

## **SAND SURFER**

### **Event Description:**

Participants will design and build a remote-controlled bot, which can be either wired or wireless, to navigate a custom-built track. The track must be constructed using materials readily available at home. The bot that completes the track in the shortest time will be declared the winner.

### **Team Requirements:**

- Each team can have a maximum of 4 members.

### **Bot Specification :**

- The dimensions of the bot should be less than or equal to 20 cm X 15 cm X 7 cm(lxbxh) failing which the team will be disqualified from the competition. An error of(+5cm/-5cm ) is permitted.
- The bot must be controlled manually.
- Teams can use both wired as well as wireless control mechanisms. In the case of wired bots, the length of the wire should be minimum 1.5 meters so that the wire remains slack at any instant of time. If the participants use wireless mechanisms they have to use either dual frequency remote, Bluetooth or Wi fi.
- Participants are not supposed to use any readymade Lego components. However ,the participants are allowed to use ready-made gear assemblies.
- Dimensions of the remote are not included in the size constraints of the bot.
- The Bot must have onboard power supplying any case. Irrespective of the mechanism used, only one person will be allowed to control the bot. And one can hold the wire if needed in the case of a wired bot.

**Failure to meet any of the above specifications will directly lead to the disqualification of the team.**

### **Power Supply:**

The participants should use an onboard electric or non-electric power supply i.e. the power source should be on the bot itself. In the case of an electric power supply, the voltage between any two points should be less than or equal to 24V DC at all times during the run.

## **Event Rules:**

- Only one team member is allowed to handle the bot. No other team member is allowed near the arena (in case of wired bot 2 members are allowed).
- Maximum of 5 minutes will be given to every team for completing the track.
- The arena has 3 checkpoints, In case the bot gets stuck at any place or it gets out of the track, then the bot will be kept at the checkpoint corresponding to that zone. There will be no extra penalty for this. The time will not be stopped when the bot is removed from the ground and placed at the respective checkpoint.
- The timer will be stopped when the front wheels of the bot touch the finishing line.
- In case of any disputes/discrepancies, the organizer's decision will be final and binding.
- The organizers reserve the right to change any or all of the above rules as they deem fit. Change in rules.

## **General Rules:**

- Every team has to register by filling the google form for the competition.
- Participants must have a valid College ID card.
- LEGO kits or their spare parts or pre-made mechanical parts are not allowed.
- The decision of the organizers or judges shall be treated as final and binding on all.
- No responsibility will be held by NEXUS for any late, lost, or misdirected entries.
- The organizing committee may amend rules as necessary. Participants will be notified of any changes via email, messages, or WhatsApp groups.

## **Contact for Queries :**

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