ROBOSPRINT

Obstacle Course

A. **Competition Description:** Arc Fest presents 'Robo Sprint', a contest of Speed and Resilience, where the most Fast and Furious Machine Wins the race. Think your robot can overcome all the Obstacles Big-or-Small, at all the Twists-and-turns in the Least of Time?

B. **Submission Guidelines:** Individuals or teams should submit the following description of the Robot that will be used in the competition:
   ● Name of the team
   ● Description (Dimensions, Weight, Power Supply, Other, etc.)
   ● List of components

C. **Robot Specifications:**
   ● Maximum dimensions - 25 cm x 20cm x15cm (l x b x h).
   ● The robot may be wired or wireless.
   ● The length of the wire (for wired bots) should be long enough to remain slack during the complete run.
   ● Maximum weight - 3 kg.
   ● Participants will have to arrange for adaptors or batteries themselves.
   ● Machines made from Lego parts, or any ready-made kit will be disqualified.
   ● Each team is allowed to have only one bot for all the rounds.
   ● The machine must be powered electrically only (Use of IC engine, pneumatic & hydraulic systems not allowed).
   ● Batteries must be sealed, immobilized electrolyte type (gel cell, lithium, NiCad, or dry cells).
   ● The electric voltage anywhere in the machine should not be more than "12V" DC at any point of time.

D. **Track Specifications:**
- The track surface and course line may have unevenness.
- There will be obstacles in the racetrack which will try to slow down the robot.
- Arena may consist of Switch Bridge, speed breakers, marble pit, slippery path, rotating ring disc, curve ramp down, seesaw etc.

E. **General Rules:**
- Team Members - 3 (Max.)
- Each member of the team must contain an identity card of his/her respected institute.
- The robot should not damage the arena.
- No test practice will be allowed on the arena.
- The robot must not leave behind any of its parts during the run; else it will result in disqualification.
- Unethical behavior could lead to disqualification. Faculty coordinators have all the rights to take final decisions for any matter during the event.
- Jury's decision will be considered final.
- Certificates of Participation will be given to all teams except the disqualified teams (due to disobeying any of the competition rules).

F. **Game Rules:**
- The competition is based on a time trial system. There will be a qualifying round for each team.
- The top team from the qualifying round makes it to the final round on the basis of time trials.
- Wires should remain slack during the race. Pulling the wire to aid the robot in traversing may lead to disqualification.
- If any of the robots starts off before start-up call, the counter would be restarted, and the machines will get a second chance. If repeated, then the team will be disqualified.
- The robot must be ready when a call is made for your team.
- The robot will be judged on basis of (in priority):
  - i. Time to complete the track.
  - ii. Number of checkpoints cleared.
- No team will get a second chance after completing the track with a poor score.