

# ALL TERRAIN

**ABSTRACT:** - ALL TERRAIN is to design and test your robot's might, strategy on terrains(sand, mud, steep slopes, etc.). It consists of an arena where there are hurdles and terrain etc.

## **SPECIFICATIONS OF ROBOT: -**

1. Dimensions of the robot should not exceed 27cm x 27cm x 30cm `(length x breadth x height).
2. Minimum track width of the robot should be 20cm.
3. Robot can be wired or wireless.
4. Readymade chassis, wireless control systems, any form of Printed Circuit Boards (Exception: ARDUINO's) are not allowed.
5. Robot should be powered only using batteries with supply not exceeding 12V between any two points and should be on top of the robot.
6. Power supply may be ON or OFF board (i.e. one of the team members can hold the power supply). External power supply will not be provided.
7. Tolerance of 5% is allowed in dimensions and power supply.
8. There is no weight limit for the robot.
9. Robot must be waterproof (The coordinators and organizers are not responsible for any damage caused to the robot).

## **ROUNDS:-**

There are two rounds one is qualifying round and the other is the final round.

### JUDGING CRITERIA:-

1. The team which completes the qualification round arena in least time with least no. of penalties is eligible for next round.
2. Penalties are imposed if robot 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.
3. The maximum time limit to traverse the arena will be announced on the day of event.
4. Teams get disqualified if they are penalized more than the allowed limit (declared on the day of event) and if the robot can't traverse the arena in the given time.

### RULES AND REGULATION:-

1. Team can consist of a maximum of 4 members.
2. Members of different institutions can form a team.
3. Only 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.
4. Any kind of damage to the arena will not be entertained, and if done, the robot will be immediately disqualified.
5. All the required accessories have to be brought by the participants.
6. Lending or making the robot to participate in same event with different team will not be entertained

7. No technical assistance will be provided by the coordinators during the time of the event.
8. No practice runs will be provided.
9. Use of ready made robots is not allowed which includes ready made basement, body etc.
10. Human interference (e.g. touching the robot) during the game will be charged.
11. If a participant does not comply with the rules of the event, the robot will be disqualified from the event.
12. Misbehaviour ,quarrelling of any kind will not be tolerated and the team will be subjected to disqualification from ALL TERRAIN.
13. The robot should not harm the field. Harming the arena may lead to disqualification.
14. No external power supply will be provided at the time of event.
15. A robot with the base of a toy car and its gear box as a machine part will be disqualified. Also lego kits are strictly prohibited.
16. Participants with wired robots are strictly advised to get wires of length 3m or more.
17. In case of wired robots the wired should be slacked though out the game.
18. Readymade PCB's are not allowed.
19. ONLY UNDERGRADUATES are allowed to participate in the event.
20. If any of the robot specifications do not meet the requirements for the ALL TERRAIN the participants are given time to set it and if unable to fix it within given time team will be disqualified and money will not be returned.

\*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.