DRIFT KING

Problem statement:

In this event, the contestants are expected to make to an IC engine powered machine, that can be controlled remotely using a wireless remote controller, which can race against machines of similar construct on an all-terrain track packed with a number of obstacles.

Track:

Terrains in the will be updated soon.

Car Specifications:

1. The car should fit in a box of dimensions 700mm x 500mm x 600mm throughout the race; this does not include the dimensions of the wireless controller device used to control the machine
2. The machine is to be controlled using a wireless remote controller during the race.
3. The tires must have a minimum diameter of 3 inch. Contestants are advised to use tires of good width for better performance on off road tracks.
4. There is no restriction on use of readymade parts for any subsystem of car(Steering, braking, suspension, powertrain, chassis, tires).

Propulsion & Steering:

1. The machine must use only mechanical power generated by an internal combustion (IC) engine for propulsion. Only one IC engine should be used in the machine. Use of any other sources such as chemicals, compressed gas, rockets etc. is not allowed.
2. Any machine which uses DC Motors for propulsion will be disqualified. However DC motors and servos can be used for steering mechanisms or any other control mechanisms apart from propulsion.
3. The machine must have an on-board power supply to run any mechanism requiring electric power.
4. The maximum allowed capacity of IC engine to be used is 5.24 cc (i.e. Participants can also use 2.5 cc, 3 cc, 3.5 cc or any other IC engine lower in capacity).
5. The electric voltage anywhere in the machine should not exceed 12V at any point of time. There shall be a countdown preceding the start of the race. No participant is allowed to touch the machine during the countdown period.
6. Providing a clutch mechanism between the engine and the wheel would prove useful, as it would prevent the engine from dying out at any stage of the race.
7. Participants are advised to use a proper cooling mechanism to prevent overheating of the engine. Participants are advised to use sway bars for better control and stability.
8. The participants are advised to use proper air filters as dirt might cause serious problems to the engine. The machine will be inspected and if found to be dangerous, the team will be disqualified. This decision rests solely with the judges and the organizers.