Minion Rush

OBJECTIVE

1. Teams must build a manually controlled machine which can traverse an arena having various obstacles.
2. The bot can be wired or wireless. In case the participants use wireless mechanism, they must use dual frequency remote/ Bluetooth.

ARENA

1. The width of the track is 1 metre.
2. There will be ramps with inclination of maximum 30 degrees.
3. Semi cylindrical shaped hurdles each of a maximum diameter of 30mm on the ramp.
4. Semi-cylindrical shaped speed breakers made from PVC pipes of maximum diameter 50mm.
5. Triangular shaped speed breaker of maximum height 30mm.
6. Certain areas of the arena will have grease, pebbles and pits.
7. The arena may contain obstacles to disrupt the path of the bot.
8. The arena will have various checkpoints which will be revealed on the spot.
9. The figures below show the sample arena and sample obstacles. **The actual arena and the obstacles at the competition will consist of alterations.**

BOT SPECIFICATIONS

1. The dimensions of the bot should be less than 300mm x 300mmx 300mm at the start of the event failing which the team will be disqualified from the competition.
2. The bot should be controlled manually.
3. Teams can use either wired or wireless control mechanisms. In case of wireless mechanism, it is mandatory to use a dual frequency remote. There is no restriction the type of wireless technology being used i.e. you can use RF, Bluetooth,Zigbee or any other technology you find suitable. In case of the wired bots, the length of the wire should be minimum 5 metres so that the wire remains slack at any instant of time.
4. The dimensions of the remote are not included in the size constraint of the bot.
5. Bot **must have an on-board powers supply** in any case i.e. the battery should be placed on the chassis of your bot.
6. Participants are not supposed to use any readymade Lego components. Violating this clause will lead to immediate disqualification of the team.
7. When using electric power supply, the potential difference between any two points must **not exceed 24 V** at any point of time during the game.
8. The bot should not separate or split into two or more unitsi.e, it should be in a single unit.
9. The bot should not damage the track.

GAMEPLAY

The gameplay consists of two rounds.

First round:

1. In this round each team will get a chance to run their bot on the arena.
2. The teams will have to traverse the arena in the shortest possible time.
3. 10 teams having the shortest times will qualify for the next round.
4. Two teams will run simultaneously on the track,but it won't be a direct race between the two bots. Time willbe noted separately and top 10 will qualify.

Second round:

1. The arena will be modified for this round and will be revealed on the spot.
2. Each of the 10 teams will get a chance to run their bot in the arena.
3. In case of a tie the times at various checkpoints will be considered.

1. Only one bot per team is allowed.
2. Only one team member is allowed to handle the bot after the start.
3. At the start of the task, the bot will be placed at the starting point.
4. Run will only start when the organizer gives the signal.
5. The starting procedure of the bot should be simple and should not involve giving or any manual force or impulse in any direction.
6. In the first round the teams are allowed to take a maximum of 2 restarts and the bot has to start from the starting line.
7. In the second round the teams are allowed to take a maximum of 3 restart and the bot will start from the previous checkpoint.

JUDGING:

1. The winner will be decided by the fastest time.
2. In case no team finishes the track the team that crosses the maximum number of checkpoints will be declared the winner.
3. In case of a tie the team crossing the checkpoint at the fastest time will be the winner.
4. Crossing the track limits will impose a penalty of 2 seconds in the first round and 5 seconds in the second round.
5.

GENERAL RULES:

1. The teams must adhere to the spirit of healthy competition.
2. Organisers reserve the right to disqualify any team indulging in misbehaviour 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 organisers 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 organisers' decision will be final and binding.
7. The organisers 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.
8. Note that at any point of time, the latest information will be that which is on the website. The information provided in the pdf downloaded earlier may not be the latest. However, registered participants will be informed through mail about any such changes.

TEAM SPECIFICATION:

A team may consist of a **maximum of 4 members**. Students from different educational institutes can form a team.

ELIGIBILITY:

All students with a valid identity card of their respective educational institutes are eligible to participate in the event.

In case of any queries feel free to contact:

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