DEPARTMENT: ROBOTICS

NAME OF EVENT: **Laser tag**

NO. OF MAX. PARTICIPANTS: 100

EVENT DESCRIPTION:

- Laser tag is a modern multiplayer game. Teams will compete against each other in a famous battle royale format. In a newly designed maze arena. The objective of the team will be to find the opponent's robot and eliminate it. The last robot standing will be the winner.

TEAM AND ROBOT SPECIFICATION:

- In laser tag, robots can be of any drive (Wheel, Legs, Belt etc).
- Participants are allowed to control their robots with a wired connection or wireless connection.
- The maximum dimensions of the robots are 35x30x20 cm (LBH).
- Battery voltages for the laser tag robots should not exceed 12 Volts.
- The battery should be easily accessible.
- The permissible weight of the robot is up to 5 Kg. (Including battery).
- No mechanical mechanism attached (Cutter, Hammer, Roller etc) and no other accessories should be attached which can destroy the mechanisms on the field as well as another team's robot.
- Only one laser is allowed to use. The placement of the laser must be 15 cm from ground level.
- Space should be given at the same height for the placement of the receptors all around the bot

REQUIREMENTS:

- Participants must bring their own supplies.
- No battery chargers or tools will be given on the event grounds. So, if they are needed the participants must bring their own.
- AC charging ports will be given on the day of event to charge batteries and use tools
- Teams are required to use laser module KY-008.
- The battery output of the robot should be a DC Male Jack.
- Receptors will have an input port(DC Female Jack) for DC Male Jack and the output port of the receptors will be DC Male Jack which will be connected to the input of the robots.

GENERAL RULES:

- Robot operators cannot step into the arena.
- Robots will be given health points (HP). A robot will be considered eliminated when HP drops to 0.
- Robots outside the playing zone will be considered eliminated.
- Receptors will be provided on the day of the event.
- Installation of receptors will be done by volunteers present on the day of the event.
- Any modification with receptors is strictly not allowed.
- Receptors should not be blocked by any part of the robot or any external material.

LEVEL DESCRIPTION:

- **Round 1: (Day 1, 2 Hours, 120 Participants)**
  participants will be divided into groups of 4 entering the maze at the same time with only one surviving going to the next round
- **Round 2: (Day 1, 1.5 Hours, 60 Participants)**
  The winners of the previous rounds will be again divided into groups of 4 with only one coming out again
- **Round 3: (Day 2, 3 Hours, 20 Participants)**
  Now the final 4 winners from the previous rounds will fight each other and the last surviving one will be considered winner.

(Event Details may change on the day of the event on the basis of entrants)

JUDGING CRITERIA:

- Teams which survive till the last will be considered the winner.
- If a team is not able to get into the next zone in the given amount of time they will be considered dead.

JUDGES:

1. Asst. Prof. Dixit Patel (Institute Faculty)

EVENT COORDINATORS:

You can contact the following coordinators if you have any query regarding the event.

Sr. No	Name	Faculty/ Student	Contact No	Email ID.
1	Dhairya Patel	Student	7226948082	dikkupatel3011@gmail.com
x	Yaksh Patel	Student	9327988170	yakshpatel0209@gmail.com

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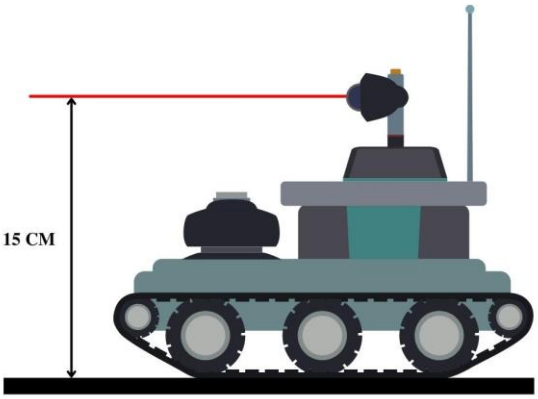
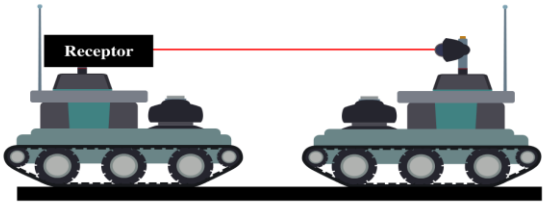
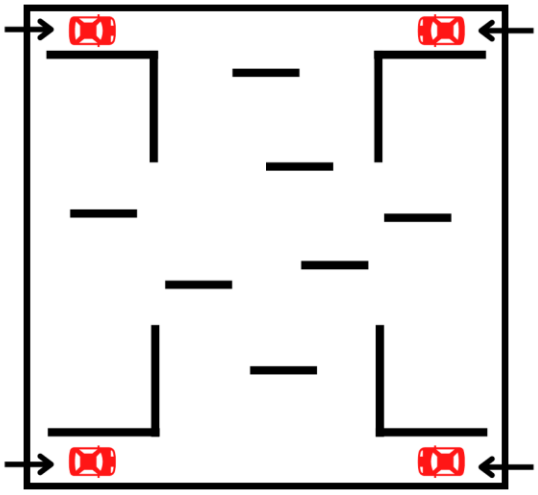
EVENT ILLUSTRATIONS:



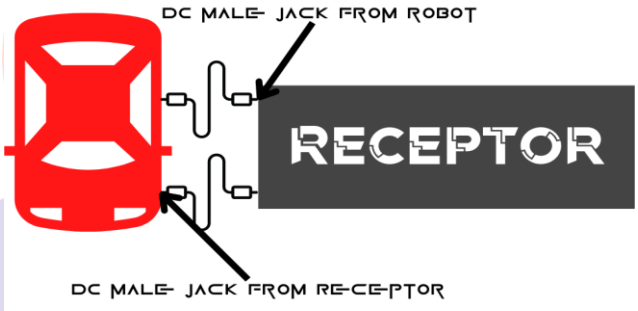
Laser must be placed 15 cm from the ground level



Receptor will be provided on event day



Four players will enter the game arena at the same time



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