# ROBOTRYST NATIONAL ROBOTICS CHAMPIONSHIPS

### **Important Note**

- 1. All the teams who have recieved 'CERTIFICATE OF MERIT' including 1st, 2nd and 3rd, 4th, 5th, are eligible for final round of RoboTryst 2015 at Tryst 2015, IIT Delhi.
- 2. The Eligible Teams whose name have not yet been updated on Zonal Winner page (robotryst-zonal-winners.php) kindly fill the Google form here. (https://docs.google.com/forms/d/1mLnxsa-OWXx4thYp1cdyaifLx\_Wby2GCWDtsbF5pMIE)
- 3. Registration Charges for the First Team of Each Zonal Center will be **Rs.400**/- Per Team Member, and there is a Registration Charge of Rs **500**/- Per Team Member for the 2nd and 3rd,
- 4. Those who require accommodation during the Fest/Competition are required to apply separately on Accomodation Registration Page (/Accomodation/).

4th, 5th, (Winter Training Wild Card Entry) Team of each Zonal Center.

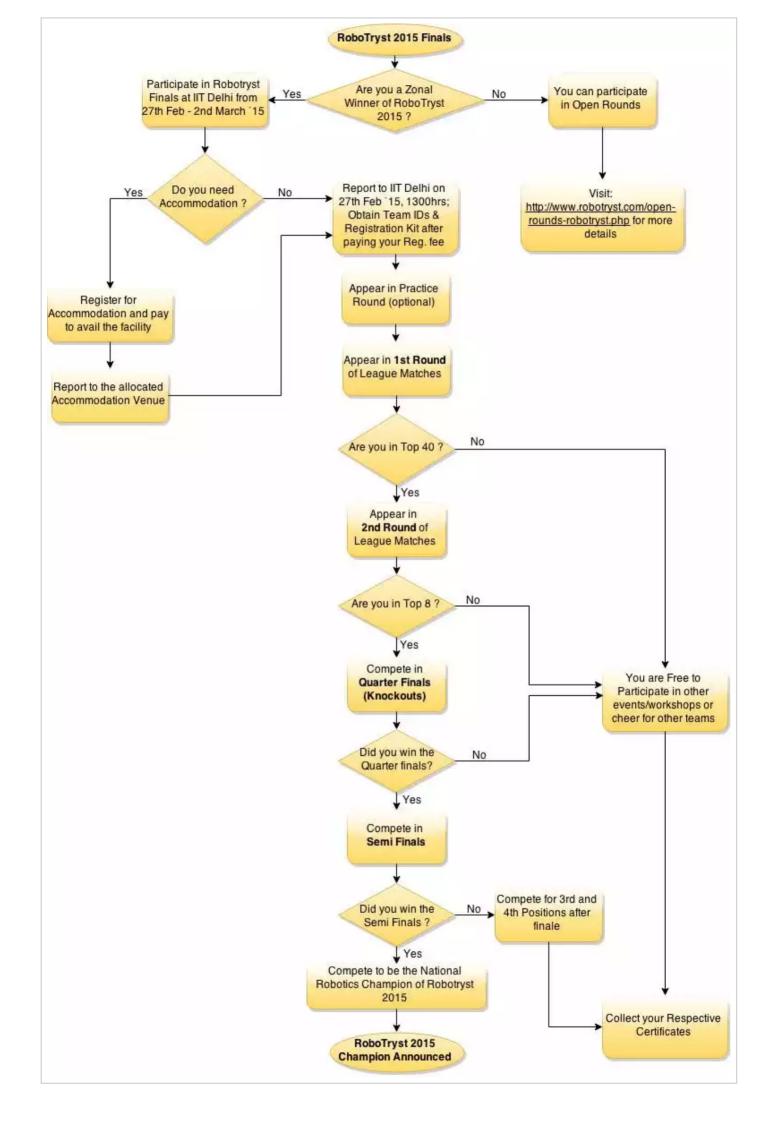
- 5. All The Participants who will participate in the final round irrespective of their zonal position, will receive a "CERTIFICATE OF HONOUR" for participating at the final round by Tryst 2015, IIT Delhi.
  - Register for Final Round at IIT Delhi (/competition)
  - Register for ROBOTRYST OPEN (/competition\_open)
    - Register for Accommodation (/Accomodation)

We invite all the participants to the Final Round of Robotryst 2015, which is going to be held at TRYST IIT Delhi.

