BALL CATCHER

INTRODUCTION

Its just an other amazing game filled with thrill and amusement. Catching a ball is not less than an excitement, but it seems to be more creative when robots play the same game. Here, we provide you a platform where you can exhibit a robot which capable of performing the above task by manual control. The controlling skills, accuracy and precision of the participant will be tested in this event. So, what are you waiting for? Its the time to put your skills to test.

PROBLEM STATEMENT

Build a manually controlled robot which should be capable enough to catch as many balls as possible in the given time. What makes the event complicated is the limitation in the size of the basket used to collect the balls.

QUALIFYING ROUND

1. The robot will be placed at the start point.
2. Balls of different colors will fall from a certain height and from different points.
3. The robot has to move and collect the balls into the basket.
4. The points will be scored based upon the number of balls collected in the given time.
5. Only when the robot catches the ball directly into its basket without taking any bounce on ground then it will be counted.
6. The basket of robot should not contain any kind of sticky or gluey surface.
7. The score for each colored ball will be mentioned on event day.
8. Subsequent rounds will be disclosed at the time of event.

ROBOT SPECIFICATIONS

1. The maximum dimensions of the robot is 30cm x 20cm x 20cm (l*b*h).
2. Robots can be wired or wireless.
3. Power supply to the robots should not exceed 12V.
4. Power supply can be ON board.
5. There is no weight limit for robots and no rpm limit for DC motors.
6. Tolerance of 5% on dimensions and power supply will be allowed.
7. The opening of the basket should be circular in shape and should not exceed 10cm diameter.
8. There should be no surface created around the opening of basket so that the ball slides into the basket. (The ball must directly fall into the basket)
9. Every robot must have only one basket to catch the ball.

RULES AND REGULATIONS

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. Human interference (e.g. touching the robot, stepping into the arena) during the game is not allowed.
9. No external power supply will be provided at the time of event.
10. 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.
11. Participants with wired robots are strictly advised to get wires of length 3m or more. The wires should be given slack throughout the game play.

12. Member participated from a team cannot participate in another team for the same event.
13. A robot is allowed to participate only once in that particular event.
14. The organizers are not responsible for any kind of damage to your robot.
15. In case of any discrepancies, the decision of the coordinator and the event head shall be final and no further arguments shall be entertained.

NOTE: Kindly keep checking the ROBOVANZA website to know the updates.

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.