

## **EVENT NAME: ROBO FIFA**

### **Problem Statement:**

Design a robot which plays soccer. The robot would compete against others in 1-1 matches. **Arena Specifications:-Will be SURPRISE.**

### **General Rules:**

1. Every participant must be a student of any reputed institution. The students must be undergraduate or post-graduate (For PG Only MCA).
2. **Maximum of 4 and minimum 2 members are allowed in one team.**
3. Every participant must carry their id his card along with a photo copy of /her government id.

### **Registration fees:**

1. Registration Fees (External Students) is 400/- per team.
2. Registration Fees for In-house students (MCKV students) is 100/- per team.
3. For any 4 events combos in robotics: Rs.300/- per team (Internal students)
4. For any 3 events combos in robotics: Rs.1000/- per team (External Students)

N.B: Combo refers to any of the events from:

- i. Chase The Maze
- ii. Robo War
- iii. Robo Ranger
- iv. Robo Fifa and
- v. Line Follower

- No refund of Registration fees, once paid.

### **Technical Rules:**

1. The Robot should be remotely controlled and the connections (the wires, for instance) between the control unit and robot should be slag all the times.
2. The robot may be disqualified if found violating the technical and safety rules of the event.
3. A battery with the voltage rating not exceeding 24 volts is allowed. This is an on-board power supply.

### **BOT Specification:-**

- 1) Robot must fit into a cube of (35 X 30) cm (l\*b) at all times. It may not expand beyond these dimensions during any point of the match. Violating this will cause immediate disqualification.
- 2) The weight of the robot should not exceed 6 kg (this is including battery, motors etc.)
- 3) The remote control for the robot could be a wired or awirelessone.
- 4) Motor must be 200rpm.
- 5) Grabbing the ball is not allowed. So, any such mechanisms are not allowed.
- 6) Readymade toy cars or Lego or IC engines or Hydraulic Systems are not allowed.

### **Games play Rules:**

#### **Round 1:**

- ☐ Wireless bot will be rewarded extra of 10 points.
- ☐ You will be given a ball at a particular place from where you have to

guide that ball to goal without touching any obstacles, which will be in the form of coloured bricks.

- ☐ Once you have scored goal the position of the ball will be reset.
- ☐ Each team will be given 2 minutes to score as many goals they can, in that period, without touching the obstacles.
- ☐ Wirings shouldn't touch the game field, if wires are in contact with the arena, penalty will be given as minus 5 points.
- ☐ 30 points will be awarded for each goal 10 points will be deducted for each to any coloured obstacles (bricks).
- ☐ Holding the ball is allowed in this round.
- ☐ Highest scorers will be proceed to the next round.

**Rules may change at the time of Event .**

### **Round 2:**

- ☐ The match will be of 8 minute of two half's od 4 minute each.
- ☐ Each team must have two bots wired or wireless, one as the striker and one as defender.
- ☐ You can't hold the ball in this round.
- ☐ Wirings shouldn't touch the game field, if wires are in contact with the arena, penalty will be given as minus 5 points.
- ☐ In case of tie, extra time of two minute will be given which will be in two half's of 1 minute each.
- ☐ If winner is not decided after the extra time, it will go to penalty shootout.
- ☐ Each team will be given five (5) chances to hit the ball to score goal. The team which will score maximum or more will be the winner.
- ☐ You can't hold the ball with the help of any kind of grabbing mechanism.
- ☐ If the bot topples then there would be a reset after 5 seconds.

### **Other Rules:**

1. At any time we can change the arena rules (based on circumstances) and decision of the coordinators will be final.
2. Unethical behavior could lead to disqualification.
3. The final round will be conducted in two half of 4 minutes.
4. No fans or blowing devices are allowed.
5. In case of any discrepancy, organizers decision is final. Arguing with organizer will lead to immediate disqualification.
6. Any kind of intentional damage to the opponent robot(s) will be considered as a foul.

### **Event coordinators:**

1. Mr. Nabankur Mandol (ME)
2. Mr. Swaraj Biswas (ME)
3. Mr. Tapas Kumar Biswas (AUE)
4. Mr. Sougata Bera ( AUE )

### **Student Coordinators:**

1. Malay Sanchar Samantaray – (AUE) 9007942342
2. Soumojit Chakraborty(EE)

