



## General Information

### 1. Introduction:

- a. World Robot Olympiad India (City) 2022 is an inter school Robotics competition.
- b. WRO City will be a one day competition.
- c. Timing of the competition are from 8 AM to 5 PM.
- d. World Robot Olympiad India (City) 2022 challenges are inspired from World Robot Olympiad International competition 2022.
- e. WRO India (City) 2022 competition shall be held at the local level to promote a culture of Science, Technology and Education amongst school students.

### 2. Mission Difficulty:

- a. Mission difficulty has been moderated and toned down for the World Robot Olympiad India City as compared to the WRO International missions.
- b. Kindly refer to each challenge document enclosed separately.

### 3. Learning is most important

- a. WRO wants to inspire students around the world for STEM related subjects and we want the students to develop their skills through playful learning in our competitions.
- b. Therefore, the following aspects are key for all our competition programs:
  - i. Teachers, parents, or other adults can help, guide, and inspire the team, but are not allowed to build or code/program the robot.
  - ii. Teams, coaches and judges accept our WRO Guiding Principles and WRO Ethics Code that should make all of us aware of a fair and learning full competition.
  - iii. On the competition day, Teams and Coaches respect the final decision judges take and work with other teams and judges on a fair competition.

### 4. Categories:

- a. The competition shall be held under the following two categories:
  - i. **Robo Mission** – A challenge-based competition. Students must design, construct and program an autonomous robot that can solve specific challenges on a field using **LEGO robotics** kits.
  - ii. **Future Innovators** – A project-based competition, students create their own innovative intelligent robotics solution relating to the current theme of the season. There is **no restriction on the use of technology**.



## **5. Team and Age Groups definition**

- a. A Team consists of minimum 2 or maximum 3 students with adult coach.
- b. Teams representing schools only are allowed to participate in this competition.
- c. All participants and coach should be from the same school.
- d. A team may only participate in one of the categories in a season.
- e. Any student may participate in one team only.
- f. The minimum age of a coach at an in event is 18 years old.
- g. Coaches may work with more than one team.
- h. The age groups are-
  - i. Elementary: students 8-12 years old (1<sup>st</sup> January 2010 to 31<sup>st</sup> December 2014)
  - ii. Junior: students 11-15 years old (1<sup>st</sup> January 2007 to 31<sup>st</sup> December 2011)
  - iii. Senior: students 14-19 years old (1<sup>st</sup> January 2003 to 31<sup>st</sup> December 2008)

## **6. Guiding principles, ethics and code of conduct:**

- a. A team should play fair and be respectful towards teams, coaches, judges and competition organizers.
- b. Every team needs to sign the WRO ethics code document and by doing so the team and coaches agree to always abide by the WRO ethics code and guiding principles.
- c. Failure to comply with WRO ethics code and guiding principles will result in severe penalties for the team including disqualification from the competition.

## **7. Responsibilities and team's own work:**

- a. The construction and coding of the robot may be done only by the team. The task of the coach is to accompany the team organizationally and to support them in advance in case of questions or problems, but not to do the construction and programming of the robot themselves. This applies on the day of the competition.
- b. A team is not allowed to communicate in any way with people outside of the competition area while the competition is running. If communication is necessary, a judge may allow team members to communicate with others under supervision of a judge.
- c. Team members are not allowed to bring and use mobile phones or any other communication device into the competition area.
- d. It is not allowed to use a solution (hardware and / or software) that is (a.) the same or Similar to another solution at the competition and clearly not the own work of the team. This includes solutions from teams of the same institution.
- e. If there is a suspicion in relation to rule 2.3 and 2.6, the team will be subjected for investigation and head referee will take the final decision.
- f. If any of the rules mentioned in this document are broken or violated, the judges can decide on one or more of the following consequences. Before, a team or individual team members may be interviewed to find out more about the possible violation of



the rules. This can include questions about the robot or the program

- i. A team may be given a time penalty of max. 15 minutes. In this time, teams are not allowed to do any changes on their robot and program.
- ii. A team may not be allowed to participate in one or more rounds.
- iii. A team may get up to a 50% reduced score in one or more runs
- iv. A team may not qualify for the next round of the tournament

## 8. Game documents and rule hierarchy

- a. During a season, the teams are free to ask clarification and explanations on the rules and game.
- b. The organizers may publish additional common FAQs / Question & Answers (Q&As) that can clarify rules in game and general rule documents to help. Teams should read these Q&As before the competition.
- c. Questions & Answers (Q&As), if any published before the competition, can overwrite rules in game and general rule documents.
- d. The judges on the competition day has the final word in any decision

## 9. Awards:

- a. RoboMission:
  - i. Trophy, Medals and Merit Certificate for top 3 positions in RoboMission in each age group category.
  - ii. Cash Voucher by ISF, for top 3 teams in each age group category.
    1. 1<sup>st</sup> Position: Rs. 7,500.-
    2. 2<sup>nd</sup> Position: Rs. 5,000.-
    3. 3<sup>rd</sup> Position: Rs. 4,000.-
  - iii. Gold Badge > 75% score
  - iv. Silver Badge between 50 – 75% score
  - v. Bronze Badge between 25 – 50% score
  - vi. Participation Certificate: 0-25% score
- b. Future Innovators Category
  - i. Trophy, Medals and Merit Certificate for top 3 positions in RoboMission in each age group category.
  - ii. Cash Voucher by ISF, for top 3 teams in each age group category.
    1. 1<sup>st</sup> Position: Rs. 7,500.-
    2. 2<sup>nd</sup> Position: Rs. 5,000.-
    3. 3<sup>rd</sup> Position: Rs. 4,000.-
  - iii. Gold Badge > 80% score
  - iv. Silver Badge between 50 – 80% score
  - v. Bronze Badge between less than 50% score



- c. Citation for all participating schools, leadership and mentors.
- d. RoboGenius Celebration Award: Cash Voucher worth Rs. 1,500.- for each participant.