EVENT - GATI ROBOVEDA'18

In its twelfth edition, ROBOVEDA brings to you, **Gati**, the F1 event with even more exciting and thrilling arenas. F1 race is the pursuit of flawless race. F1 racing satisfies the fundamental need to push technology to its limits and enjoy.

PROBLEM STATEMENT:

Design a manually controlled robot to crack the arena in least time, avoiding penalties. Wireless, Bluetooth, RF and NRF controlled robots are also accepted.

SPECIFICATIONS OF THE ROBOT:

- 1. Maximum size of robot should not exceed 25cm x 25cm x 25cm (l*b*h). Tolerance of 5% is allowed in this regard.
- 2. Robot should not damage any part of the arena. If the robot damages any part of the arena, it will be disqualified.
- 3. The chassis should not be ready made, if found so, the robot will be disqualified.
- 4. The potential difference between any two points should not exceed a limit of 12V. A tolerance of 5% is allowed.
- 5. If the robot suddenly stops in the arena due to any technical problem, you will be allowed to modify only twice for a round. Timer will not be stopped during this period.
- 6. External power supply will not be provided.

QUALIFYING ROUND:

- 1. During qualifying round, each team will be allowed to participate.
- 2. The winner of the round is judged by a circuit race of 1 lap.
- 3. If the robot touches any barricade once, a penalty of 5 seconds will be levied.
- 4. The robot choosing the bonus path rather than original path leads to bonus of 20 seconds or more will be declared on the day of event.
- 5. Total time taken by participant to reach the finish line with penalties will be counted.
- 6. Arena will be explained only once to the participant before the race commences.
- 7. Width of the track varies from 30cm to 35cm for qualifying round. It may change in further rounds.

JUDGING CRITERIA:

The robot should finish the arena within the time limit, which will be disclosed on the day of event.

ARENA DESIGN



Note: The dimensions of arena may not be exactly as shown in the figure. It just resembles the figure shown. The figure shown above is not up to scale.



RULES AND REGULATIONS:

- 1. A team can consist of a maximum of 4 members.
- 2. Members of different institutions can form a team.
- 3. Only 2 members of a team are allowed to stay around the arena (for controlling and assisting) and a team is allowed to play with one robot only.
- 4. Any kind of damage to the arena will not be entertained, and if done, the robot will be immediately disqualified.
- 5. All the required accessories should be brought by the participants
- 6. Lending or making the robot to participate in same event with different team will not be entertained.
- 7. No technical assistance will be provided by the coordinators during the time of the event.
- 8. No practice runs will be provided.
- 9. Use of an IC engine in any form is not allowed.
- 10. Human interference (e.g. touching the robot) during the game will be charged.
- 11. If a participant does not comply with the rules of the event, the robot will be disqualified from the event.
- 12. Misbehavior of any kind will not be tolerated and the team will be subjected to disqualification from Roboveda.
- 13. Robot with the base of a toy car and its gear box as a machine part will be disqualified. Lego kits are strictly prohibited and will lead to disqualification.
- 14. Participants with wired robots are strictly advised to get wires of length 3m or more.
- 15. In case of wired robots the wired should be slacked throughout the game.
- 16. No readymade PCB's are allowed.
- 17. **ONLY UNDERGRADUATES** are allowed to participate in the event.

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NOTE:

- 1. All participants will be given Certificate of Participation.
- 2. Winners and runners will be given Certificate of Merit.
- 3. Same member cannot be a member of two different teams for the same event.
- 4. A robot is allowed to participate only once in an event. The robot can participate once again in the same event with same team if it satisfies the following conditions:
 - The team has to **register once again** with modified old robot/new robot before registrations closes and maximum of 3 registrations will be accepted
 - The following modification has to be made to the old robot to accept it as a new robot. They are: Motor rpm, chassis width is changed and then it is accepted as a new robot.
- 5. In case of any discrepancies, the decision of the coordinator and the event head shall be the final and no further arguments shall be entertained.
- 6. We request the participants not to assume anything without contacting us.
- 7. Team Roboveda is not responsible for any kind of damage to your robot.
- 8. All participants must bring their college ID card.

In case of any discrepancies, the decision of the coordinator and the event head shall be the final and no further arguments shall be entertained.

THANK YOU

EVENT COORDINATORS:

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