

# LAKSHMANDAREKHA



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

**ROBOVEDA '22**

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### **3.ROBOTS:**

#### **3.1 ROBOT SPECIFICATIONS**

- 3.1.1. Maximum dimensions of the robot should be 20cm\*20cm\*20cm(l\*b\*h).
- 3.1.2. Robots should deal with the lighting conditions including photography as well.
- 3.1.3. All the systems (battery, sensors, data processing and control systems) must completely reside on the robot itself.

#### **3.2 POWER SUPPLY AND WEIGHT**

- 3.2.1. The power supply should not exceed 12V .
- 3.2.2. The maximum weight of the bot should not exceed 3KG.

### **4.COMPETITION AND MATCHES:**

#### **4.1 MATCHES**

- The event consists of 2 rounds:
- 4.1.1. QUALIFYING ROUND.
  - 4.1.2. FINAL ROUND.

#### **4.2 COMPETITION RULES**

##### **Qualifying round**

- 4.2.1. A qualification round will be there on the first day of the event.
- 4.2.2. If the robot traverses the path within the given time with least penalties then the robot will be qualified in the first-round. Manual touch will be considered as a penalty.
- 4.2.3. Maximum time span to traverse the path will be mentioned on the day of the event.
- 4.2.4. The participants will be provided 3 minutes of time for calibration and making any changes in their code before entering the arena.



4.2.5. Checkpoints will be pointed out in the arena at the time of the event by Coordinators.

4.2.6. Participants successfully completing the round 1 arena are only forwarded to the final round.

## Final round

4.2.7. Participants who crack the arena within the given time and least penalties will be shortlisted to the final round.

4.2.8. The qualified teams have to use the same robot as the one used in the qualifying round.

4.2.9. The final round arena will be displayed on the day of the event.

4.2.10. The winner of the final round will be the team which crack the arena in the least time.

## 4.3 COMPETITORS RULES:

4.3.1. Candidates of qualification upto under-graduation can participate.

4.3.2. Members of different institutions can form a team.

4.3.3. Only 2 members of a team are allowed to stay around the arena (for calibrating and assisting).

4.3.4. A team is allowed to play with one robot only.

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

4.3.6. All the required accessories have to be brought by the participants (additional components will not be provided at the event).

4.3.7. If the participant's robot size exceeds the given dimensions, he/she is allowed to change the motors, tyres, etc, to match with the given dimensions.

4.3.8. The time measured by the coordinators will be final and is not subjected to change.

4.3.9. In-case of unfair outcomes, the coordinator's decision will be final.

4.3.10. No technical assistance will be provided by the coordinators during the time of the event, request for technical assistance leads to disqualification of participants permanently from RV-22 events.



- 4.3.11. Practice run is only permitted by permission from coordinators, traverse distance for practice runs will be mentioned by coordinators at the time of the event.
- 4.3.12. If a participant does not comply with the rules of the event, he/she will be disqualified from the event.
- 4.3.13. Misbehavior of any kind will not be tolerated, and the team will be subjected to disqualification from Roboveda.
- 4.3.14. The robot should not harm the opponent or the field. Constantly harming the arena may lead to disqualification.
- 4.3.15. No external power supply will be provided at the time of event, if found leads to disqualification.
- 4.3.16. The robot which will start on the “START” tile and reach the “END” tile block by following the black lines in the shortest time will be nominated the winner.
- 4.3.17. All the Participants should note the requisite timings of the event. Approaching the event after the mentioned timings is not tolerable and leads to disqualification of teams.

#### **4.4 SCORING:**

- 4.4.1. Maximum time span to traverse the path will be mentioned on the day of the event (Qualifying round) by the coordinator.
- 4.4.2. Number of resets allowed are 2 only if the robot moves out of the arena (line).
- 4.4.3. If the robot moves out of the arena more than twice no resets will be provided and the robot will be considered as disqualified (not qualified for further rounds).
- 4.4.4. The robot should be able to complete the given task with least penalties.

#### **5. VIOLATION AND PENALTY:**

- 5.1. Robots should not damage the arena. If it does, the robot will be instantly disqualified.
- 5.2. Manual touch will be considered as a penalty.
- 5.3. Each penalty adds extra time (which will be declared at the event) to the total time.



## **6. DISQUALIFICATIONS:**

- 6.1. Exceeding the bot size beyond maximum dimensions will lead to disqualification.
- 6.2. Robots should not damage the arena. If it does, the robot will be instantly disqualified.
- 6.3. The robot should be in the given dimensions else it will lead to the disqualification of the team.
- 6.4. If a participant does not comply with the rules of the event he/she will be disqualified from the event.
- 6.5. Misbehavior of any kind will not be tolerated, and the team will be subjected to disqualification from Roboveda.
- 6.6. A robot with the base of a toy car and its gearbox as a machine part will be disqualified. Also, LEGO kits and readymade PCB's are strictly prohibited and will lead to Disqualification.

## **7. OTHERS:**

- 7.1. Maintain a physical distance of 1-2m from other persons, even if they don't appear to be sick.
- 7.2. Wear a properly fitted mask and frequently sanitize yourself with alcohol-based hand rub(sanitizer) or soaps.
- 7.3. Make sure your mask covers your nose, mouth, and chin.
- 7.4. If you feel any kind of Covid-19 symptoms, make sure you inform coordinators.
- 7.5 It's important for every participant to strictly follow the Covid-19 Protocols
- 7.6. All participants will be given Certificate of Participation.
- 7.7. Winners and runners will be given Certificate of Merit.
- 7.8. Member participated from a team cannot participate in another team for the same event.
- 7.9. In case of any discrepancies, the decision of the coordinator, technical deputies and the event head shall be the final and no further arguments shall be entertained.



- 7.10. A robot is allowed to participate only once in that particular event.
- 7.11. We request the participants not to assume anything without contacting us.
- 7.12. Team Roboveda is not responsible for any kind of damage to your robot.
- 7.13. All participants must bring their ID cards.
- 7.14. Team Roboveda is not responsible for any damage to your robot on or off the event.
- 7.15. We request the participants not to assume anything that is not mentioned in the document without contacting the coordinators or Technical Deputies.
- 7.16. It's our sincere request to all the participants to go through this rule book thoroughly and not a single point mentioned in this rule book will be compromised under any circumstances. We also request you to have a copy of this book handy during the event.
- 7.17. Check this rule book frequently, it may have some changes.
- 7.18. Any kind of misbehavior will not be tolerated and will lead to disqualification of the team.
- 7.19. If you choose our hospitality, the payment must be done on the day you check in.
- 7.20. Events Pushpak, Yantra and Ranaveera are open categories. All the remaining events are open for students pursuing up-to B.Tech level only .
- 7.21. 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.
- 7.22. 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.
- 7.23. 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.

\*\*\* THANK YOU \*\*\*

### **EVENT COORDINATORS:**

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