

# RULE BOOK

## ROBO SUMO

### ROBOT SPECIFICATIONS :

- The dimensions of the bot must not exceed 30 cm x 30 cm x 30 cm at any point of the game. 5% tolerance will be given.
- Both wired and wireless robots are allowed.
- The weight of the bot should not exceed 5 kgs. 5% tolerance will be given.
- Maximum voltage for batteries and any two point of circuit in bot should not exceed 25.2V at any point of the game.
- The bot can have 4-wheel drive or 2-wheel drive mechanism; all the tyres must contribute into the motion.
- The body of the robot must not be taken from any readymade toys. Robot making kits can be used.
- Dribbler mechanisms are allowed.
- In case of wired control, the participants must ensure that the wire length should be minimum 6 meters.
- Wires must be routed through a pole at least 45cm high or must have a person to hold it upright throughout the match
- Wires must remain slack during gameplay.
- In case of wireless control, must support dual-frequency operation to avoid interference.
- RF modules from toy cars may be used. However, use of IC engines and LEGO kits will attract disqualification.

### GENERAL RULES:

- The competition is based on bot standing last.
- First round will be the qualifiers, where two team will compete with each other with their bots, last one standing inside the arena wins the round.
- The total game time is 3 mins with two halves.

- If Team A bot pushes the opponent team B bot to out of the circle. Team A will be awarded points
- If a team leads by 5 points, they will be automatically declared as winner.
- Also, if a bot hasn't moved from its spot more than 30 seconds, team will be awarded zero marks.
- If any of the robots starts off before start up call, the counter would be restarted and the machines will get a second chance. If repeated again then team will be disqualified.
- The robot must be ready when call is made for your team.
- Team members will be allowed only three times to touch or reset their robots position during the run. However, this will lead to a time penalty and timer will not stop during this course of action.
- Machine must not contain any readymade kits, pneumatic &hydraulic systems, IC engines.
- Decision about your robot will be taken by the organizers.
- The rules may or may not change before the match

## **GAME RULES**

### **ArenaSpecifications:**

- The arena will be a 6ft diameter circle with no walls.
- there will be a center line and two box at edges marking the starting position of robot.

### **SCORING PATTERN:**

- Each time a team's bot pushes the opponent completely out of the arena, the team scores 1 point.
- If a team reaches 5 points, they will be automatically declared the winner, regardless of remaining time.
- A bot stationary for over 30 seconds during the match results in zero points for that round.
- Technical resets (up to 3 times per match) are allowed but do not contribute to scoring and incur a time penalty.

- If a bot starts before the official start signal more than once, the team will be disqualified (no points awarded).
- If neither bot scores within the full match duration, the winner will be decided based on:
  - Number of valid pushes
  - Total time the bot remained active
  - Judges' decision, if necessary

#### **Gameplay Rules:**

- Robot must move in all directions.
- Timing will be taken using a laser precise gate timer.
- Disqualifications will be strict.
- Doubts must be clarified before the event.

#### **Referee and Organizers:**

- The referee's decisions are final.
- Organizers may modify or clarify rules under special circumstances