Detailed Description:

You have to design a DPDT (Double Pole Double Throw) switch controlled bot that should be able to cover maximum distance as fast as possible keeping in mind the challenges and obstacles on the track and dodging them to reach the endpoint in the shortest possible time.

Rules:

- Each team must have 4 members, they might belong to any branch, years keeping in mind they are students of our institute
- The track will be having stationary as well as moving obstacles
- The bot will have to go through certain checkpoints and if a bot misses the checkpoint there will be some penalties or other conditions.
- The winners will be decided on the basis of the lowest time taken by a particular bot
- In the case of a tie where the time of two or more teams will be the same, the winner will be decided on the basis of the least penalties made by a particular bot
- Even if ties are made the teams will have to compete with each other by completing the track once again
- You are not allowed to pull the bot with its wire, doing so will result in immediate suspension from competition.
- Since the components will be provided by us, you are not allowed to bring ready-made bots to the competition.
- Bots should not damage the arena in any case.
- Any unethical behaviour will not be tolerated and lead to immediate disqualification.
- Coordinators have all the rights to take final decision for any manner during the event.

Bot and power specifications:

- The bot should have a maximum dimension of 30 cm x 30 cm (length x width).
- The weight of the box should not exceed 3 kilograms.
- The DPDT bot will be wired and thus the length of the wire should be decided such that it should cover considerable area of track and be slacked all the time (make sure your wire should not entangle with the wire of other teams)
- The bot should be powered by a battery; regarding the battery make sure it’s maximum safety