

YODDHA



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

 **ROBOVEDA '22**

explore the unwritten lore...

YODDHA

1. GAME AND RULES:

1.1 Levels

1.1.1 Participants completing the level 1(qualification round) arena are only forwarded to the level 2 (final round).

1.2 Level 1(Qualification Round)

1.2.1 This level consists of three matches each of 180 seconds.

1.2.2 To qualify level 1 one must win two matches.

2. GAME FIELD AND OBJECTS:

The match ring area consists of the match circle and the outer layer area of Arena. The rest of the space (outside the arena area). The outside of the arena area is surrounded by volunteers. The match circle is a circle that is covered with a black color coating.

Height – 3cm

Diameter – 160cm

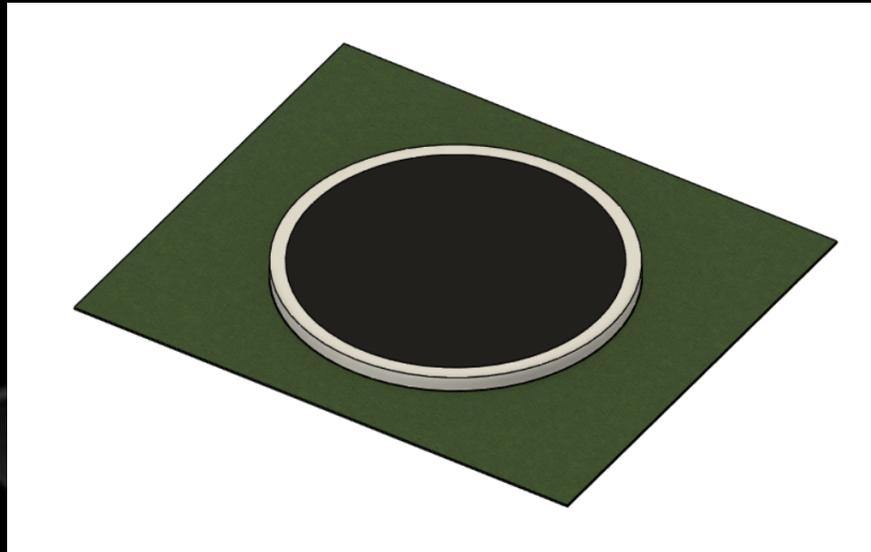
Court material – Wood

Width of White line – 5cm(Part of the Arena)



NOTE: The above Arena design is just for reference purpose only. Actual arena may vary on the day of the event.

The square in the below diagram represents the carpet



3. ROBOTS:

3.1 ROBOT SPECIFICATIONS

Dimension and weight restrictions

Mass – Maximum 5 kg

Length – Maximum 30cm

Width – Maximum 30cm

Height – No restriction

Note : Tolerance of 10% on bot dimensions will be allowed.

3.2 POWER SUPPLY

5.2.1 Maximum voltage in the circuit should not exceed 12V DC at any time.

5.2.2 Tolerance of 10% on power supply will be allowed.

3.3 REQUIREMENTS FOR BLADE USE:

3.3.1 It is forbidden to use double blades.

3.3.2 It is forbidden to use any components that may separate from the robot when it moves or comes into contact with another robot.

3.3.3 For Mega Sumo robots, all edges are included except the front scoop, must not be sharp enough to damage the arena (exception is when the robots collide), other robots, or players.

3.4 MOVEMENTS OF AUTONOMOUS ROBOTS:

3.4.1 The movements of the robot should be designed to detect the movements of the opponent and respond/attack accordingly. If there is any doubt in the autonomy of the robot, the coordinators and head have the right to inspect the control logic of the robot. In case of any discrepancy the robot leads to disqualification.

3.5 USE OF REMOTE CONTROL DEVICES WITH AUTONOMOUS ROBOT:

3.5.1 During the competition (round), the remote control devices must be placed in a previously designated area. The devices may only be used to stop the robot, when the referee (coordinators or head) gives a corresponding command. The official infrared remote control device is held by the referee (coordinators or head).

3.6 PROHIBITED COMPONENTS OF THE ROBOT:

3.6.1 Any components that may disturb the operation of the opponent (for example, flashlights or jamming devices such as IR LEDs intended to saturate the opponents IR sensors).

3.6.2 Any components that are designed to damage the opponent.

3.6.3 The robot must not include any parts, which fix it onto the Arena (for example glues, suction cups, etc.). Magnets that improve the grip of the wheels are allowed.

3.6.4 Any components that may damage or scratch the surface of Arena. An exception is when the robots collide.

3.6.5 Any components that are designed to damage the opponent.

3.6.6 It is forbidden to use any liquids, powders and gas as a weapon against the opponent.

3.6.7 It is not allowed to use any inflammable materials in the robot.

3.6.8 The robot must not include any throwing devices (for example throwing a net on an opponent).

3.6.9 We are not responsible for any kind of damage to the robot.

4. SAFETY:

4.1 We are not responsible for any kind of damage to the robots in the game field.

5. THE COMPETITION AND MATCHES:

5.1 THE START OF MATCH:

5.1.2 Before each round and with the signal from the coordinators, the contestants should place their robots. The robots may start moving after they have received the start command.

