### RC Car

# Registration fees-Rs.600

## **Problem Statement**

Who is the fastest at the curves !!!

#### Rules

- 1. There will be a qualifying session with each team getting 2 laps out of which the faster lap will be considered. Note that these laps will have to be taken successively.
- 2. The top teams from the qualifying rounds will make it to the second round.
- 3. After the qualifying round, there will be races between multiple cars at a time. So the participants must use a remote with frequency of band spectrum 2.4 GHz.
- 4. The track will have check points at regular intervals. If a machine tumbles, halts or goes off the arena at any point on the track, one of the team members is allowed to lift it up and place it at the nearest checkpoint behind that point. The time shall still be running in the mean time.
- 5. Team members are not permitted to touch either their machines or those of their opponents once the race begins (unless there is need to lift the machine as stated in fourth point). The penalty for doing so is disqualification.
- 6. In the qualification round, a maximum of two team members are allowed from a team in the racing arena
- 7. The machines are not allowed to leave any loose parts on any part of the arena. Any machine disintegrating during the race will be disqualified.
- 8. If any of the machines starts off before the flag is waved, the counter would be restarted and the machines will get a second chance. However, if any machine starts off before the waving of flag (or countdown) for a second time, it will be disqualified. No rematch will be held for the second time.
- 9. Teams are not allowed to purposefully damage the machine of the opponent's team. If found doing so on track (while racing), the concerned team will be disqualified. Execution of last three rules will be subjective and relies

completely on judges' and organiser's discretion.

- 10. The organizers reserve the rights to change any or all of the above rules as they deem fit. Change in rules, if any will be highlighted on the website and notified to the registered teams.
- 11. Violation of any the above rules will lead to disqualification.
  - 1. Machine should fit in a box of dimensions 700mm x 500mm x 600mm (lxbxh) at any moment of time during the race. The external device which is used to control the machine is not included in the size constraint.
  - 2. The machine should be controlled by a wireless remote control mechanism throughout the race.
  - 3. The machine must not be made from Lego parts, or any ready-made assembly kits other than the parts mentioned below
- 4. The tires must have a minimum diameter of 3 inch. You are advised to use tires of good width for better performance on dirt tracks.
- 5. Any machine which uses DC Motors for propulsion will be disqualified. However DC motors and servos can be used for steering mechanisms or any other control mechanisms apart from propulsion.
- 6. The machine must have an on-board power supply to run any mechanism requiring electric power.
- 7. The maximum allowed capacity of IC engine to be used is 4.6 cc (i.e. Participants can also use2.5 cc, 3 cc, 3.5 cc or any other IC engine lower in capacity).
- 8. The electric voltage anywhere in the machine should not exceed 12V at any point of time.
- 9. There shall be a countdown preceding the start of the race. No participant is allowed to touchthe machine during the countdown period.
- 10. The participants are advised to use proper air filters as dirt might cause serious problems to the engine.

# **Team Specification**

A team may consist of a maximum of 6 participants. Students from different educational institutes can form a team.

# **Certificate Policy**

Certificate of excellence will be awarded to the top 2 winners.

Certificates of Participation will be given to all the participants, but not to the teams which get disqualified due to disobeying any of the competition rules.