



TOP GEAR

When you are talking about TECH FEST, robotics is the essential topic because it's your creation that challenges others on biggest platform of pride, glory and expertise .it says The early bird catches the worm. if you want to catch the match, if you love speed, if you love to take challenge then this is your place to win the race.

Make your own bot and challenge other opponents bot. Make your own manual robot to win the EVENT on the platform of PHOENIX. This is a racing event of manual robots where 4 bots will compete amongst themselves at a time and you have to reach your destination to win the crown of no,1 racer and grab all the cash after each race.

You have to place your bot on a challenging arena comprising of different terrains like sand, pebbles, obstacles, bumpers, marbles, grease, inclines, sea-saw, dips, cliffs, ramps and many more. All the participants need to built a strong, fast and suitable manually controlled robot which is able to complete the entire track and reach the finishing point as fast as possible.

Problem Statement:-: Build a manual robot capable and strong enough to travel fast through any type of difficult terrain To beat the other opponents and reach the destination within a shortest time.

General Rules:-

- 1. This is a team event. The maximum number of participants allowed in a team is 4.
- 2. A team may consist of students from different/same colleges.
- 3. A participant cannot be a member of 2 different teams in this event.
- 4. The bots can be powered on-board as well as off-board.
- 5. In case of off-board power supply the wires must be kept slacked all the time.
- 6. It should be noted that the main chassis should remain the same throughout the event and Two team cannot perform with the same bot at any time in this event.
- 7. 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.





- 8. LEGO kits or its spare parts are not allowed, but the participant can use readymade gearboxes or bases.
- 9. The bot can be controlled by maximum of two participants during the event.
- 10. Any action violating fair play will lead to immediate disqualification.
- 11. The decision of the coordinators will be final.
- 12. Rules may be modified after the commencement of the event.

Event Rules:-

- 1. THIS is a racing event where 4 teams will compete amongst themselves to reach the ending point with their own bot.
- 2. The 4 bots will be placed at their respective 4 different starting points from where it will start its journey and overcoming all the obstacles you have to take your bot at the single ending point.
- 3. 1st bot to reach the ending point with shortest time will win the race.
- 4. The arena will consist of various obstacles and rough terrain (like with sand, bumpers, seasaw, iron chips

etc.) PHOENIX

- 5. There are no Restarts, no Time-outs, . If the bot of a team is encountered with any kind of malfunctions and it fails to move for any reason, it's the GAME OVER for them.
- 6. If a bot somehow stuck in the arena or if it is toppled, then the team can ask for a reset or hand- touch, then the event coordinators will reset the bot within 5 seconds of the request. Participants are not allowed to touch the bot during the event.
- 7. One bot can freely collide with other's, restrict movement of other bots by any means in order to reach the end point at the earliest.





- 8. The arena may be subjected to modifications.
- 9. There is no time limit, the first bot which reaches the End point, wins the race and takes the cash.
- 10. No participating team is responsible for any damage of your bot during the event.
- 11. One team can participate as many time as they wish by registering them each time.

Bot specification:

- 1. The size of the bot must not exceed 25*25*25cm. Individual parameters to be measured with a tolerance of 10%.
- 2. Touching the bot during the competition is strictly prohibited.
- 3. The robot must be controlled manually using either wire or wireless control.
- 4. No Lego kits or IC engines are allowed but you can use gear boxes.
- 5. The robot may use an external or on board power supply. The maximum voltage applied on the bot must not exceed 18v at any time during the event. The supply voltage cannot be increased or decreased.

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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