BATCH NUMBER:14

**DESIGN AND ANALYSIS OF V8 SOLENOIDAL ENGINE**

NAME OF THE GUIDE: Asst.prof. K. ARUNA SREE

**ABSTRACT:**

In an automobile, engine is the main power source and today, majority of the engines are Internal Combustion (IC) Engines which use either Petrol or Diesel as the main fuel source. The combustion of these fuels in the piston releases heat Energy which is converted into mechanical Energy. These fuels release harmful gases after combustion and hence pollute the environment as well as have adverse effects on the living beings.

Fossil fuels are going to get exhausted in the near future and currently, Electric Cars are the best alternative to the conventional gasoline engine cars. Electricity is a clean source of energy with almost zero emissions. The objective of this project is to design a solenoid engine which works on the principle of Electromagnetism. This concept is used to convert electrical energy into mechanical energy and the power generated is used to drive the car.

Key Words: Solenoid, Electromagnetism, Spark Distributor, Rheostat, V8 Engine.

**COMPONENTS:**

1. Crankshaft

2. Gears

3. L-Bracket

4. Solenoid Piston

5. Camshaft

6. Flywheel

**METHODOLOGY:**

1. A solenoid is a conductor around which copper wires are wound and when it is supplied with current, it generates a magnetic field.
2. When current is passed through the wire, it produces magnetic flux which attracts any metal put inside the hollow pipe, towards it.
3. Spark distributor is used to actuate electromagnet according to position of piston in cylinder rather than sensors and microcontrollers.
4. The reciprocating motion of the plunger is converted into rotating motion of the crankshaft.

**NAME OF THE STUDENTS**:

1. L.DURGA PRASAD : O170226
2. P. NAVEEN : O170754
3. KVNSUJANA DIVYA : O170455
4. M.T.D RAJESH : O170134
5. P. ANURAG : O171132
6. G. RAVI : O171089