Invitations are open to all students who hold Winning positions and have participated in various Zonal Rounds conducted all over India.

# Action Flowchart RoboTryst-2015





# Objective: Building and Designing of the Robot in such a manner that it completes the allotted task, accomplishing all the hurdles in the shortest period of time with most efficiency.

#### Theme:-

- Build and Design a Fast Grid Navigating Line Follower Robot which is Autonomous in Nature.
- Your robot should start from the START point and should stop at the center of the HOME.
- · Robot should navigate the diversified Black line and should reach the home point.
- Robot should complete the whole path with minimum time.

#### Venues:-

- Zonal Rounds: Zonal Rounds of Robotryst Championship are held at various Institution all
  over India, they were selected as officially as Zonal centre where first 2 rounds of the
  Robotryst 2015 were conducted, from where are 3 teams are selected to participate at the
  finale and represent their zonal centre.
- National Level: Robotryst National Level Championship we will be held at New Lecture Complex at IIT Delhi during TRYST from 27th February 2015 to 2nd March 2015.

## **Game Rules and Regulation:-**

- Background color of the game arena will be white in color.
- · All the lines are Black in color.
- The Dimensions of the Arena are specified before hand, under Task specification.
- External Power Supply is not allowed.
- · Every team will get only one attempt.
- All teams will be given preparation time before starting of the competition.
- Four teams will compete at a time.
- Selected teams will qualify to the next round.
- Participants are not allowed to touch the machine or the Arena during the task.
- Eligibility Criteria:-
- All the Participants who have achieved 1st, 2nd, 3rd position and have merit Certificate in the Zonal Rounds of Robotryst championships held all over India are eligible to register for the Closed Rounds of the Robotryst Final Round.
- All the Participated who participated in the Zonal Rounds (have participation Certificate) are eligible to participate in the open rounds of the completion.
- All the Interested and keen participant can register for the open round.

# **Registration Process:-**

• All the registration for the final comptition are open for Online Registration , Online Registration charges for the Final Round for the First Position winners are Rs 350/- and for all other position holders is Rs 450/-.

# Stages of the Competition:-

- League Matches:- All the winners of the zonal round Robotryst 2015 will be participating in the prelims rounds from which 40 teams will be selected to participate in the quarter finale
- **Quarter Finals:** Winners of the prelims rounds will be competing with each other in the Quarter finals and the eligible 8 teams will qualify to the next level that is the Semi finals.

- **Semi Finals:-** Winners of the quarter finals will compete in the second last stage of the competition and the judges will be selecting the 4 teams to compete in the Grand Finale
- **Grand Finale:** Grand finale will be the last stage of the whole completion, from which top three teams will be selected as the winners of the National RoboTryst Championship 2015.

# **Certification Policy:-**

#### Certificate of Excellence:-

After Completion of the Grand Finale of RoboTryst Championship, 3 Teams will be selected
who will be awarded with "Certificate of Excellence", "Trophies" and "Goodies" which will
be announced at the commencement if the event.

#### Certificate of honor:-

• All the participants of Robotryst Championship will be awarded with "Certificate of honor".

