

ROBO RACE

INTRODUCTION TO EVENT

Team Size: Maximum 3 Participants

Prize: 1st=3100, 2nd=1100

Registration Fee: 100/- PerTeam

Eligibility: B. Tech, Polytechnic students are eligible.

About the event

The faster you run the sooner you're done. Racing is great mania which one must sacrifice everything, without reticence, without hesitation. A smooth race never made a skilful racer and to take care of that we bring you the dirt Arena because A Little Dirt Never Hurt! So come with your robots to the dirt track and race it like you stole it!

RULES/SPECIFICATIONS

- The goal of the contest is to design a manual or wireless ROBOT which can complete the track, Full of hurdles.
- Dimension: - 30*30*30.
- Weight: - max. 3 kg.
- Power Supply: - Maximum 12V Battery, DC motor.
- * IC engine not allowed.
- Playing rules to be decided on the spot.

NOTE

- All decisions of a referee and judges are final.
- All the criteria will be checked before the match. If any ROBOT fails to match the criteria shall be disqualified.
- In some critical conditions the organizers can add/change any rule on the spot.

Event Head :- Y.V.S.v.Puneeth
8309426459

Head Coordinator:-Shubhneet Arora
9888155769

ROBO SOCCER

INTRODUCTION TO EVENT

Till now we have seen many human beings playing football but now it's time to create a robot that can play the football with its opponent and prove its ability.

Team Size: Maximum 3 Participants

Prize: 1st=3100, 2nd=1100

Registration Fee: 100/- Per Team

ARENA SPECIFICATIONS

Eligibility: B.Tech., Polytechnic and +2NM students are eligible.

- Event will be in open ground. There would be some obstacles.
- There will be a line beyond 40cms from the goalpost from where if goal is scored by the robot then extra point will be awarded.
- The field of play will have size 250x150cms.
- The goalpost will be of 30*25cm (l*h) and there will be a hole of 10cms diameter at the centre.

SPECIFICATION, DESCRIPTION AND RULES

- It is One on One match in which every single team can have robot at the arena.
- The team can be formed by Maximum 3 Students.
- The team registration must be done with a unique team name.
- The robot should fit in a 30 cm x 30cm x 30cm (Length x Width x Height) size of dimension box.
- Weight should not be more than 3kg.
- The machine can be wired or wireless operated. Lego kits are not allowed.
- The robot can drag or kick the ball (no other means are allowed, eg. Holding a ball).
- The robot cannot hold the ball more than 10 sec.
- The potential difference between any two point of circuit should not exceed 12V.
- The duration of match will be decide by judges.
- It is a knockout game whoever will score high will be the winner of match.
- Every participant must carry their valid college id-card. without id card you will not be allowed to participate .

NOTE

- In some critical conditions the organizers can add/change any rule on the spot. 2/3rd of ball should remain outside the robot. Two teams will play at a time, i.e. there is one on one match. If teams are less than 5 then event will be cancelled.

Event Head :- Amandeep Singh

9815390469

Head Organiser :- Shubhneet Arora

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SUMO BOT

INTRODUCTION TO EVENT

Team Size: Maximum 3 Participants

Prize: 1st=3100, 2nd=1100

Registration Fee: 100/- Per Team

Eligibility: B.Tech., Polytechnic and +2NM students are eligible.

SPECIFICATION, DESCRIPTION AND RULES

- Students from different colleges can form a team.
- The robots participating in every match of the round will be placed on the arena or stage which is one feet above the ground.
- The robot has to push the opponent out of the arena or stage. If any robot stops working during clash, it would be considered as disqualified.
- The robot which will win the finale would be declared as winner of the event.
- The robot should fit inside a box of (30cm X 30cm X 30cm). Extension in robot structure after leaving box is not permitted.
- The maximum time for the clash will be 3 minutes.
- The battery of the robot should not exceed 12 volts.
- The weight of the robot should not exceed 5kg excluding the radio-controlled console used by the robot handler. If battery is on-board the weight of battery is included.
- Participants will not be allowed to change the battery once the robot is placed on the arena.
- If the robot is wireless, the frequency of the remote should be such so as to avoid interruption.
- Maximum 3 members are allowed per team.
- Decision of the judges would be final.
- Every participant must carry their valid college id-card. Without Id card you will not allow to participate.
- Only students are allowed, no professional are allowed.

DON'TS IN THE DESIGN OF ROBOT

- Do not disturb the opponent's radio-control by putting a jamming device in the robot.
- Robots shall not damage the arena deliberately.
- Robots shall not throw liquid or powder or other substances at the opponent.
- Robots shall not employ any flammable devices as a weapon.
- Robots should not secure itself on the ring surface by using, suction cups, diaphragms, sticky treads, glue or other such devices.
- Projectile weapons or saw-blades are prohibited.

Every participant must carry their valid college id-card. without id card you will not be allowed to participate .

NOTE

- If teams are less than 5 then event will be cancelled.
- In some critical conditions the organizers can add/change any rule on the spot.

