

ROBO RACE
21st and 22nd feb '14

INTRODUCTION

The machine (bot) should navigate the track in minimum possible time by clearing all obstacles and checkpoints.

RULES

Arena:

The arena is shown in figure 1.

The surface of the arena will be flat at most of the surfaces.

The obstacles that will be a part of the arena are:

Between 0 to 180 degree turns

Ramp with an angle of inclination of maximum 50 degree

Curved path

Hanging bridge

Sprint track

Sea-saw

Banked road

Muddy road

Sharp turns

Off road

Free run

Note: The track shown in the figure is the proposed design. The actual track is subject to changes.

Bot Specifications:

Power supply will be provided to the team at the time of event for its machines.

The potential difference between any two points of the machines must not exceed 24 VDC and 4A of current.

The machine can be either wired or wireless.

The bot dimensions must not exceed 25cm*25cm*25cm.

In case the machine is using a non-electric power supply, kindly get it approved from the organizers beforehand via email. Organizers are not responsible for inconvenience if approval is not sought.

Game Procedure:

There will be 2 rounds. An elimination round followed by a final round.

The teams are required to complete the track in minimum possible time. The team will be given two runs in the elimination round. The best score of the two runs will be considered.

Top 8 teams selected from the elimination round will qualify for the final round.

At the start of the run, the machines will be placed behind the starting line.

The time will start as soon as the front edge of the machine crosses the line.

The maximum time given to complete the task is 3 minutes in qualifying round and 5 minutes in the final round.

There will be six checkpoints in the track. The team has to clear all the checkpoints before reaching the finish line.

A total of 3 restarts will be given to the team during the run.

If a team opts for a restart, then the machine will be restarted by placing it at the previous checkpoint.

No penalty will be awarded for a restart.

During a restart, the teams can make any hardware changes (if required). However, the time won't be stopped during the restart.

In the final round, if all the teams are unable to complete the task in the stipulated time, then the team that reaches the farthest wins.

Miscellaneous:

Any team that is not ready at the time specified will be removed from the competition automatically.

The machines would be checked for their safety before the run and would be discarded if found unsafe for other participants and spectators.

Organizers' decision shall be treated as final and binding on all.

The organizers reserve the right to change any or all of the above rules as they deem fit.

Change in rules, if any, will be highlighted on the website and notified to the registered participants.

In case of ties during elimination round, a rerun will be given to the teams.

REGISTRATION FEES - 200/- (3 members) + 50/- for every extra member

Date of Event: 21st and 22nd February 2014

FAQ's

- 1. What is the team structure?
 - > Team may consist of at most 2 members. Members can be from same or different institutions. No person may be a part of multiple teams for the same event. However, participants should only be from recognized educational institutes/universities.
- 2. What things are the participants expected to bring?
 - > College ID cards and Receipts of registration.
- 3. Can I register on the day of the event?
 - ➤ We normally keep registrations open even on the event day. But if we feel that the number of teams is exceeding the limit set by us, we may have to close on-spot registrations. It is highly recommended that registration be done prior to the event day.

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(fig.-1)

ROBO RACE TRACK