### **General Rules:-**

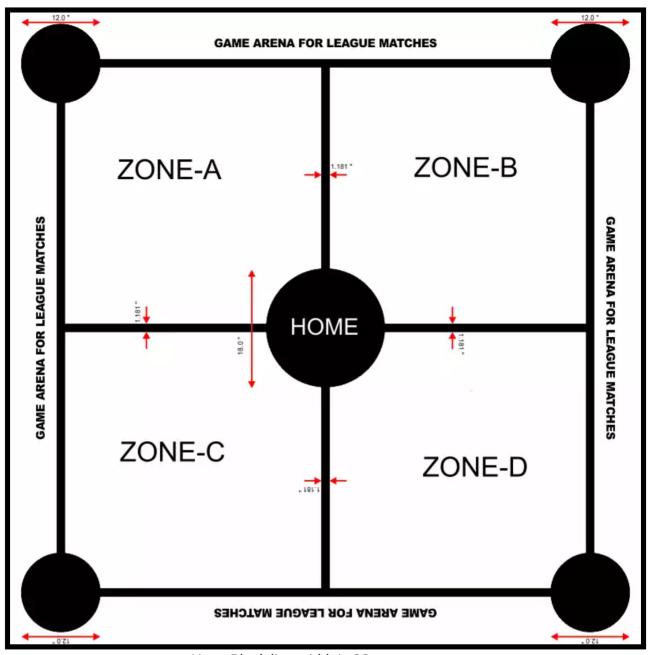
### **Team Specification:-**

- Participating team should consist of 1-5 members; team size should not increase more than 5 members.
- Participating team should have their own Robotic Kit, (provided during the workshop or you can purchase a kit at ROBOMART.COM
- · Participants from different institutions can form a team.
- Participants can be from different Batches, Branch, or Year.
- · Kit Specifications:-
- Maximum Robot Size 25Cms \* 25Cms
- Maximum Power supply of 18V is allowed in the completion.
- Kits provided and purchased from Robosapiens Technologies Pvt. Ltd will only be allowed in the competition, kit manufactured or purchased from any other company will be disqualified.
- · For kit purchase, Follow the link provided below:-

www.robomart.com (http://www.robomart.com), our official kit partner.

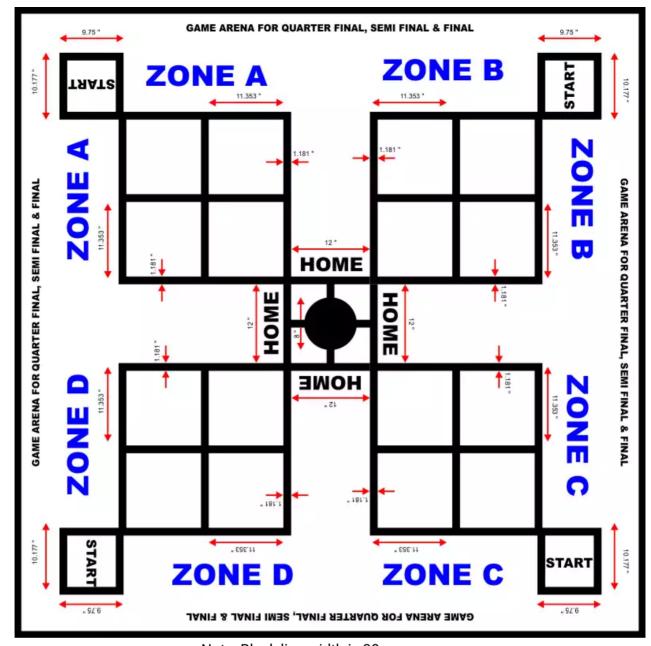
#### Task Specifications:-

Game Arena for league Matches:-



Note: Black line width is 30mm

Game Arena for Quater Final, Semi Final, Grand finale:-



Note: Black line width is 30mm

# Terms and condition of the competition:-

- During the game, team members are not allowed to touch the Robot, failure in doing so can lead to Disqualification.
- Robot should only be build according to the robot specification mentioned above; any innovation and creativity within the limits will be considered.
- Dimension marks will not be there in the final setup of the completion arena.
- The machine must not contain any combustible, corrosive, or otherwise dangerous materials for safety reasons.
- The machines you have built will be first checked for size and safety.
- Any kind of damage to the arena will lead to disqualification.
- Judges have the right to disqualify any team if they feel the team is not playing with the fair interest.
- Participants should not dismantle their robots before the completion of the whole completion
  as the machines might be checked by the organizers at the later stage to ensure that the
  participants have not violated any of the rules.
- Judges hold the right to disqualify a team whose conduct is found unfair.
- The organizers have the right to change any or all the above rules as they feel fit.

