

PUSHPAK



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

ROBOVEDA '22

explore the unwritten lore...

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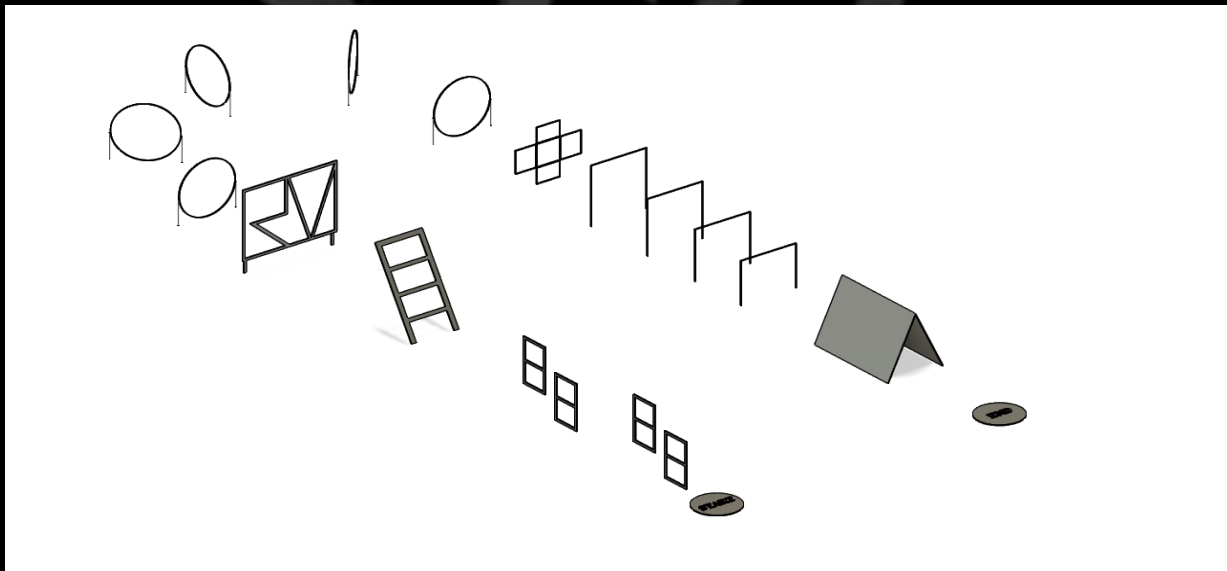
PUSHPAK (Open for all)

1. GAME AND RULES:

1.1. Having ideas is far different from applying those practically and proving oneself. The Roboveda'22 **PUSHPAK** event gives you a wonderful opportunity to showcase your talent. The program not only aims at drone technology, but the main aim is to encourage teams coming up with basic drones who need a push for further development.

1.2. Design an aero vehicle (Quadcopter/ Tricopter) to crack the Arena in least time.

2. GAME FIELD AND OBJECTS:



NOTE: Actual Arena may differ from this arena and dimensions may change.

3. TEAMS:

- 3.1. Members of different institutions can form a team.
- 3.2. Any team with fewer than two(2) members is not allowed.



3.3. Maximum 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.

3.4. All the team members are supposed to carry their college ID cards

4. ROBOTS:

4.1. Robot Specifications:

4.1.1. Maximum of 4 motors will be allowed.

4.1.2. Propeller diameter should not be greater than 10 inches.

4.1.3. Only electrical motors are allowed.

4.1.4. Use of stabilization board and programming assistance in receivers is not allowed.

4.1.5. No ready-made quad copters are allowed

4.1.6. No metal propellers should be used.

NOTE:

The diameter of the hurdles will be around 1 meter so it is suggested for the participants to bring quadcopters of diameter below 80cm.

4.2. Power supply for robots:

4.2.1. Battery weight should not be more than 350gm.

4.2.2. Voltage between two nodes of the battery should not exceed $15.5 \pm 3\%$ Volts.

4.2.3. No external power supply will be provided at the time of the event.

5. SAFETY:

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

5.2 The robot should not harm the arena. Constantly harming the arena may lead to disqualification.



6. THE COMPETITION AND MATCHES:

6.1. MATCHES:

6.1.1. The event consists of 2 rounds.

6.1.1.1. Qualifying round

6.1.1.2. Final round

6.1.2. A qualification round will be there on the first day of the event.

6.1.3. Participants successfully completing the qualifying round arena are only forwarded to the final round.

6.1.4. There will be a final round for participants qualified in the qualification round.

6.2. COMPETITION RULES:

6.2.1. All the required accessories have to be brought by the participants.

6.2.2. No technical assistance will be provided by the coordinators during the time of the event.

6.2.3. No practice flights will be allowed.

6.2.4. Only two members of a team are allowed near the arena during the play.

6.2.5. Only one member is allowed to control the quad copter.

6.2.6. While the other member can give the instructions.

6.2.7. Usage of readymade drones is not allowed.

6.2.8. Technical time out of 1 min can be taken by a team.

6.2.9. Human interference (e.g. touching the drone) during the game will be given a penalty.

6.3. SCORING:

6.3.1. Scoring will be explained during the time of the event.

7. VIOLATION AND DEDUCTION OF POINTS:

7.1. Penalties are imposed if the drone touches the border of the track or if skips or replacements are chosen. Each penalty adds extra time to the total time. The time added for each penalty shall be declared on the day of the event.



8. DISQUALIFICATION:

- 8.1.** If a participant does not comply with the rules of the event he/she 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.** Lego kits are strictly prohibited and will lead to disqualification.
- 8.4.** The robot should not harm the field. Constantly harming the arena may lead to disqualification.
- 8.5.** Usage of ready-made drones is not allowed.

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 Certificate of Participation.
- 9.7.** Member participated from a team cannot participate in another team for the same event.
- 9.8.** 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.
- 9.9.** Robot is allowed to participate only once in that particular event.
- 9.10.** Team Roboveda is not responsible for any kind of damage to your robot.
- 9.12.** All the participants are requested to bring their college ID cards.
- 9.13.** We request the participants not to assume anything that is not mentioned in the document without contacting the coordinators or Technical Deputies.
- 9.14.** 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.



- 9.15.** We also request you to have a copy of this rule book handy during the event.
- 9.16.** Check the rule book frequently, it may have some changes.
- 9.17.** Any kind of misbehavior will not be tolerated and will lead to disqualification of the team.
- 9.18.** Events Pushpak, Yantraa and Ranaveera are open categories. All the remaining events are open for students pursuing up- to B.tech level only.
- 9.19.** No spot registrations will be accepted for this event.
- 9.20.** 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.
- 9.21** The registration fee per individual in a team is ₹449 with which the entrant can participate in all the events except Pushpak, Ranaveera, and Yantraa. One should pay the scheduled amount before participating in the event.
- 9.22.** 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. The registration fee per individual in a team is ₹.749 with which the entrant can participate in all the events and any one of the 2 categories in Ranaveera. One should pay the scheduled amount before participating in the event.

*****THANK YOU*****

EVENT COORDINATORS:

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