# **ROBO RACE**

# **INTRODUCTION**

There's no secret. You just press the accelerator to the floor and steer left. Make your robots complete the track in the least time and challenge other robots. Push the rapid growing technologies over the limit to have fun. Presenting ROBO RACE to showcase your fastest robot designs on the track.

#### PROBLEM STATEMENT

A manually controlled wired or wireless robot has to transverse through a track full of turns and obstacles in minimum possible time.

### **ROBOT SPECIFICATIONS**

- 1. Size limitations are 25cm×25cm×25cm.
- 2. The chassis should not be ready made.
- 3. The potential difference between any two points should not exceed a limit of 12V.
- 4. Robots can be wired, wireless, or autonomous.
- 5. Power supply must be ON board.
- 6. There is no weight limit for robots.
- 7. Tolerance of 5% on dimensions and power supply will be allowed.

#### QUALIFYING ROUND

- 1. The robot will be placed at start line and starts the lap when time starts.
- 2. If the robot falls down from the track, there will be a penalty and will start from the same place. Timer won't be stopped.
- 3. There will be a penalty for each obstacle tripped.
- 4. Width of the track varies from 30cm to 35cm for qualifying round. It may change in further rounds.

Note: Scoring and penalty rules will be announced on the day of event

#### RULES

- 1. A team can consist of a maximum of 4 members.
- 2. Members of different institutions can form a team and must carry your respective college ID cards.
- 3. Only 2 members of a team are allowed to stay around the arena (for controlling and assisting).
- 4. Only Undergraduates are allowed to participate in the event.
- 5. Any kind of damage to the arena will not be entertained, and if done, the robot will be immediately disqualified.
- 6. No technical assistance will be provided by the coordinators during the time of the event.
- 7. No practice runs will be provided.
- 8. Use of an IC engine in any form is not allowed.
- 9. Human interference (e.g. touching the robot, stepping into the arena) during the game is not allowed.
- 10. No external power supply will be provided at the time of event.
- 11. A robot with the base of a toy car and its gearbox as a machine part will be disqualified. Also, LEGO kits are strictly prohibited.

- 12. Participants with wired robots are strictly advised to get wires of length 3m or more. The wires should be given slack throughout the gameplay.
- 13. Member participated from a team cannot participate in another team for the same event.
- 14. A robot is allowed to participate only once in that particular event.
- 15. The organizers are not responsible for any kind of damage to your robot.
- 16. In case of any discrepancies, the decision of the coordinator and the event head shall be final and no further arguments shall be entertained.

## **CERTIFICATE POLICY**

- 1. A certificate of participation will be awarded to all participating teams except for the disqualified teams.
- 2. A certificate of appreciation (or excellence) would be awarded to the winners.