

## BOTS OF ANARCHY

All-terrain robots are supposed to handle a wider variety of terrain than the ordinary robots. They are programmed in such a way that they are able to drive off a road, tough terrain, steep rocks, sand, mud, rocks, water, etc. When you are talking about Robotics. Manual robotics is the best option to start your journey to explore the world of robotics. It's time to do more with your robots and go and test it to extremist surrounding to get the best out of it.

Have you ever traversed through rough terrain, went on rock climbing or trekked across obstacles or even got stuck in the sand? It's time to place your robot in the challenging arena comprising of all possible terrains like sand, pebbles, obstacles, bumpers, bridges, marbles, grease, inclines, dips, cliffs, ramps, banks, etc. Participants need to build a manually controlled robot which can traverse through the arena and be able to complete the entire track within a certain time limit.

**Date:** 13<sup>th</sup> to 15<sup>th</sup> April

### **General Rules:**

- This is a team event. The maximum number of participants allowed in a team is 4
- A participant cannot be a member of 2 different teams in this event.
- Any action violating fair play will lead to immediate disqualification.
- The decision of the coordinators will be final & binding.
- Rules may be modified after the commencement of the even. The bots can be powered on-board as well as off-board. In case of off-board power supply the wires must be kept slacked all the time.
- It should be noted that the main chassis should remain the same throughout the event.
- The participants will be provided with 220 volts, 50 Hz standard AC supply. Participants will have to arrange for any other power supply required for their robot by their own.
- LEGO kits or its spare parts are not allowed, but the participant can use readymade gearboxes or bases.
- The bot can be controlled by maximum of two participants during the event.

## **Event Rules:**

- The bot will have to be placed at the starting point from where it will start its journey through the arena and make its way towards the finishing line overcoming all the obstacles in its way.
- The maximum time allotted for completing the arena will be 5 minutes.
- The arena will consist of various obstacles along with sand, bumpers, water, net-bridge, etc.
- Depth of water probably will be 3-4 cm.
- There will be a maximum of 2 Restarts where the bot will be placed at the starting point and the clock will be set again, at the cost of a penalty.
- There will be a maximum of 3 Resets where the bot will be placed at the last crossed checkpoint, at the cost of penalty points.
- Each team can take a technical time out of 1 minute only once during the event. In case when a timeout is taken a restart will be deducted (a team can also call for a timeout once a restart is given).
- There will be a number of checkpoints in the arena, crossing which, the team will earn points.
- The arena will be subject to modifications in the final round. Special attractions like rotating discs and inclined walls will be also present in the arena.
- Attempt those paths and earn huge bonus points.
- The top few teams of the preliminary round will move on to the finals in which they have to face the previous arena subjected to some major and minor changes

Sample obstacles in the course

1) Metallic wire 2) Bed of Nails 3) Asbestos Sheet Bot specifications:

\*\*\*\*The dimension of the bot must not exceed 25\* 25\* 25 cm during the starting of the event.

\*\*\*\*The maximum weight of the bot must not exceed 2.5 Kg.

\*The maximum allowable voltage for the bot is 19.5 V.

Use of LEGO kits is strictly prohibited.

Autonomous bots based on microcontrollers are not allowed.

**PS: Rules are subject to change without prior information. The decision of the event coordinators will be final in regards to all the issues pertaining to the event.**

## **Event Coordinators**

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