# **BEAM**



## **ABOUT-**

BEAM robotics is a way of thinking about and building robots with roots in the "behaviorist" "actionist" robotics movement of the 1980s. Rather than relying on microprocessors, programming, and digital logic, BEAM designs favor discrete components, stimulus-response control systems, and analog logic. From a design perspective, BEAM robotics is about getting the most complex and interesting behaviors using the simplest circuits, actuators, and components.

# BEAM is an acronym for:

Biology Electronics Aesthetics Mechanics:

#### **EVENT DETAIL:**

Each team has to submit their abstract before 15th april so that coordinator can provide the necessary guidelines to the team.

Round 1: Team has to present the presentation related to their model. Length of the presentation should not be more than 15 slides.

Round 2: This is on the spot round. In this participants have to make a robot using kit provided by us.

Round3: This is the final round of the event. Each team has to bring his Bot to compete with other participants.

## **RULES AND REGULATION:**

- 1) Each team can consist of maximum of 3 members.
- 2) Kit will be provided only for the 2<sup>nd</sup> round.
- 3) For the third round participants have to design their Bots by using elements written above.
- 4) Each round has its weightage and no elimination before third round.

Cash prize will be awarded to the winners.

## **COMPONENT USE TO MAKE BEAM ROBOT:**

- 1) Battery holders, 2 × AAA (2) + Batteries cell, AAA (4)
- 2) Slide switch, SPST subminiature + Roller lever switch, SPDT with 3/4" lever
- 3) DC motors, 6VDC (2)
- 4) IR detectors, phototransistor (Photodetector) type (2)
- 5) LM386 low-voltage power amplifier chip, 8-pin DIP
- 7) Resistor,  $1k\Omega$ , 1/4W + LED(1-red +1-green)

- 8) Round PCB, 1" dia,12
- 9) Super Tape.

**Event Coordinator:** 

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