**DIRT RACE**

“IT’S NOT ABOUT JUST BEING FAST “.  Defy the traps , time your gaps because driving on the highway is way too mainstream. Come onto to the race track filled with the unexpected as Tathva'15 presents to you Dirt Race.

There is no creation without a creator, see if the robot of yours has what it takes to withstand this test of speed, skill and endurance. Stride past the other robots at top speed to emerge the champion of this race. Gear up your robot for the ultimate Dirt Race.

**PROBLEM STATEMENT**

Design a remote controlled bot that can maneuver over different terrains and the intermediate obstacles. Reach the finish line as fast as u can because u never know who can take over the race from you.

**ARENA**

•The actual arena will be displayed only at the venue.

•The bot may use any shortcut it finds in the racecourse, but it must complete all the obstacles.

•Different terrains like concrete, sand, soil, gravel, glass, wood, fire etc. will be used in the track.

•Two minutes of preparatory time will be given to the teams before the start of the race to study the arena and devise game-play strategies.

•There may be bridges, inclined planes, wedges, rotating platforms, and many more surprise elements.

•Final aim is to reach the finish line in the least possible time.

**EVENT SPECIFICATIONS**

ROUND 1

•In the first round, two teams will be selected in random to compete against each other. Top 18 teams will be advancing to the next round based on their time of completion of the race. 2 teams will be given an added advantage of their design to move to next round.

ROUND 2

•Second round will be a typical knockout round. Total 20 teams will be competing in this round.

•The event managers will be sorting out the qualified teams from Round 1 into pairs which will be competing against each other. The winner of the race advances to the next round.

ROUND 3

•In third round, one team at a time will be sent into the arena. Time will be only judging criteria.

•Top 3 teams with best timing will be the winners.

NOTE: In Round 2 time taken by each team will be noted. This will be the basis of selection in case of any unwanted or natural interferences.

CERTIFICATE OF EXCELLENCE WILL BE GIVEN TO THE PARTICIPANTS WITH THE BEST DESIGN.

•Design judging criteria will be under the discretion of event managers.

**COMBAT POLICY**

•The bots can push or collide against each other amidst the race.

•No kind of weapons (guns, knives, projectiles, hammers, axes, etc.) should be used upon the opponents.

•All the bots are expected to have defensive structures as the competitors themselves are responsible for any damage caused to their respective bots due to harsh impact with the arena walls or any other bots.

•The participants may not touch the bots while it is on the race track. Only the official supervising the bot on the track may reset the bot at the last checkpoint. Any violation of this rule may lead to disqualification.

•Trying to control the bot with the tension of the connecting wires will not be tolerated.

**BOT SPECIFICATIONS**

•Each team is allowed to have only one bot for all the rounds.

•The bot must fit into a cube of 25cm x 25cm x 20cm.

• No external power supply will be supplied at the venue. All teams should arrange for their own power.

•The maximum potential difference between any two points should not exceed 18 V for wired vehicles and 24 V for wireless bots.

• No IC engines are allowed. The batteries can be placed on the bot or held in hand.

• In case of wired bots, the connecting wires from the bot to the remote control should be a minimum of 3 meters in length.

•Bots cannot be constructed using ready-made Lego kits or any other such mechanism.

•But ready-made gear assemblies and wheels can be used.

•The bot must be water and fire resistant.

• Violating the clause will lead to immediate disqualification.

•Wireless bots and light weighted bots have an added advantage.

**RULES**

• A team may consist of a maximum of 3 members.

•Cross-college teams are allowed.

•Teams may register online for the event. Spot registrations are also possible .

• Maximum of two players are allowed into the arena. One for controlling the bot and the other to assist with the wires

•There will be checkpoints all along the track. If any kind of human intervention is required, then the bot has to start once again from the last checkpoint.

• For example, if a bot falls from a cliff and is unable to get back on the track, then the

official will restart the bot immediately from the last checkpoint it had surpassed, while

the other team continues to move ahead on its path without stopping.

•The above policy can be used only three times for a given checkpoint. If a team cannot

reach the next checkpoint in spite of restarting from a previous checkpoint thrice, it will be disqualified.

• Also if a bot hasn't moved from its spot for more than 60 seconds, it will lead to

disqualification.

•Change of batteries in the middle of the race is not allowed.

• In case of any discrepancy, decision of the organizing panel will be considered absolute.

• Event Mangers decision will be the final

**PARTICIPATION**

Min: 1

Max: 4