

PROBLEM STATEMENT:

Participants have to build a battery powered wireless Remote Controlled car that can endure the rough and uneven terrain (dirt track) made of moist clay. Least time taken to traverse the track length will decide the winner for the competition.

GAME RULES:

1. Students currently enrolled for up to an undergraduate/postgraduate program at their institute are eligible for the competition.
2. Each team can have a maximum of three participants.
3. Every team has to register online at our website for the competition.
4. No portion of the machine (except the remote control antenna) should project out of a 10"x10"x10" cube at any point of the game.
5. The machine must use only mechanical power converted from a source of electrical energy. Use of any type of chemical (except batteries) is not allowed.
6. The machine should carry its power supply onboard and should be **wireless remote control (RC) operated**.
7. **Teams may use prefabricated wireless remote control (RC) kits** but rest of the machine should be designed and built by the team.
8. All the participants might have to submit their Remote Controllers to the organizers during a race to avoid any chances of interference between similar frequency remotes.
9. The teams must adhere to the spirit of healthy competition.
10. Judges and organizers reserve the right to modify the rules in order to preserve the spirit of healthy competition.
11. If a machine fails to participate in the group photograph (time & venue will be notified at the reporting desk during Techfest) no reimbursement will be given to that machine.
12. Gearbox and/or motor assembly of a toy car, or a base of a toy car with its gear box and/or motor as a machine part will disqualify the machine for the competition.
13. Lego kits/parts are not allowed.

ELIMINATION ROUND:

1. Elimination round will consist of time trials of all the machines on the track.

2. Elimination rounds are essentially for seeding purpose and to eliminate unsafe machines. Machines will be checked for safety and size prerequisites.
3. Machines can be modified after elimination round (but the safety aspect would still require inspection by the judges).
4. A machine is required to essentially clear the elimination round only once.

CONTEST RULES:

1. The contest will be organized into many rounds (races).
2. The teams have to be ready for the contest within two minutes of the announcement for them to do so, failing to which the judges, at their discretion, can disqualify that team.
3. At the end of each round, the top teams will move forward to the next round. The number of the teams advancing to the next round after each round is left to organizers discretion.
4. In case of tie or ambiguity, the race will be replayed again between those two machines.
5. No change of batteries to run the machine will be allowed during a single race.
6. There shall be an Elimination round for all the competing machines as mentioned above.
7. Also, the machine must be **robust** enough to withstand **multiple races** and uneven terrain of the track.

RACE TRACK:

1. The race track will cover about 20 meters of track length and will have a variable width ranging from 15 to 30 inches.
2. The race track will be made up of dirt consisting of mostly moist clay plus some other ingredients.
3. The race track would have many crests and troughs of variable heights which the machines are expected to negotiate. (Thus, the machines will require a **sufficient clearance** from the ground level.) The race track may also have various turns in its path (hair pin turn, 90 degrees bend etc.)
4. The contestants may also expect a few bridges or straight tunnels through which the vehicle will need to be maneuvered carefully. A few land marks like 'loose dirt pools' and 'swamps' etc. are most likely too.

GENERAL RULES:

Size/Safety:

The machines will be first checked for size and safety. The machines are not allowed to dismember themselves or leave parts on the track. The machines must not contain any combustible, corrosive, or otherwise dangerous materials for safety reasons. No explosive compression or decompression, either internal or external is permitted. There is a risk of compressed containers rupturing and creating shrapnel. Any machines whose strategy or operation is considered too dangerous shall be disqualified by the judges.

Breakdowns/Timeouts:

There is no provision for breakdown or timeouts in this contest. Your machine must be sturdy enough to participate in several races. The decision of the match referee will be final and binding in all respects. But a change of batteries is allowed in between consecutive races. The machines may be repaired during off time (i.e. the time when a machine is not expected to be on the race track).

Foul/Penalties:

Team members are not permitted to touch their machine once it starts racing on the track. The penalty for doing so is DISQUALIFICATION. Machines causing intentional damage to other contesting machines will be DISQUALIFIED.

Machine Names:

The name of your machine must be prominently displayed on the machine.

Demonstration to Judges:

Machines will have to be demonstrated to judges (who will evaluate the machines for other prizes such as most creative design) at a time and venue notified at the reporting desk. Any team that does not turn up at the specified time will not be considered for these prizes.