
Shetty
Institute of Technology
OLD TOWN RACE
ROBO RACE
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"Old Town Race" — Robo Race Competition

1. Overview

The Old Town Race is a robotics competition where teams build autonomous or manually controlled robots to race on a challenging track filled with obstacles. The goal is to demonstrate speed, control, and real-time navigation.

2. Racing Track

- **Track Area:** Total venue area is approximately any in sqft.
- **Lanes & Length:** The track consists of 5 bot lanes.
- **Track Width:** Starts at around 120 cm wide (each lane about 40 cm). It may narrow down to 35 cm near checkpoints before hurdles.
- **Terrain & Obstacles:** The surface may be uneven. Obstacles include switch bridges, speed breakers, marble pits, slippery paths, rotating discs, curved ramps, and seesaws.

3. Robot Specifications

- Dimensions: The bot must easily fit inside a 30cm x 30cm x 30cm (Length × Width × Height) box at all times.
- Weight Limit: Maximum weight is 5 kg (including battery), with a allowable tolerance of 5%.
- **Power & Voltage:**
  - Sealed batteries **Any.**
  - No Limitation in voltage and capacity.
- **Controls & Movement:**
  - Must be able to move in all directions (not restricted to forward/backward only).
  - Custom-built or modified kits are allowed; ready-made commercial robots are prohibited.
  - Infrared sensors are allowed, but the bot must not emit broad infrared interference.
  - Wireless/RF systems must allow switching between at least two frequency channels to avoid signal interference.

4. Game Play Rules

- **Format:** Multiple heat rounds will be played to determine the top 3 winners.
- **Heat Races:** 3 to 5 bots race simultaneously in each round.
- **Time Limits:**
  - Each round lasts a maximum of 8 minutes total (2 minutes preparation + 6 minutes race time).
  - Readiness time is excluded from the 6-minute race timer.

- **Checkpoints & Touching the Bot:**

1. Checkpoints are placed approximately every 5 feet.
2. If a bot gets stuck or goes off track, the handler can restart it from the last passed checkpoint.
3. Maximum 3 touches allowed per team during a round.
4. Time spent adjusting or restarting the bot continues to count against the 6-minute race limit.

- **Winning Condition:** The front edge of the robot crossing the finish line stops the timer. The fastest bot to complete the track or cross first wins the heat.

5. Competition Structure & Officials

- **Referee:** Holds full authority over the match and enforces all rules. Referee decisions on field play are final.
- **Assistant Referee**: Helps monitor violations, track line faults, and assist the main referee.
- **Team Roles:** Each team designates a Captain (communicates with referees/requests timeouts) and a Bot Handler (handles adjustments or substitutions). Teams must report to the arena at least 10 minutes prior to their match.

6. Prohibited Activities & Code of Conduct

Violation of any of these rules can lead to immediate disqualification of the entire team:

- **Unruly Behavior:** Fighting, verbal abuse, or aggressive behavior toward officials or opponents.
- **Pit Area Restrictions:** No scooters, skateboards, hoverboards, running, or horseplay in the pit area.
- **Property Respect**: Never touch another team's robot, tools, or equipment without explicit permission.
- **Safety Restrictions:** Absolute ban on alcohol, illegal drugs, tobacco/e-cigarettes, firearms, explosives, lasers, and pets.

7. Prize Money & Certificate Distribution

- The total prize and recognition **pool for Marg Darshak is ₹15,000,** split into ₹10,000 Cash Pool and ₹5,000 Equivalent Value in Official Certification & Trophies.
- **Breakdown:**
- 1st Place Winner: ₹10,000 Cash + Winner Trophy + Certificate of Excellence
- 2nd Place Runner-Up: ₹5,000 Cash + Runner-Up Trophy + Certificate of Excellence
- 3rd Place Second Runner-Up: Certificate of Excellence
- All Participants: Official Participation Certificates & Meritorious Recognition.

Note:

- Prior to prize disbursal, all team members must fill out and sign the official Prize Allocation Form.
- Minor rules and regulation can be changed on spot by organizers.

8. Official Contact Details

- **Faculty Coodinator :**

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Thank You