

## **Robo Soccer**

**Registration fees-Rs.300**

### **Problem Statement**

Design a manually controlled robot wired or wireless that can play soccer.

### **Rules**

1. This is a 1 on 1 type game.
2. The balls used will be 3 – inch smiley balls.
3. Robots will be placed in different halves of the arena with ball in center of arena.
4. The arena is made up of wooden ply of dimensions 8 feet in length and feet in 4 widths.
5. The arena has 15 cm wide goal post on either sides. The arena is bounded from all sides.
6. One team member is elected as the robot handler. Only that team member is permitted to control the robot during the game. Other member can handle the wire & battery of the robot. All other team members must remain outside the game zone.
7. Each team will try to score goal by pushing the ball.
8. Team with more number of goals will win the match.
9. If ball goes out of arena it will be placed in center and match will be resumed.
10. In case of a tie, 3 penalties would be taken by each team.

11. Match duration will be announced on the day of event.
12. Participants who misbehave may be asked to leave the competition area and risk being disqualified from the contest.
13. Robots or participants that cause deliberate interference with other robots or damage to the arena will be disqualified.
14. The organizers 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.
15. Violation of any the above rules will lead to disqualification.

### **Machine Specification**

1. The following size limitations apply for each robot including whatever kick mechanisms the bot have 250mm max X 250mm max X 250mm max
2. The robot cannot have potential more than 12V between any two points.
3. The external device, which is used to control the machine, is not included in the size constraint.
4. The machine can be wired/wireless.
5. The machine must not be made from Lego parts, or any ready-made assembly kits, however participants are allowed to use their own creativity for the kick mechanism.
6. The robot can be powered by a power source such as a battery fixed on the robot or by a stationary power source connected to the robot by a cord.
7. Participants should keep spare batteries otherwise; it may lead to disqualification if bot is not ready or stops in between the match.
8. The length of the wire (for wired bots) should be long enough to cover the whole arena and wire should remain slack during the complete game.

### **Team Specification**

A team may consist of a maximum of 2 participants. Students from

different educational institutes can form a team.

### **Certificate Policy**

Certificate of excellence will be awarded to the top 2 winners.

Certificates of Participation will be given to all the participants, but not to the teams which get disqualified due to disobeying any of the competition rules.