RULE BOOK

Robo Race

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.
- Both wired and wireless robots are allowed.
- 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 16.8V 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.
- In case of wired control, the wire length should be minimum 4 meters.
- Wires must be routed through a pole at least 45 cm high or held upright by a person throughout the match.
- Wires must remain slack during gameplay.
- In case of wireless control, dual-frequency operation is required to avoid interference.
- RF modules from toy cars may be used. Use of IC engines and LEGO kits will lead to disqualification.

GENERAL RULES:

- Robot should meet the given specifications; otherwise, the team will not be allowed to participate.
- There will be two rounds: Time-based and One vs One.
- Each team can have a maximum of 4 members. Students from different institutes can form a team.
- Each member must carry their institute ID card.
- Unethical behaviour may lead to disqualification; event coordinators have the final decision.
- Bots will be checked by organizers before competition. Judges' decision is final.
- Registration is online only. No offline or on-spot registration.

GAME RULES

Arena Specifications:

- The arena will consist of muddy tracks, stones, gravels, water, bridges, ramps, etc.
- The bot should be able to maneuver over any terrain.
- Arena may change each round based on participation.
- Damaging any part of the arena intentionally will result in disqualification.
- Only coordinators and 2 members per team are allowed inside the boundary during matches.
- Spectators must remain outside the boundary.
- Arena specifications may change based on club decisions.

Scoring Pattern (Round 1):

- Time taken to complete the arena will be recorded.
- +5 seconds per wheel touching the line.
- +5 seconds per hand touch.
- If bot goes out of track completely, +10 seconds penalty; if through ground contact, +20 seconds (+5 per wheel).
- Skipping an obstacle = +25 seconds.

Scoring Pattern (Round 2):

- Top 8 or 16 (depending on participation) will proceed to one vs one race.
- Pure knockout, no penalties or time considerations.
- Maximum 2 wheels can go out of the line; if third wheel touches, bot is stopped and placed back. 2
- Pushing opponent out is allowed as a tactic.
- Any human interference = disqualification.
- No skipping obstacles in this round.

Gameplay Rules:

- Robot must move in all directions.
- Timing will be taken using a laser precise gate timer.
- Disqualifications will be strict.
- Each robot must have its own transmitter and receiver.
- 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.