Event Head :-Rahul Garg
8360229037

Head Organiser :- Shubhneet Arora
9888155769

4G ROBOT

INTRODUCTION OF THE EVENT:

Team Size: Maximum 3 Participants

Prize: 1st=3100,2nd=1100

Registration Fee: 100/- Per Team

Eligibility: B.Tech., Polytechnic and +2NM students are eligible.

- **PROBLEM STATEMENT:**

- Use your creative mind to create a mobile controlled wireless machine that can cross over an artificial path passing through some hurdles and obstacles.

- **TEAM SPECIFICATIONS:**

- Students from different colleges can participate in this event. The team can be formed by Maximum three students. The team registration must be done with a unique team name.
- 1. Participants must carry their ID cards (Belongings to current institute) at the time of reporting.
- 2. Professionals are not qualified for participation.
- 3. More than one team from a particular institute can also perform.

- **MACHINE SPECIFICATIONS:**

- 1. The machine should fit in a 30cm x 25cm x 15cm (Length x Width x Hight) size of dimension box.
- 2. No limitation of weight.
- 3. The machine must be wireless operated.
- 4. Readymade base of machine will not be allowed (Readymade wheels, motor, battery, switch, wires can be used).
- 5. The potential difference between any two point of circuit should not exceed then 12v.

- **ARENA SPECIFICATIONS:**

- 1. The arena will be on wood.
 - 2. Event will be in open ground.
 - 3. There would be some obstacles like marbles, grass, sand, glass and some mud in alternative places of arena.
 - 4. There would be some incline slant and decline slant in arena.
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- **RULES:**

- 1. There should be two rounds, first round will be Preliminary, and those who qualify the preliminary round, they will be proceed in the final round.
- 2. The machine should cover complete path of the arena, no shortcut will be allowed.
- 3. The machine should start to run from start point of arena.
- 4. The machine should not damage the arena else team will be disqualified.
- 5. Machine should not leave the path; otherwise penalty will be there.
- 6. If the two wheels of machine cross the boundaries of track, it will consider as a penalty
- Note – in some critical conditions the organizer can add/change the rule on the spot.

- **JUDGING CRITERIA -**

- 1. The judgment is made on the basis of time taken by the machines.
- 2. The machine who completes the final round with lesser time will be the winner.
- 3. The judgment will be consider as:-
- Total point = Total time taken (in sec.) + no. of penalties (in that time duration).

- **NOTE**

- 1. All decisions of a referee and judges are final.
 - Every participant must carry their valid college id-card. without id card you will not be allowed to participate
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Event Head :-Rahul Garg

8360229037

Head Organiser :- Shubhneet Arora

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Mud rally

INTRODUCTION OF THE EVENT:

Team Size: Maximum 3 Participants

Prize: 1st=3100, 2nd=1100

Registration Fee: 100/- Per Team

Eligibility: B.Tech., Polytechnic and +2NM students are eligible.

About the event:

Robot that has been designed for the purpose of rescuing people. The benefits of rescue robots to these operations include reduced personnel requirements, reduced fatigue, and access to otherwise unreachable areas. This robot has to tackle a lot of problems coming in its path including uneven terrains, mountain slopes, pebbles and stones, pits, mud and water. mudrally invites students to design such a rescue robot that could cross the above mentioned difficulties in least time.

Problem Formulation:

To design a manual controlled wired / wireless robot that could cross a track full of obstacles in least time.

General Rules:

1. Each team can have maximum of 3 participants.
2. A team may consist of students from different colleges. School students from class 8th and above are also allowed to participate in the event.
3. Robot should fit into a size of (30 x 30 x 30) cm.
4. Max. Weight Limit is 4kg.
5. Maximum power (12 V), can be on board or off board.
6. The organizers reserve the right to change the rules as they deem fit
7. Judges decision will be final and binding to all.

Note:

- All decisions of a referee and judges are final.
- All the criteria will be checked before the match. If any ROBOT fails to match the criteria shall be disqualified.
- If your bot has been damage through entering into water. Coordinator and management of GGI are not responsible for any issue in your bot be preparer of it.

Every participant must carry their valid college id-card. without id card you will not be allowed to participate

Event Coordinator :-Yashpreet Singh

9803772505

Head coordinator :-Shubhneet Arora

9888155769

Paper Presentation

INTRODUCTION OF THE EVENT:

Team Size: Maximum 3 Participants

Prize: 1st=5100,2nd=3100

Oral Presentation Guidelines

Length of Presentations: Each contributed session presentation will be 15 minutes in length including time for questions. Please meet your Chairperson in your session room 15 minutes before the start of your session.

Presentation Upload: it must be uploaded onto the conference computers preferable at least 1 hour prior. Supporting staff will be available in the preparation room;

Audio Visual Information:

The use of Power Point presentations is strongly encouraged and the following equipment will be provided in all Presentation rooms:

- Data /Video Projector
- A computer to which your presentation will be uploaded.
- Screen
- Laser Pointer

No other equipment will be provided unless agreed to by the Organizing Committee. Please send a request immediately if there is something else you require.

