

# **TUG OF WAR**

## **INTRODUCTION:**

The objective of this contest is to compete in a raging battle of “Tug of war”.

## **PROBLEM STATEMENTS:**

Participants will design and build a robot that will pull another robot when connected with a string (or rope) in a tug of war contest across a center line.

## **ROBOT SPECIFICATIONS**

1. Robots mass not to exceed 1500gms.
2. Robots must not exceed the size limit.
3. A proper HOOK should be attached to robot so that rope can be tied to it.
4. Wheels and other parts may not be treated with any fluids, grips(rubber), glue or other substances

## **QUALIFYING ROUND:**

1. A proper **HOOK** should be firmly attached to the robot so that string is tied to it.
2. Robots begin approximately 40 cm from the start line. The line may be marked with tape.

3. Robots must be safe. A robot should not be danger to competitors, other robots, or the competition arena.
4. The other end of the string is connected to a weight. The bot must pull the weight within the given time.
5. Qualifying round consists of 2 rounds.
  - a. First, a standard weight is given. The bot must drag the weight in the given time.
  - b. Then the weight is increased. Same task should be done.
6. If both the rounds are qualified, the bots move to the actual round of 'Tug of War'
7. Robots begin approximately 30cm from the center line (approximately 60cm from each other).
8. If, after 1 minute, no robot has crossed the center line, the round is to be considered a draw.
9. A robot must win 2 out of 3 trials.
10. In the case of draw, where neither robot is successful in pulling the other across the line, the winner is determined by holding a tie-breaking round. In this round, the winner is determined by the measuring the distance of each robot from the centerline at the end of the time limit (which is 1min). The robot closes to the line loses.

## **RULES AND REGULATIONS:**

- The team can consist of not more than 4 members
- Members of different institutions can form a team.
- All the participants must carry their respective college id cards.

- Any kind of damage to the arena will not be entertained and will lead to disqualification.
- No technical assistance will be provided by the organisers during the event.
- No practice runs are allowed.
- Use of IC engines are not allowed.
- NO human interference is allowed during the course.
- A robot with a gearbox or any kind of LEGO kits will be disqualified.
- A robot can participate only once during the event.
- The organizers are not responsible for any kind of damage to the robot.
- In case of any discrepancies the decision of the coordinator or the event head will be final.
- The teams should bring the own toolkits.

### **CERTIFICATE POLICY:**

- The certificate of participation will be awarded to every team except the teams that are disqualified.
- The certificate of merit will be awarded to the winners, along with the prize money.

### **CONTACT:**

Sidharth – 9381457915

Sriram - 7093032750