_558
2. **Title of the Project:** DEVELOPMENT OF ELECTRIC VEHICLE FROM EXISTING PETROL VEHICLE WITH AUTOMATIC SPEED CONTROL SYSTEM.
3. **Name of college and Department:** KLE INSTITUTE OF TECHNOLOGY, Mechanical Engineering Department.
4. **Name of Students:**  
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5. **Key Words:**

- Conversion of Petrol Vehicle to Electric Vehicle.
- Development of Auto Speed Control System.

6. **Introductin:**

- At the mention of global warming, the first thing comes to mind is an increasing number of vehicles in traffic, as well as exhaust gases these vehicles emit.
- We have two major problems first is of fuel because in garbage vehicles, consumption of fuel is almost doubled due to collection of garbage from door to door in a society which will result in running of vehicle in 1st and 2nd gears.
- The next problem arises from previous one i.e., driver effort, continuous operation of clutch pedal and shifting of gears results in driver fatigue. Due to this operation, wear and tear in a vehicle is increased which leads to high maintenance of vehicle as well as reduces life of vehicle.
- To overcome this, we will convert an I.C engine vehicle to a more efficient electric vehicle.
- The process of conversion includes the replacement of existing parts like ICE, clutch assembly, transmission box, fuel tank and other components with motor, battery, controller and converters.

## **7. Objective:**

- i. To modify the existing petrol vehicle to electric vehicle.
- ii. To develop auto speed control system using Arduino and Sensors.
- iii. To test the performance of developed electric vehicle.

## **8. Methodology:**

- Removal of IC engine parts from petrol vehicle.
- Assembly of BLDC motor with allignment.
- Controller and Battery connection.
- Development of auto speed control system.
- Testing the vehicle.

## **9. Results and conclusion:**

The electric powered vehicle has number of advantages and benefits over the internal combustion engine. It is cleaner and much more efficient. The project demonstrated an efficient way for conversion of a conventional Internal Combustion Engine vehicle into an Electric Vehicle. This conversion will save the IC engine vehicles from going to scrap. The project successfully converted the existed IC engine to EV by meeting all the set objectives.

## **10. Scope of Future:**

The project work in about converting existed IC engine bike to EV, it could the design constraints, And following work on future scope.

- Power transmission by suitably changing the gears.
- Automatic braking system is developed for drum brakes can be improved by using discbrake.

