

TOP GEAR

"The winner isn't the one with the fastest car; it's the one who refuses to lose..."

INTRODUCTION:

When the lights go Green, the driver has to hit the peddle hard and cruise across the track, successfully making clean passes through the obstacles and crossing the chequered flag in the least time as possible. The driver who records the shortest time during the three tech fest days will be crowned the winner of the event.

This is basically an entertainment event. There are no preparations or models to be made for this. All it requires is driving skills.

PROBLEM STATEMENT:

Complete two laps on the circuit made in the campus inbounds in the minimum possible time, clearing all the obstacles. The participant who records the lowest time till the end of the **DEXTRA** will be declared the winner of **TOP GEAR**.



CIRCUIT:

The track will be 500 metres long one way, making 1000 metres a lap. It will consist of sharp turns and many challenging obstacles. The driver has to steer through the obstacles making a clean pass. There will be a time penalty of +2 Seconds on every hit on the obstacle.

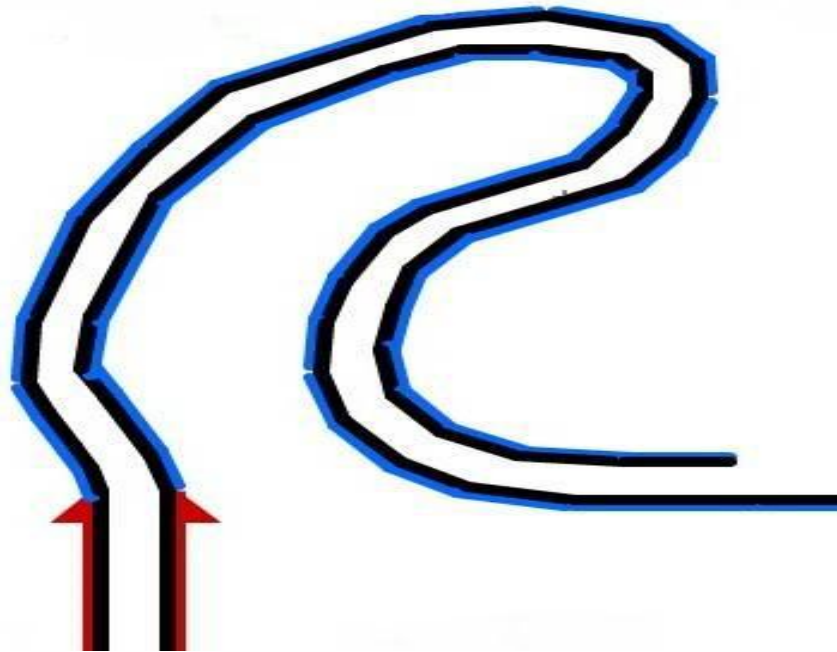
- 1) The obstacles of the track include bumps, obstructions in the form of barrels, tyres, etc.
- 2) There will be time penalty of +2 sec on each hit on obstacle or off track drive.
- 3) At a time only one vehicle will run on the track.
- 4) The driver has to work with constant braking and acceleration.

OBSTACLES:

1. Barrels and Road Cones



2. Sharp Turns(90, 180, 360 degree turns)



3. Tyre Road Block



VEHICLE SPECIFICATIONS:

- The vehicle runs on 300 cc 4-Stroke air cooled Briggs & Stratton 10 hp OHV Petrol Engine. The approx weight of the engine is 35 kilograms.
- The 3D model of the main frame says that the dimensions will be 64inch X 100inch
- The approx weight of the vehicle will be around 270 kilograms.
- The engine is powered by PIAGGIO APE Manual transmission system consisting 4+1 gear configuration coupled with chain sprocket system of RAJDOOT.
- It is a four wheeled single seated vehicle which can trounce to a max speed of 50kmph
- Vehicle decelerates via Disc Brakes on all four wheels in parallel configuration, actuated mechanically via peddle.
- The engine frame is made of 3mm AISI 1020 steel tubing bent and cut at the required places.
- The vehicle is provided with 2 ignition kill switch in case of any hazard.

EVENT SPECIFICATIONS:

- This is a **single** participant event.
- The event is open for all and the charge for two laps is Rs 120.
- Participants can repeat the laps only after registering again.
- The maximum load carrying capacity of vehicle is 150 kg.
- Safety equipments will be provided during the event.
- The participants have to a bear time lag in case of queue for the ride and also some regular engine inspection.
- The participant will have to show his/her **Driving License (permanent or learning)** during the time of registration of the event, failing which he/she will not be entertained.
- Each participant will have to sign the **Personal Damage Waiver (PDW)** at the time of registration.

TEAM SIZE:

Individual

DISCLAIMER:

The vehicle will be thoroughly tested and will undergo 5 Days Safety and Performance Evaluation before it hits the track. So there will be no Technical loop holes from organising side as far as safety is concerned.

In case of reckless driving by the participant which includes ramming the vehicle and driving off-roadways, causing deliberate damage to the vehicle, the damages will be claimed by the concerned authorities.

TEAM NIRVANA will not be responsible for any injuries or any other sort of physical damage to the participant during the event.

CERTIFICATION POLICY:

Certificate of Excellence will be given to top three Winners with the least timing.

EVENT MANAGERS

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