

GATI



Sreenidhi's Annual Technical Fest ★ ISO 20121:2012 CERTIFIED

ROBOVEDA'22

explore the unwritten lore...

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1. GAME AND RULES:

1.1. Design a wired or wireless robot within the specified dimensions that can travel through all turns of the track. The robot that cracks the arena in the least time is the winner.

2. GAME FIELD AND OBJECTS:

2.1. ARENA

2.1.1. The arena is placed on the ground, there may be obstacles at certain points in the racecourse.

Note: The design is not drawn to scale. The top view of the arena is shown below.





3. TEAMS

3.1. There is no team limit.

3.2. Only 2 members of a team are allowed to stay around the arena (one for controlling and one for assisting) and a team is allowed to play with one robot only.

3.3. Members of different institutions can form a team.

3.4. This event is open for students up to undergraduates.

4. ROBOTS :

4.1. ROBOT SPECIFICATIONS :

4.1.1. Dimensions of robot should not exceed 30cm x 30cm x 30cm (l*b*h).(Tolerance of 5%is allowed in this regard).

4.1.2. Minimum track width of the robot should be 25cm x 25cm.

4.1.3. Robots can be wired or wireless.



4.1.4. Robots should not damage any part of the arena. If the robot damages any part of the arena, it will be disqualified.

4.1.5. Readymade chassis, any form of printed circuit boards or controller boards (other than development boards and motor drivers) are not allowed. Failing to oblige which, shall lead to disqualification.

4.1.6. If wireless control systems are being used, then at the output only digital values should be sent.

4.1.7. Speed control of the bot is not allowed in any manner during the whole arena run.

4.1.8. The robot should not expand or compress during the run.

4.1.9. Use of IC engines in any form is not allowed.

4.2. POWER SUPPLY FOR ROBOTS:

4.2.1. The potential difference between any two points should not exceed a limit of 12V and the robot should be powered only using batteries. (A tolerance of 5% is allowed).

4.2.2. If the robot suddenly stops in the arena due to any technical problem, you will be allowed to modify it only twice for a round. The timer will not be stopped during this period.

4.2.3. Power supply may be ON or OFF the board (i.e., one of the team members can hold the power supply). An external power supply will not be provided.

4.2.4. Changing the battery or battery polarity is not allowed during the race.

4.3. WEIGHT :

4.3.1. No bot can weigh more than 5kg.

5. SAFETY:

5.1. All the required accessories should be brought by the participants.

5.2. Team Roboveda is not responsible for any damage to the robot.

5.3. Technical assistance will not be provided by coordinators or technical deputies.

6. THE COMPETITION AND MATCHES:

6.1. MATCHES:

The event consists of 2 rounds.

6.1.1. Qualifying round

6.1.2. Final round.

6.2. QUALIFYING ROUND

6.2.1. During the qualifying round, one team will be allowed to participate at a time.

6.2.2. Whole arena run should be completed within 12 minutes for qualifying the round.

6.2.3. The winner of the round is judged by a circuit race of 1 lap.

6.2.4. If the robot touches any barricade once, a penalty (in seconds) will be levied. Consecutive touches maybe imposed with higher penalties, specifications of which will be mentioned on the day of the event.

6.2.5. Total time taken by participants to reach the finish line with penalties will be counted.

6.2.6. Arena will be explained to the participant before the race commences.

6.2.7. Width of the track will be in accordance with the robot specifications for the qualifying round. It may change in further rounds.

6.3. FINAL ROUND:

The top 12 teams that cracked the qualifying round in less than the total time (with penalties) of 12 minutes will be allowed for the final round.

6.3.1. Only one team is allowed to participate at a time.

6.3.2. The winner is judged by a circuit race of 1 lap.



6.3.3. If the robot touches the barricade once, a penalty (in seconds) will be levied. Consecutive touches may be imposed with higher penalties, specifications of which will be mentioned on the day of the event.

6.3.4. Total time taken by participants to reach the finish line with penalties will be counted.

6.3.5. The winner of the final round will be the team that cracks the arena in the least time (total time).

6.4. SCORING:

6.4.1. The top 12 robots that have cracked arena-1 in the least time in the qualifying round will be considered and those teams will be allowed to participate in the final round.

6.4.2. If the robot touches any barricade once, a penalty (in seconds) will be levied. Consecutive touches may be imposed with higher penalties, specifications of which will be mentioned on the day of the event.

6.4.3. The time taken by the robot to complete the race track along with the penalties is the total time taken.

7. **VIOLATION AND DEDUCTION OF A POINT:**

7.1. Human interference (e.g. touching the robot) during the game will be charged.

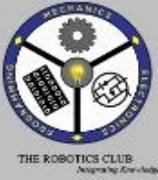
7.2. Any kind of damage to the arena will not be entertained, and if done, the robot will be immediately disqualified.

7.3. Robot with the base of a toy car and its gearbox as a machine part will be disqualified. Readymade kits are strictly prohibited and will lead to disqualification.

8. **DISQUALIFICATION:**

8.1. If a participant does not comply with the rules of the event, the robot will be disqualified from the event.

8.2. Misbehavior of any kind will not be tolerated and the team will be subjected to disqualification from Roboveda.



8.3 At any point of time during the match voltage should not be varied and should be constant, variation in voltage leads to disqualification .

9. OTHERS :

9.1. Maintain a physical distance of 1-2m from other persons, even if they don't appear to be sick.

9.2. Wear a properly fitted mask and frequently sanitize yourself with alcohol-based hand rub (sanitizer) or soaps.

9.3. Make sure your mask covers your nose, mouth, and chin.

9.4. If you feel any kind of Covid-19 symptoms, make sure you inform coordinators.

9.5. It's important for every participant to strictly follow the Covid-19 Protocols.

9.6. All participants will be given a Certificate of Participation.

9.7. Winners and runners will be given a Certificate of Merit.

9.8. All participants must bring their respective ID cards.

9.9. Participants are allowed to participate only once in that particular event.

9.10. Team RoboVeda is not responsible for any kind of damage to your robot.

9.11. We request the participants not to assume anything that is not mentioned in the document without contacting the coordinators or Technical Deputies.

9.12. It's our sincere request to all the participants to go through this rule book thoroughly and not a single point mentioned in the rule book will be compromised under any circumstances. We also request you to have a copy of this rule book handy during the event.

9.13. Make sure you visit our official website on a daily basis so that you will get to know if there are any changes made in the event.



9.14. Any kind of misbehavior will not be tolerated and will lead to disqualification of the team.

9.15. If you choose our hospitality, the payment must be done on the day you check-in.

9.16. In unforeseen circumstances, Team Roboveda abides to the decision of the Institution regarding the conductance of the event. Only registered participants will be informed about the change in event dates or cancellation. In that case, the registration the fee will be refunded.

9.17. Events Pushpak, Yantraa and Ranaveera are open categories. All the remaining events are open for students pursuing up-to B.tech level only.

9.18. The registration fee per individual in a team is ₹299 with which the entrant can participate in Yoddha, Samanvayi, Jaladhmatra, only. One should pay the scheduled amount before participating in the event.

9.19. The registration fee per individual in a team is ₹449 with which the entrant can participate in all the events, except Yantraa, Pushpak, Ranaveera. One should pay the scheduled amount before participating in the event.

9.20. The registration fee is ₹ 749 for which the entrant can participate in all the events including Pushpak, Yantraa and in any one of the 2 categories of Ranaveera. The registration fee is ₹849 for which the entrant can participate in all the events including Pushpak, Yantraa, and in both the categories of Ranaveera.

*****THANKYOU*****

EVENT CO-ORDINATORS:

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