# Event Description

* Task :

There is a drone racing event. Design a wireless remote controlled flying drone to carry and drop an object for through an obstacle course in minimum time without crashing. This competition will test your drones speed, maneuverability and weight.

* PATH**:**​

The path will consist of pillars, loops, bends, underpass, turbines and other obstacles placed in random sequence along an aerial track. It will end with drop zone and landing pad for testing maneuverability skills.

* Drone specifications :

1. 6 -8 inch propeller
2. 2 to 3 blade probs
3. Frame size min:250mm -max:450mm (approx)
4. Height 50-100mm
5. Multi-rotor 3 4 6
6. 3 -4 s each cell have 4.2 volts
7. Flite controller (djinaza,kk 2.1.5,pixhawk,APM)

Note: 1. Ready-made drone not allowed.

2. Carry some external attachment also for carry the load(u -shape,loop hook etc).

* RULES:

1. Each team would be given only 1 chance in each round . Qualified teams from 1st round would be passed to 2nd round,(only 6 team will selected for the 2nd round).
2. The timer will start after 30 seconds of the previous team completing their attempts. The participants need to be prepared in time and launch without delay after entering the take-off zone.
3. The teams would lose their turn if they are not ready in time.
4. The same drone should be used in both the rounds. In case of damages during the competition, teams can repair the same drone but are not allowed to use a replacement. The repaired drone should be ready in time for the turn.

* Revisions:

Any revisions to the Scope of the Competition would be informed to all the participants via registered email and the same would be updated on the websites of the respective technical information.

* General Guidelines:

The use of 2.4 GHz radio is required for all aircraft competing in the competition. If the participants want to use any other frequency, they will have to inform the organizers in advance and for this they have to pay some cost .

* Mode:

Receivers installed in the drone must be in 'receiver mode only', using drone in Gps mode is restricted.

* Components:

All the components(Servos, motor, etc.) will be checked by organizers for functionality before the competition. If found not working, teams will be dismissed from the competition they will not be chance again.

* Position:

A pilot can position himself at any point in the arena to fly the aircraft during the rounds but chosen point should be comfortable for all members.

* Precaution’s:

1. In view of stringent safety requirements, if a pilot flies out of the designated flying zone which includes the overhead of the event organizing and control section, as mentioned at the venue, he/ she is disqualified and must immediately turn back and land safely.
2. Teams are suggested to carry additional components (motors, batteries, propellers etc.) as needed to avoid last-minute surprises at the venue. You will lose time/ attempt if you are not ready at the time of your turn.
3. Please do not share any part of your aircraft (motors, ESC, Battery etc.) with other teams. Each team is expected to carry all the equipment needed to participate in the competition.
4. Metal propellers are not allowed.
5. There will be two round.. Obstacle round 1 and 2,both round are animated.

* Criteria of scoring :

Bonus and penalty marks will be declared at the time of tournament. During each obstacle round points will be given on the basis of Bonus and Penalty score.

Total score=(Obstacle)+(bonus scoring) +(external guest grade) –(penalty).

* Results:

Results would be declared at the spot ,on the basis of total time taken during whole obstacle race and grading will be provided by our external guest.

* Registration fees :

The participation fees for each team is 2000/- rupees.

* PRIZES :

1. WINNING TEAM WILL GET THE WINNING PRIZE 10,000 RUPEES.
2. RUNNER-UP TEAM WILL GET THE WINNING PRIZE 7,500 RUPEES.
3. SECOND RUNNER-UP WILL GET THE WINNING PRIZE OF 5000 RUPEES.