# Zealicon'15

# PROBLEM STATEMENT

All you have to do is to prepare An autonomous bot capable of detecting the block, sounds buzzer and follow the line.

The OBJECTIVE is to score as much as possible. The score will be obtained on completing given tasks.

### **EVENT DESCRIPTION**

Event consists of two rounds:

<u>PRELIMINARY</u>: In this round, the bots have to follow the lines, detect the block and reach the end point by passing through different checkpoints in the minimum time.

#### **The Grand Finale:**

Same as preliminary but with some extra difficulty and some twists. Arena will be disclosed 15 minutes before finals.

#### ARENA SPECIFICATION

- The arena will consist of a base made of plywood on which black line on white surface/ white line on black surface will be present.
- The arena size will be 16 ft X 8 ft (The arena size may be changed on spot according to the events).
- In every round there will be some hurdles including blocks ,strip lines.

#### MACHINE SPECIFICATION

- Bot cannot exceed its dimensions more than 10inch X 7.5inch (length X width). There are no limitations for height and weight for bot.
- The bot should be completely autonomous.
- On board Power supply or external power supply can be used.220V, 50Hz AC supply will be provided.
- The motors used in the bots should not have voltage rating more than 24V.

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#### **GAMEPLAY**

- The team will go solo to perform the given tasks.
- Match will start with a whistle. Each team has to follow line, detect block to complete the task.
- There will be white/black blocks present on the white/black line .Autonomous Bots have to detect the block sounds buzzer and place the bot at particular position using manual bot
- Manual bot will be provided at the time of event.

#### **COMPETITION RULES**

- Each bot should be completely autonomous which may contain microcontrollers.
- Locomotion of all bots will be checked at the start of every round.
- Bot is not allowed to damage the arena, this will result in penalty.
- In case of mingling of wires of the bot, the coordinators are allowed to pause the match-time to untangle the wires and reposition the bots.
- There is a penalty if the bot immobilizes for 10 sec.

#### **GENERAL RULES**

- **Team Size**: A team must consist of maximum of **4 participants**. Participants from different institutions can form a team.
- Each team should have unique participants i.e. no two teams can have even a single participant common.
- Any team that is not ready at the time specified will be disqualified from the competition automatically.
- The teams must adhere to the spirit of healthy competition. The teams must not damage the arena, blocks and bots in any way. Judges reserves the right to disqualify any team indulged in unlawful activities.
- Judges decision shall be final and abided by all.
- The organizers reserve the rights 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.

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# **ELIGIBILITY**

All students with a valid identity card of their respective educational institutes along with ZEALICON ID are eligible to participate in TRACK-O-LUNA at ZEALICON 2K15.

# **CONTACT**

Event coordinators

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