ROBO RACE

1. Introduction

For all those who have passion in Robotics or Sports, FLAIR-FIESTA presents ROBO-RACE. This competition is to show how good and swift robot of yours can be by crossing the hurdles using it and scoring more points.

2. Problem Statement

1. Teams must build a manually controlled machine which can run on the track provided with minimum time.

2. The bot can be wired or wireless. In case the participants use wireless mechanism, they must use dual frequency remote.

3. Event Rules and Specifications

3.1. Arena

The arena consists of the following:

1. Track filled with pebbles,sand, water, spikes, soil, nails etc.

Note:

1. **The dimensions of the arena will be accurate to within 5% or 20mm, whichever is less.**
2. **The diameter of the pipe may vary within +/- 10 mm.**

4. Team Size

4.1. Students from different colleges can form a team. A team may consist of at least members and should not exceed more than 4 members.

4.2. The students must carry their valid student ID cards of their college which they will be required at the time of registration.

5. Eligibility

Any student from a recognized institute/college can participate in this event.

6. Rules

Power Supply:

6.1. The participants can use an on-board or off-board electric power supply. However the power source must be non polluting and must satisfy the safety constraints determined by the coordinators.

6.2. The voltage between any two points should not exceed 12 Volt DC at all times during the run.

6.3. The participants have to carry their own power supply. Only 220V AC socket will be provided by the organizers.

Game-play:

1. The bot must start from the START line.
2. There are at least 10 modules in the track.
3. Each Modules has specified points.
4. The bot has to cross each level in the given order only.
5. If bot is not able to cross a particular level then it can skip that level.
6. Maximum number of skips allowed is 2, failing will result into disqualification.
7. Points of the skipped levels will not be counted.
8. It is a time based game, the timer will start when the bot starts running from the START point & will count until bot reaches the FINISH point.
9. The timer will not stop while skipping process.

General Rules:

1. The teams must adhere with the spirit of healthy competition.
2. Organizers reserve the right to disqualify any team indulging in misbehavior or violating any rules.
3. Any team that is not ready at the specified time will be disqualified from the competition automatically.
4. The time measured by the organizers will be final and will be used for scoring the teams.
5. Time measured by any contestant by any means will not be accepted for scoring.
6. In case of any disputes/discrepancies, the coordinator decision will be final and binding.
7. The coordinator reserve the rights to change any or all of the above rules as they deem fit. Change in rules, if any will be updated on the website.
8. Note that at any point of time, the latest information will be that which is given on the day of event. The information provided in the PDF downloaded earlier may not be the latest.
9. All decisions taken by the organizing team will be final. No argue will be encouraged.

Game Rules:

1. The machine would be checked for its safety before the run and will be disqualified if found unsafe for other participants.
2. Only two team members are allowed to enter in the arena, however only two member is allowed to control the bot. Other team members are not allowed to enter the arena.
3. The bot will be liable for disqualification if it causes any kind of damage to the arena.
4. In case the bot gets stuck at any place and at any point of time for   more than 10 sec, then the bot will be placed back to the initial check point of that Level .The timer won't be stopped during this process.

Scoring:

1. Points will be awarded for crossing individual levels as given above.
2. In skip, equivalent point is added in the participant track completion time as penalty time.

6. Specifications

1. The dimensions of the bot should be less than or equal to 300 mm X 300 mm X 300 mm (l*b*h), failing which the team will be disqualified from the competition.
2. The bot should be controlled manually.
3. Teams can use both wired as well as wireless control mechanisms. In case of wired bots, the length of wire should be minimum 4 meters so that the wire remains slack at any instant of time. If the participants use wireless mechanism then it is mandatory to use a dual frequency remote.
4. The dimensions of the remote are not included in the size constraint of the bot.
5. Bot can have an on-board or off-board power supply.
6. Only upto 5% tolerance will be allowed else the bot will be unfit for the game and will lead to disqualification.

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