

## **RULES AND REGULATIONS FOR PICK AND PLACE**

### **ROBOT SPECIFICATIONS:**

#### **1. SIZE:**

- The robot at its maximum size (with arm and gripper part facing the upper direction) should fit into a box of dimensions 35cm x 35cm (L X B) and should have a maximum weight of 5 kg.
- No restriction on height of the robot.
- Robot measurements shall be done during the caging time.
- Robots violating these restrictions will be disqualified.

#### **2. CONTROL:**

- Robot must be controlled manually using wireless controllers only. (Radio Frequency or Android Bluetooth controller application).
- While using Radio Frequency remote controllers, in order to avoid frequency interference with the opponents, the machine must have a dual frequency remote control circuit or two control circuits which may be interchanged before the start of the race.

#### **3. DESIGN:**

- Only electrically powered actuators are allowed.
- The robot's parts can expand in size only during the play.
- The power supply must be on-board. A maximum voltage of 12V D.C. is allowed.
- Use of readymade parts like LEGO kits is strictly prohibited.
- If judges suspect that the participant has put no effort on building the robot, the participant may get disqualified.
- Parts that could break or damage the arena and objects are not allowed.
- The participant's robot should not damage opponent's robot.

#### **4. PARTICIPANTS:**

- Team of maximum 3 member formation is allowed.
- Participant is allowed to handle only one robot throughout the event.
- The handler and robot will be identified during registration and caging.
- No changes in the robot are allowed during the game play.
- Participant should not change their robots before or during the event.

### **IMPORTANT:**

- No tolerance is allowed. Robot should remain within the specification mentioned above.
- Robot once caged, participant is not allowed to make changes to the robot.
- No second chance will be given to any of the participants.
- Before caging the robot, the handler should make sure that the battery is charged. Robot once caged will not be given back in any circumstances.

## **GAME PLAY**

- Robots will be caged during the caging session.
- The play starts with two participants at the same time, once whistle is blown.
- The maximum runtime allowed would be 3 minutes.
- The objects will be equally spread over the arena.
- Pushing or disturbing opponent's objects or opponent's robot will not be allowed.
- Each object carries separate points and the points for various objects will be informed by the game co-coordinator at the time of the event.
- During game play, the robots have to pick their respective objects only and drop them inside their respective BINS.
- Negative points will be given for disturbing opponent's objects, as per the points allocated for them.
- All robots should be returned to the caging area.
- The participant is not allowed to take back his/her robot before the whole competition is concluded.
- Student should use same type of battery throughout the event. They are not allowed to change the battery type. For eg: From NiMh to LiPo/LiPo to NiMh.
- The participant who finishes the match with highest points will be the winner.
- Any form of claim or argument is not entertained during the event. Judges decision is final under any circumstance.
- A participant who argues with judges and violates the above rules is liable for disqualification.

## **ARENA SPECIFICATIONS**

- The arena will be 10 ft x 10 ft (L x B).
- Dimensions of the BIN : 50x50x10 cm (L x B x H).
- The size of the objects will not exceed 5 cm for all the shapes.
- The actual arena will be displayed only at the venue.
- Different shaped objects like cube, cone and cylinder will be there in the arena.
- The clearance between each object will be 60 cm so that the robots can move around without any disturbance to the objects.
- The actual arena may differ from the given description.