

## HALDIA INSTITUTE OF TECHNOLOGY

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ANNUAL TECHNO-MANAGEMENT EXTRAVAGANZA

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# ROBOWAR

## Introduction:

The future is calling for your strategic technical prowess. Battle out your brilliant botbuilding skills ahead of their time in 'Robowar'. Build your own combative bot and emerge victorious against your opponent in the ultimate test of cruel endurance in a hostile and deadly clash.

### **Problem Statement:**

The goal is to create a bot to engage in a fight against the competing bot and emerge victorious in a set time.

#### Task:

To fight the competing bot successfully and score goals with the ball present in the middle of the arena. The goals act as health boost points. The team with minimal defects and the most health points emerges victorious.

#### Rules:

- Robot Specifications: The dimensions of the bot should be no more than 90x90x90 (in cm, length x breadth x height respectively)
- All robot dimensions have a tolerance of 10%.



- The robot can be either wired or wireless. However, the team having a wireless robot will be granted an extra 5 points. The bot's weight should not exceed 20kg.
- The robot is allowed to have weapons
- However, in weapons
- Flammable and combustible materials are not allowed . Any kind of liquid, chemical or gaseous weapon is not allowed.
- Any kind of power cut will lead to disqualification.
- · Projectile weapons (materials shooting out of the bot) are strictly not allowed.
- All the specifications of the robot have to be submitted beforehand in hard copy.
- Team specifications:
- This is a group event with no more than five members comprising each team.
- A member cannot be a part of more than one team.
- Point system
- The team will initially be granted 100 health points.
- Each damage imparted on the bot will lead to a deduction of 5 points.
- Upon scoring a goal, the team gains 10 points.
- If the bot touches the red zone, it leads to a deduction of 5 points.
- If the bot is held up for more than 10 seconds, the team loses 5 points.
- If the bot requires any sort of external manual help, it leads to a deduction of 5 points.
- In case of any discrepancies, the final decision will reside with the judges.

#### **Knockout Matches:**

- There will be three rounds of 3 minutes each.
- The victor team will be chosen on the basis of how many points are left from the initial set of 100 points.
- The bot exiting the arena in any way will lead to the disqualification of the team.

#### Final matches:

- The qualified teams will now be pitted against each other in a round of three matches of 4 minutes each.
- Maintaining the rules, the teams will compete against each other to attain the top positions of victory.

## Tie-Breaker Matches (applicable for both knockout and final matches):

• Here, the teams start with 0 points and according to the point system, the teams gain or lose points respectively in a set time.



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