



## Introduction

**M**inimal motor is a motor prepared from very basic and limited inventory. The design of this running mechanical device from very basic objects, requires innovative and out of the box thinking. It also teaches us the value of recycling or creative use of our trash.

## Idea

**E**lectric motor is a device that converts electrical energy (from a battery or voltage source) into mechanical energy (used to cause rotation). When a current carrying conductor is placed in a magnetic field, the conductor experiences a force which rotates the motor. Commutation is to be taken care of for successful operation of DC motor.

# Task

There is a set of basic household inventory that each team would be provided.

The teams have to use these materials and design a DC motor.

The DC motor should be robust and firm. It should be able to run even if the shaft is lightly loaded. Also, self start motors would be given more points.

The main judging criteria would be speed of the motor.

Further, the teams can earn extra points by returning the unused objects from their set of materials.

Thus, teams should try to make the motor by using least possible objects.

# Event Format

There will be two rounds in this event .

There is no limit to the number of teams that can participate in the first round. There will be three members in each team.

Round 1 will be MCQ quiz. The questions in this quiz will check the participants' electrical engineering concepts. Only Six teams will be selected for the next round.

Round 2 is the main round of this event in which the participants have to perform the tests . Winner will be decided on the cumulative score of each team from the two rounds.

In case of tie, the winner would be decided by an oral quiz.

## Prizes and Certificates

First prize	:	Rs. 5000/-
Second Prize	:	Rs. 3000/-
Third Prize	:	Rs. 2000/-

The teams reaching the second round will receive the certificate of participation.

## Contact

Event Co-ordinator  
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For registrations and more details visit  
[www.techvaganza.org/events/fixerelixir/minimalmotor](http://www.techvaganza.org/events/fixerelixir/minimalmotor)



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