# **Perception 2015**

Problem statement for On Stranger Tides

# Objective:

Build a manual amphibian bot capable of surviving on land and water as well as complete the task provided.

Team Size: Max 4

Arena size: 4×3 meters

# **RULES:**

- 1. There will be 3 rounds
- 2. A maximum of 5 minutes will be given to traverse the arena.
- 3. A maximum of 3 restarts will be given to a team. No point penalty will be awarded for a restart. However the timer won't be set to zero.
- 4. During a restart, the bot will have to be restarted by putting it back on the START position.

#### ROUND 1

This is the round of Elimination

Teams will compete and battle each other in terms of total time taken to complete the traversal of the arena.

Top 9 teams from this round shall move to next round.

## **ROUND 2**

This is a knock-out round. Three team will simultaneously complete on the arena. To win the round, the team has to be the first to reach the end point. There is no time constraint scoring in this round.

#### FAOs for round 2

- 1. Teams are allowed to block the path of other team.
- 2. Any form of physical contact between bots two different teams is allowed as long as it is unintentional or the other team dont resist.
- 3. If a team uses wired controls, it is there responsibility to stop it from getting entangled to other team's.
- 4. In case of any conflict the game maker shall provide a resolution.

#### **ROUND 3**

This is the final round. All rules and methods of round 2 shall be followed. Winners of round two will be given chance to compete in this round

## **BOT SPECIFICATION:**

The top view projection of the bot must fit within a square of dimensions 250mm x 250mm (I x b).

### **POWER SUPPLY:**

The bots may use an on-board power supply. External AC power supply (230V, 50Hz) will be provided.

Each team shall bring their own power supply for its bots. The potential difference between any two points on the bots must not exceed 24 V DC.

The Bot must be properly insulated against water. Electrical protection of the bots will be the responsibility of the participants.

Prizes worth Rs 4000 will given to winner and 1000 will be given to Runner up. Participation certificates will be given to all participants at end of event.

Contact:

Dharmasis: 9438456451

Viswa: 8908336502