### **TECHNO-SPARK'24**

#### A State Level Tech Fest

#### ORGANIZED BY CHRIST POLYTECHNIC INSTITUTE, RAJKOT

#### ROBO MAZE

There are three rounds in this event. Details of each round will be disclosed at the time of event. In this event, the participant has to make a robot which can move along the path & push the box or any other low weight things. The specification of Robot, rules & regulations are given below.

## Robot Specifications:

- $\triangleright$  The maximum dimension of the robot can be 30 x 30 cm (1 x b)
- ➤ Both Wireless and Wired Robots are allowed.
- Max weight must not exceed 5 kg
- ➤ Readymade toys car are not allowed
- ➤ Robot must be pure electrical base and must not contain any readymade kits, pneumatic & hydraulic systems, IC engines.

### **Battery and Power:**

- ➤ The robot can be powered electrically only. On-board Batteries must be sealed, immobilized-electrolyte types (such as gel cells, lithium, NiCad, NiMH, or dry cells).
- ➤ The electric voltage between 2 points anywhere in the robot should not be more than 24 V DC at any point of time.
- ➤ All efforts must be made to protect battery terminals from a direct short and causing a battery fire, failure to do so will cause direct disqualification.
- > Use of damaged, non-leak proof batteries may lead to disqualification.
- ➤ Change of battery will not be allowed during the match.
- ➤ No AC power will be guaranteed to the participants, even to charge the batteries. Backup must be held by the participants themselves.

## Rules and Regulation:

- ➤ Maximum of 4 participants are allowed per team.
- The robot should not damage the arena.
- ➤ Unethical behavior could lead to disqualification. Faculty-coordinators have all the rights to take final decision for any matter during the event.
- ➤ Three hand touches are allowed with penalty of 10 seconds. For each hand touch, penalty time will be added further to overall time required by robot for completion of specified round.

➤ The machine will be checked by the judges before the participants are allowed to race and the decision regarding the compliance of the machine with the specifications shall be solely in the hands of the judges

## **Team Specification:**

- Any team can participate in Roborace. A team may consist of a maximum of 4 participants. These participants can be from same or different institutes.
- ➤ **Team Name**: Every team must have a name which must be unique. Organizer reserves the right to reject entries from any Team whose name it deems inappropriate, offensive or conflicting. Organizers must be notified during if a Team's name has been changed.
- ➤ **Team Representative**: Each team must specify their Team Representative (Leader) at the time of registration on the website. All important communications between organizers and the registered teams will be done through Team Representative. The Team Representatives must submit valid contact details (phone no., email ID etc.) at the time of registration.

### Brief summary for rounds:

Qualifying round-1

Time for 1 penalty =  $3 \sec$ 

Total time calculation= time taken + penalty (3 second per penalty)

> Qualifying round-2

Time for 1 penalty = 5 sec

Total time calculation= time taken + penalty (5 second per penalty)

Final round

Time for 1 penalty = 10sec

Total time calculation= time taken + penalty (10 second per penalty)

> Any decision regarding rules and regulations by event coordinator is final. No arguments are entertained regarding the same. For any query contact the event coordinators.

# **Event Coordinators:**

1) Mr. Ankit Mehta (Mo:- 7984681036)

2) Mr. Ritesh Patadiya(Mo:- 9537323933)