

ROBO SOCCER

PROBLEM STATEMENT:

To build a manually controlled robot, within the given specifications, to excel in robo soccer field by scoring maximum points.

ROBOT SPECIFICATIONS:

1. Readymade hand/gripper is not allowed.
2. The dimensions of the robot must not exceed 40cm x 30cm x 30cm (l*b*h).
3. Robot can be wired or wireless.
4. Power supply to the robot must not exceed 12V.
5. Power supply can be ON/OFF board.
6. Maximum weight of robot including battery shall not exceed 6 kgs.
7. Tolerance of 5% on the dimensions and power supply will be permitted.

THE ARENA:

The robo soccer field is a rectangular area resembling a soccer field with goal posts on either side. A table tennis ball will be placed at the centre of the field with both the participating robots on either side equidistant from the ball.



QUALIFYING ROUND:

1. The participating robots are placed in the field on either side of the ball.
2. The game last for 5 minutes (tentative) in total. The participants are expected to score as many numbers of points as possible.
3. A rectangular box is present in front of the goals on both the ends. If a robot manages to score a goal without the robot entering this rectangular area (including the boundary), 15 points are awarded. If the robot scores a goal by entering the rectangular area (including the boundary), 10 points are awarded.
4. If the robot touches the goal post or drives into the goal, that goal is not considered and the game shall be reset.
5. At the end of 5 minutes, the robot with highest number of points wins.

NOTE: Subsequent rounds and penalties shall be announced at the time of the event.

RULES AND REGULATIONS:

1. A team can contain a maximum of 4 members.
2. Any kind of damage to the arena shall not be tolerated, in which case, the bot shall be disqualified.
3. No technical assistance shall be provided by the coordinators during the time of the event.
4. Practice runs shall not be permitted.
5. Use of IC engines in any form is prohibited.
6. Human interference, i.e., touching the robot, stepping into the arena, etc shall not be permitted.
7. All bots must contain their own power supply. No external power supply shall be provided at the time of the event.
8. Any kind of accelerometer module or a mobile phone accelerometer is allowed to control the robots.
9. Any robot with the chassis of a toy car or its gearbox as a machine part, as well as LEGO kits are strictly prohibited.
10. Each member can only take part once in a particular event.
11. Each robot is allowed to take part only once in a particular event.

12. The organisers are not responsible for any kind of damage to the robot.

13. In case of any discrepancies, the decision of the coordinator and the event head shall be final; no further arguments shall be entertained.

CERTIFICATE POLICY:

1. Certificate of participation shall be awarded to all the teams except for the disqualified ones.

2. Certificate of merit shall be awarded to the winner along with the cash prize.

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