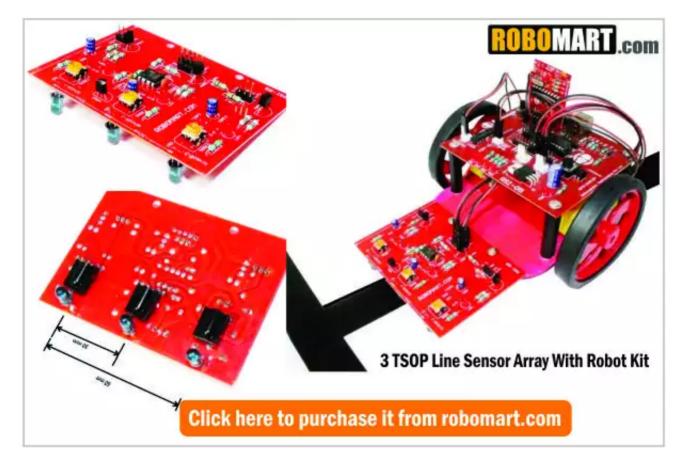
Any changes in the rules regulation will be updated on the website.

# **IMPORTANT**

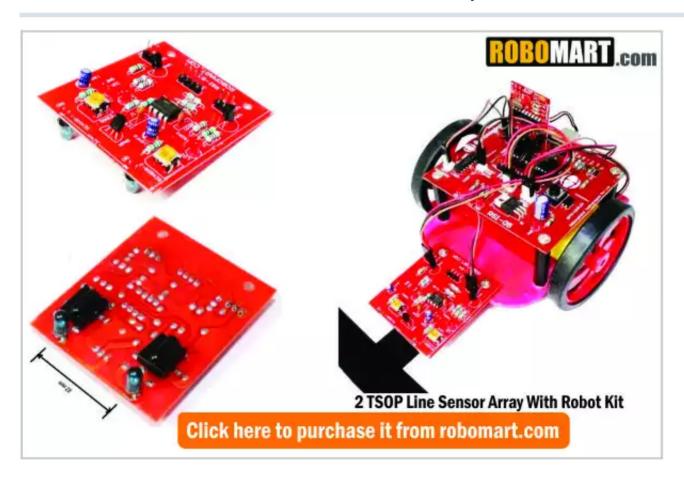
You Might Need these special sensors to complete the task. as sensors provided you during the workshop will not operate in sunlight. Theses are special sensors based on IR Receiver TSOP1738/TSOP1756. These sensors are available as a single sensors and in array format as well. these sensors can easly interfaced with your existing robotics kit.



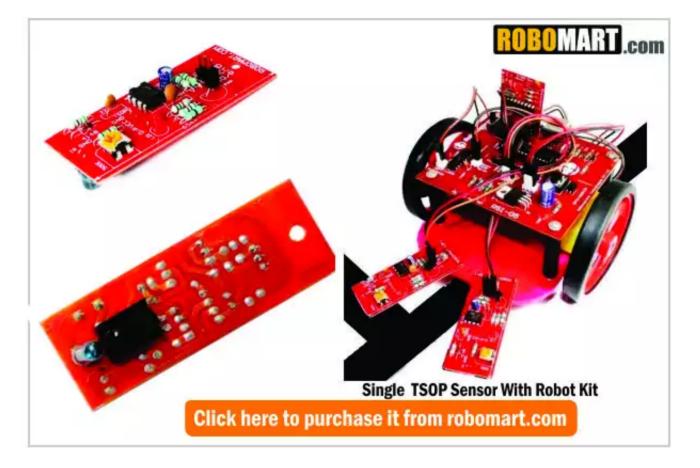
TSOP Based 5 Sensor Array



TSOP Based 3 Sensor Array



TSOP Based 2 Sensor Array



## TSOP Based Single Sensor

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"IIT Delhi and/or TRYST 2016 IIT Delhi is in NO WAY associated / liable for the zonal rounds of RoboTryst 2016. TRYST 2016, IIT Delhi is only a venue partner for the final round of RoboTryst 2016. IIT Delhi or TRYST 2016, IIT Delhi shall not take responsibility of any accommodation / food, transport etc. of any finalist nor will issue any certificate to any participant. These will be taken care of by Robosapiens Technologies only. TRYST 2016 IIT Delhi will only provide a suitable venue for conducting the final rounds of ROBOTRYST. All communication / enquiries / letters / regarding RoboTryst should be send to the office address of Robosapiens and not to IIT Delhi"

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