

# COGNIZANCE 2K23

## CSPIT EE

### **Title of Technical Event: Robo race**

#### **Event Coordinators:**

##### **Faculty Coordinators**

7. Prof. Mohammed Soaib Saiyad, 8485916188
8. Prof. Jignesh Patel, 9978794997

##### **Student Coordinators**

1. Arsh Sandhu (Student Id:21EE020, 7043779106)
2. Aryan Saxena, (Student Id:21EE021, 9879550216)
3. Toshif Shaikh, (Student Id:21EE023, 9106527919)

#### **Event Description:**

"RoboRace" refers to an innovative motorsport concept that involves fully autonomous, electric race cars competing against each other. It's a high-tech, futuristic take on traditional racing, with a focus on showcasing the capabilities of artificial intelligence, machine learning, and autonomous driving technology.

#### **Team Specification:**

No. of Participants per entry/ Team: 4 participants

For the race, each team is required to bring one electric small-scale robot car.

#### **Task:**

- Each competitor must bring a miniature, hand-built robot car for the competition.
- The goal is to build your own robot, either wired or wireless, within the required specifications in order to obtain the highest speed possible in order to cross the finish line in the shortest time possible.
- Any kind of obstacle, such as numerous turns, sand, a suicide point, dig and others, could be present on the path, your robo should be able to overcome every obstacle.
- The first prize goes to the robot with the shortest official time. Second prize to the next shortest, and so on.
- If there is a tie, another chance will be given to the participants.

### **General Rules and Regulations:**

- Fair Play: Teams are required to follow the rules of sportsmanship and fair play. Any form of violence or argumentative behaviour's is not permitted.
- Final Decisions: The coordinators and organisers of the event have the last say in all matters. The appointed event officials should be contacted with any disagreements or issues.
- Disqualification: Individual that disobeys the rules or acts improperly may be eliminated from the competition by the event organisers.
- During the race if anything happens to the robo due to the obstacles', the university would not be held accountable.
- The group itself is accountable for the robot's safety.

### **Rounds:**

It's a one round game only, each automobile will only have one opportunity to run on the track. The winner will be determined by taking the shortest amount of time to finish the race.

### **Event Rules:**

- Every time a single robot runs down the path, the amount of time it takes will be recorded. After all the ground the one with the shortest time to complete the path will be declared as winner.
- Negative points will be awarded for each time the Robot moves out of the track.
- The robo must complete the race within five minutes maximum.
- There will be a single round competition (i.e. no semifinal/final round).
- Machine must not contain any readymade kits, pneumatic and hydraulic system.