

B.I.T. SINDRI

SANDHAAN'20



"THE ANNUAL TECHNO MANAGEMENT FEST"

PATRON PROF-IN-CHARGE CHAIRMAN

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DEAD OR ALIVE "All you need is speed"

INTRODUCTION

The era today is witnessing a rapid metamorphism in which a maniac can emerge with unsurpassable impetus so as to spur the development around. This segment challenges your imagination to realize your dream, car racing with churning wheels and puffing engine on terrain rarely dreamt about.

TASK

You have to construct an All-Terrain Vehicle which can run on tracks having varying hurdles. The Bot will start from one end of the track and it has to reach the finishing end of the track by crossing all the hurdles. Winner will be decided on the basis of the time taken by each team.

PRELIMS

The various hurdles in this round will be sand, pebbles, overhead crossings, nails, husk, cubes, greasy surface, wire mesh, incline, swings etc. The organizers however reserve the right to introduce modifications without any prior notice.

FINALS

In addition to the hurdles in the prelims there will be embankment, sharp turns, big jumps, oily surface and few surprising hurdles.

BOT SPECIFICATIONS

- The dimensions of the robot should not exceed 25cm x 25cm x 25cm (length x breadth x height)
- The weight of the robot should not exceed 2.5 kg.
- The external wired used to control the machine manually is not included in this size constraint.
- If the machine uses an externally placed power supply, the dimensions of the power supply are not included in the size constraint. However, in case of an onboard power supply the machine along with the power supply should follow the rule mentioned in clause 1.
- The judges hold the right to subjectively determine if the machine violates any clause.

POWER SUPPLY AND CONTROL MECHANISM

- The machine can use an externally placed or on-board electric or non-electric power supply.
- In case of an electric power supply, the voltage at any point on the machine must be lower than or equal to 24V at any point of time during the game.
- The organizers will provide 230V, 50 Hz AC power supply. Any extension cords, eliminators, adaptors or battery box etc. required will have to be arranged by participants themselves.
- The machine has to be necessarily controlled by some wired/ wireless remote-control mechanism at all stages of the game.
- If a robot is using radio control, the organizing team will not be responsible for any disturbance in frequency.
- In case of wired mechanism, the wire must be slack for the duration of the game. The participants have the right to ensure that the wire does not get entangled with the opponents' machine during the game.

GENERAL RULES

- A team can consist of utmost 4 participants.
- Open for all years and participants must show proper ID cards of their institutions.
- The team which will qualify for next round will depend upon the time taken by the team to cover the track.
- If any robot will fall from the arena then the robot will have to climb back to the track using the slope provided.
- The robot can use that slope which is present just behind the point where it leaves the main track.
- If the robot is upturned, and then the participants can restore the robot at the same position but at cost of +2 sec.
- The teams are expected to be on the time and each team is supposed to be ready with their machines near the arena, failing which the team will be disqualified.
- Each team will be initially given 2 minutes of trial for some final adjustments in their machine. After this the game will start irrespective of whether a team is ready or not.
- The right spirit of participation is expected from the participants.
- In case of any dispute judges' decision will be final and binding. The judges also hold the right to disqualify any team in case any of the rules are violated.

In case of any discrepancy the decision of judgment panel will be final and binding.

INCENTIVES: Prizes to be won worth INR 15000.

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