5.1.2 The coordinators stop the robots by sending a stop command. The match ends officially after a corresponding signal from the coordinators .

5.2 TIE ROUND:

The round is repeated in the following situations.

5.2.1 When the tie occurred within the 3 matches

5.2.2 Both robots fall out of the arena at the same time.

5.3 PENALTY TIME WILL BE AWARDED FOR:

5.3.1 Situation where one or several wheels of the robot roll out of the Arena and the robot is able to return to the Arena. In this case, that team will earn one penalty time(i.e 15 sec).

5.4 THE WINNER IS ANNOUNCED IN THE FOLLOWING SITUATIONS:

5.4.1 If the opponent has been pushed out of the Arena.

5.4.2 If the opponent falls out of the Arena.

5.4.3 Situation where one or several wheels of the robot roll out of the arena and the robot is unable to return to the arena then the opponent wins.

6. OBJECTIONS:

6.1 The decisions of the coordinators are not subject to appeals. Complaints must be submitted during or immediately after the match. Any later complaints will not be accepted. In case of any conflicts or disputes, the final word will be said by the coordinators or head.

7. CHANGES AND CANCELLATIONS IN THE RULES:

7.1 Changes and cancellations made to the rules are adopted by the main organizer of the competition according to the regulation of the regulatory committee of the competition.

8. WARNING AND VIOLATIONS:

8.1 WARNINGS:

A contestant who acts as indicated below gets a warning. Only one warning is excused. After that it leads to a penalty of 10 seconds.

8.1.1 If the operator or some item of the operator (for example, remote control) ends up in the area of the Arena before the round ending signal of the referee(coordinators or head).

8.1.2 If the robot moves before the beginning of the round.

8.1.3 If both robots move, but do not collide within 1.5mins.

8.1.4 If the participant violates the requirements for the use of remote control.

8.1.5 If the robot is replaced from the given position after it is placed on the Arena.

8.1.6 If the participant does not comply with the safety requirements.

8.1.7 In case of any other action that is considered unfair.

8.2 VIOLATIONS:

The participant who violates the following rules, loses the match.

8.2.1 If the contestant breaks or deforms the Arena.

8.2.2 If the participant violates the requirements provided for “The Robot”.

8.2.3 If the autonomous robot does not make autonomous movements.

8.2.4 In case of any other action that is considered unfair.

9. DISQUALIFICATION:

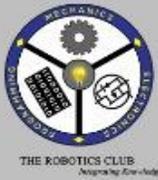
In the following cases, the participant will be disqualified – he or she must leave the competition and is not added to the list of competition results.

9.1 If the participant's robot does not comply with the requirements provided in the Rule Book.

9.2 If the participant behaves in an undignified manner. For example, swears or offends the opponent or the coordinators or head.

9.3 If the participant deliberately injures the opponent.

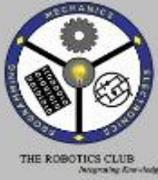
9.4 At any point of time during the match voltage should not be varied and should be constant, variation in voltage leads to disqualification .



10. OTHERS:

- 10.1. Maintain a physical distance of 1-2m from other persons, even if they don't appear to be sick.
- 10.2. Wear a properly fitted mask and frequently sanitize yourself with an alcohol-based hand rub (sanitizer) or soaps.
- 10.3. Make sure your mask covers your nose, mouth, and chin.
- 10.4. If you feel any kind of Covid-19 symptoms, make sure you inform coordinators immediately.
- 10.5. It's important for every participant to strictly follow the Covid-19 Protocol.
- 10.6. All participants will be given a Certificate of Participation.
- 10.7. Winners and runners will be given a Certificate of Merit.
- 10.8. All the participants are requested to bring their college ID cards.
- 10.9. The same member cannot be a member of two different teams for the same event.
- 10.10. 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.
- 10.11. We request the participants not to assume anything without contacting us.
- 10.12. Team RoboVeda is not responsible for any kind of damage to your robot.
- 10.13. All participants must bring their registration receipts to the event compulsorily.
- 10.14. 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.
- 10.15. 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.
- 10.16. 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.
- 10.17. 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.





- 10.18. If you choose our hospitality, the payment must be done on the day you check-in.
- 10.19. Events Pushpak, Yantraa and Ranaveera are open categories. All the remaining events are open for students pursuing up-to B.Tech level only.
- 10.20. 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 fee will be refunded.
- 10.21. A robot is allowed to participate only once in that particular event. The robot can participate once again in the same event with the same team if it satisfies the following conditions:
- The team has to register once again with a modified old robot/new robot before registrations close and a 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 can be wheels, motors, and chassis material is changed and then it is accepted as a new robot.

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.

EVENT COORDINATORS

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