

ROBO MAZE

INTRODUCTION:

Robo Maze is one of the simple looking, yet tough to crack events in Robovanza. An autonomous robot has to complete a tricky maze in the shortest possible time. The quickest one to finish the maze wins.

PROBLEM STATEMENT:

To build an autonomous robot, within the given specifications, that is capable of completing the maze quickly. The objective is to solve the maze without coming in contact with the walls

ROBOT SPECIFICATIONS:

1. Readymade bots are not allowed. Readymade chassis may be used.
2. The dimensions of the robot must not exceed 30cm x 25cm x 20cm (l*b*h).
3. Robot should be completely autonomous.
4. Power supply to the robot must not exceed 12V.
5. Power supply can be ON/OFF board.
6. The bot must not weigh more than 4 Kg.
7. Tolerance of 5% on the dimensions and power supply will be permitted.

QUALIFYING ROUND (ROUND 1):

1. There are multiple walls through which the robot must be manoeuvred autonomously (Ultrasonic, lidar etc can be used) .
2. The track width may be as short as 300 mm. So, it is advised to maintain the bot dimensions appropriately.
3. Hitting any obstacle leads to penalty. The penalty details shall be disclosed at the time of the event.
4. The robots shall be judged based on the time taken for completion including the

penalties.

5. If the robot becomes immobile, the team shall be initially provided with 60 seconds for fixing it. If the team fails to fix it in that time, extra 60 seconds shall be provided with some penalty. In case of a failure for the next time, the team shall be disqualified.

NOTE: Subsequent rounds shall be announced at the time of the event.

RULES AND REGULATIONS:

1. A team can contain a maximum of 4 members.
2. Any kind of damage to the arena shall not be tolerated, in which case, the bot shall be disqualified.
3. No technical assistance shall be provided by the coordinators during the time of the event.
4. Practice runs shall not be permitted.
5. Use of IC engines in any form is prohibited.
6. Human interference, i.e., touching the robot, stepping into the arena, etc shall not be permitted. Doing so will lead to penalty or may even be disqualified.
7. All bots must contain their own power supply. No external power supply shall be provided at the time of the event.
8. Any robot with the chassis of a toy car or its gearbox as a machine part, as well as LEGO kits are strictly prohibited.
9. Each member can only take part once in a particular event.
10. Each robot is allowed to take part only once in a particular event.
11. The organisers are not responsible for any kind of damage to the robot.
12. In case of any discrepancies, the decision of the coordinator and the event head shall be final; no further arguments shall be entertained.

NOTE: Kindly keep checking the ROBOVANZA website for further updates.

CERTIFICATE POLICY:

1. Certificate of participation shall be awarded to all the teams except for the disqualified ones.
2. Certificate of merit shall be awarded to the winner along with the cash prize.

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