

## All Terrain

### **INTRODUCTION:**

Lead your robot where no robot has ever been to. Build your robot to tackle a challenging track of unfriendly rocks, flat tiled floor or sloping surfaces and enable its best off-road performance.

### **PROBLEM STATEMENT:**

To build a manually controlled robot, within the given specifications, that can scale the given path employed by a difficult terrain, as quickly as possible.

### **ROBOT SPECIFICATIONS:**

1. Readymade hand/gripper is not allowed.
2. The dimensions of the robot must not exceed 30cm x 30cm x 30cm (l\*b\*h).
3. Robot can be wired or wireless.
4. Power supply to the robot must not exceed 12V.
5. Power supply can be ON/OFF board.
6. There is no weight limit for robots.
7. Tolerance of 5% on the dimensions and power supply will be permitted.

### **QUALIFYING ROUND:**

1. There are multiple zones in the arena, each with an individual terrain, through which the robot must be manoeuvred.
2. The terrains may include slopes, rocky surface or slippery tiles; and shall definitely exclude large obstacles and very acute slopes.
3. Skipping any zone leads to penalty.
4. The penalty details shall be disclosed at the time of the event.
5. The qualifying round contains basic inclines or declines.
6. The robots shall be judged based on the time taken for completion including the penalties.
7. 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.
7. All bots must contain their own power supply. No external power supply shall be provided at the time of the event.

# ROBOVANZA

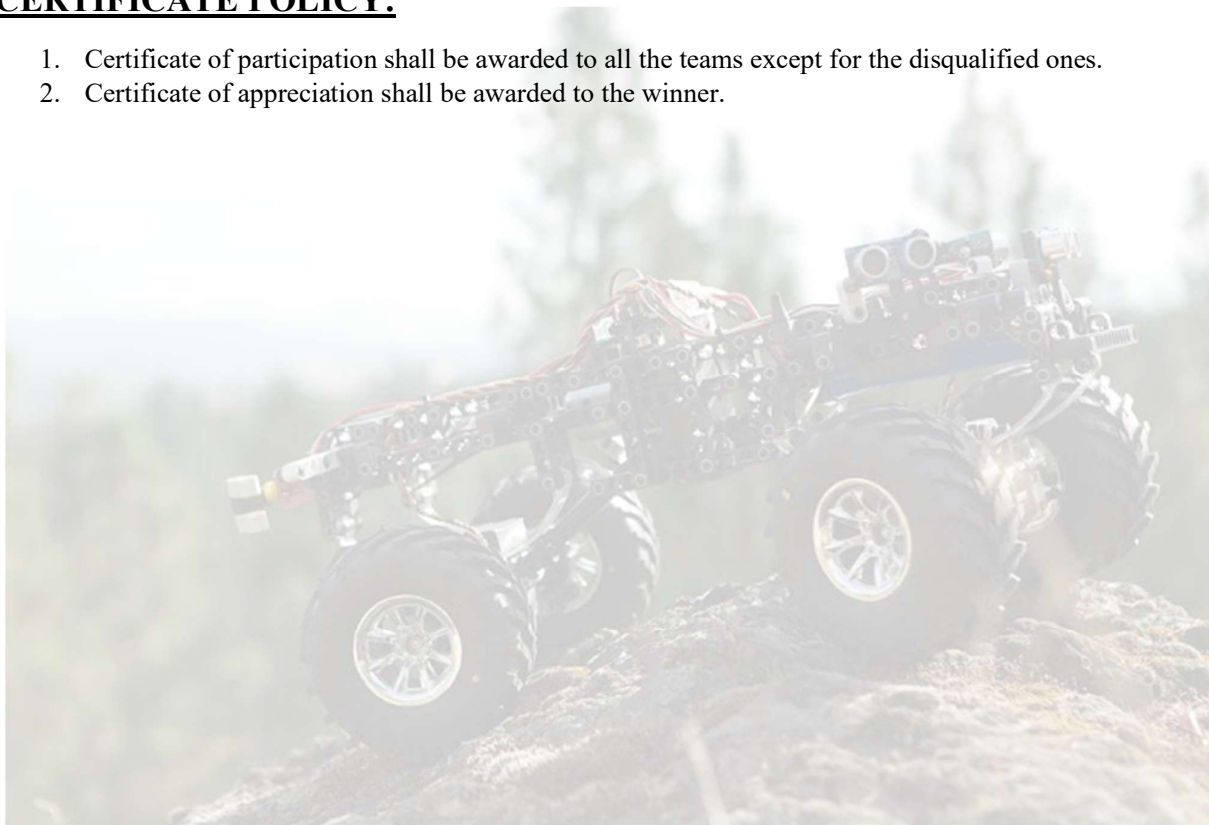
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8. Any kind of accelerometer module or a mobile phone accelerometer is allowed to control the robots.
9. Any robot with the chassis of a toy car or its gear box as a machine part, as well as LEGO kits are strictly prohibited.
10. Each member can only take part once in a particular event.
11. Each robot is allowed to take part only once in a particular event.
12. The organisers are not responsible for any kind of damage to the robot.
13. 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 appreciation shall be awarded to the winner.



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