### **RULE BOOK**

## **Line Following Robot**

#### **ROBOT SPECIFICATIONS:**

- The dimensions of the bot must not exceed 30 cm × 30 cm × 30 cm at any point of the game. 5% tolerance will be given.
- The bot must be fully autonomous.
- The weight of the bot should not exceed 5 kg. 5% tolerance will be given.
- Maximum voltage for batteries and any two points of the circuit in the bot should not exceed 24V at any point of the game.
- The bot can have 4-wheel drive or 2-wheel drive; all tyres must contribute to motion.
- The body of the robot must not be taken from any readymade toys. Robot making kits can be used.
- Batteries must be sealed, immobilized electrolyte type (gel cell, lithium, NiCad, or dry cells).

#### **GENERAL RULES:**

- Batteries must be sealed, immobilized electrolyte type (gel cell, lithium, NiCad, or dry cells).
- Robot should be as per the given specifications. If the robot is not satisfying any of the above criteria, the team will not be allowed to participate.
- Each team can have a maximum of 4 members. Students from different institutes can form a team.
- Each member of the team must contain the identity card of his/her respected institute.
- Unethical behaviour could lead to disqualification. Event coordinators have all the rights to take final decision for any matter during the event.
- The bot will be checked by organizers for compliance before competition.
- The judge's decision will be considered final.
- Teams can register only through online for the event. There will be no offline or on spot registrations.

### **GAME RULES**

### **Arena Specifications:**

- Surface:
- Tape width: 18mm 25mm
- Intentional damaging of any part of the arena will result in disqualification.
- No team members are allowed inside the track/arena.
- Spectators must remain outside the boundary to allow enough space for teams.
- Arena specifications may change based on the club's decisions.

## **Scoring Pattern:**

- Time taken to complete the arena will be recorded.
- +5 Robot goes off track.
- +10 seconds per hand touch/intervention.
- Skipping a checkpoint = +10 seconds.

## **Gameplay Rules:**

- Robot must move in all directions.
- Timing will be taken using a laser precise gate timer.
- Disqualifications will be strict.
- Doubts must be clarified before the event.

# **Referee and Organizers:**

- The referee's decisions are final.
- Organizers may modify or clarify rules under special circumstances.