Rules and regulations for Paper presentation

- The short listed participants are required to bring their presentation slides for the accepted paper. The presentations slides should only be either in **ppt or pptx format**.
- The presenters are required to submit their presentation slides to the organizing team at **registration counter** during the registration at **9:15 a.m. Vikram Sarabhai Block -B**.
- The presentation can **only** be conducted by the presenter stated in the **registration form**.
- **The 10 minutes presentation time slot includes paper presentation Q&A session.**

- During each paper presentation session, there will be **two signals (ring sound) given by a timekeeper**. The **first signal** indicates there are only **five minutes remaining** for the presentation. The **second signal** indicates the **end of the presentation** and the author would have to **end their presentation**.
- The presenters should be **punctual for their presentation as scheduled and register with the respective session chair 15 minutes before their paper presentation session**.
- 2019 Robo-Menia Conference **certificate** will be given to the **presented authors** at the **end of their paper presentation session**.
- The **Best Paper Award** is under the judge and the organizers discretion.
- Presenter should be in their **formal attire** during the presentation.

Every participant must carry their valid college id-card. without id card you will not be allowed to participate .

Event Coordinator :-Sajad Ahmed

9646017695

Head Coordenator :-Mohit Arora

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CAD modelling

INTRODUCTION OF THE EVENT:

Team Size: Maximum 1 Participant

Prize: 1st=3100, 2nd=1100

Registration Fee: 50/- Per Team

CAD Modelling Competition @ Robomania 2019 Computer Aided Design (CAD) has revolutionised design in the architectural, engineering, construction and manufacturing industries. CAD may facilitate the manufacturing process by transferring detailed diagrams of a product's materials, processes, tolerances and dimensions with specific conventions for the product in question. It can be used to produce either two-dimensional or three-dimensional diagrams, which can then when rotated to be viewed from any angle, even from the inside looking out. A special printer or plotter is usually required for printing professional design renderings.

Description of the Competition:

This category allows every students to display their best technical Skills of drafting of 2D drawings. This competition shows the technical ability of students which will be judge on the basis of their technical presentation to draft the drawing, completion within given time slot and neatness.

Rules of Competition:

- [1]. Limited to one student entry per team.
- [2]. Time limit for qualifying round will be 10 minutes No.of questions will be 15 (Objective type).
- [3]. Time limit for the final round will be 60 minutes. (for 2D CAD).
- [4]. No extra time will be provided to any participant in any circumstances.
- [5]. Minimum marks required in qualifying round (QUIZ) are 60% for the Final Round.
- [6]. Judges will review all projects on display. Judgement will be basis on the completion, (with in the the give time span) neatness and technical aspects of the drawing.
- [7]. Judges Decision will be final.

Eligibility:

ITI /Diploma / B.Tech / M.Tech / Autodesk Professional Certified (Automation and Robotics Engineering, Automobile Engineering, CAD/CAM, Industrial Engineering, Civil Engineering, EEE, ECE, Mechanical Engineering, Production Engineering)

Every participant must carry their valid college id-card. without id card you will not be allowed to participate .

For more details: Er. Satnam Singh (9888213137) (A.P/CE)

Er. Ravinder Goyal (9464996757) (A.P/AE)



Web Designing

INTRODUCTION OF THE EVENT:

Team Size: Maximum 2 Participants

Prize: 1st=3100, 2nd=1100

Web designing @ Robomania 2019 has revolutionised design in the engineering, and all over the pace of internet. Web designing encompasses many different skills and disciplines in the production and maintenance of websites. The different areas of web design includes web graphic design, interface design, authoring, including standardized codes, and proprietary software, user experience design, and search engine optimization.

Description of the Competition:

This category allows every student to display their best technical Skills of designing a website with its own creative thinking. This competition shows the technical ability of students which will be judge on the basis of their given task creativity, completion within given time slot and neatness.

Rules of Competition:

- [1]. Limited to one student entry per team.
- [2]. No extra time will be provided to any participant in any circumstances.
- [5]. There should not be any copied content from any other source.
- [4]. Judges will review all projects on display. Judgement will be basis on the completion, (with in the the give time span) neatness and technical aspects of the drawing.
- [7]. Judges Decision will be final.

Eligibility:

ITI /Diploma / B.Tech / M.Tech / Autodesk Professional Certified (Automation and Robotics Engineering, Automobile Engineering, CAD/CAM, Industrial Engineering, Civil Engineering, EEE, ECE, Mechanical Engineering, Production Engineering)

Event Coordinator:- Haris Halal

Head coordinator:-Mohit Arora

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Micromania

INTRODUCTION OF THE EVENT:

Team Size: Maximum 2 Participants

Prize: 1st=3100,2nd=1100

Description of the Competition:

This category allows every student to display their best technical Skills of coding to apply on any platform they want to use. A problem will be given to the participants and they must solve the problem statement within given time. This competition shows the technical ability of students which will be judge on the basis of their given task , completion within given time slot and neatness.

Rules of Competition:

- [1]. Limited to one student entry per team.
- [2].In 1st round help from any source is allowed to solve the problem code within given time.
- [3]. in 2nd round no extra source is being provided but participant has to solve the code problem on its own.
- [4]. No extra time will be provided to any participant in any circumstances.
- [5].
- [6]. Judges will review all projects one by one. Judgement will be basis on the completion, (with in the give time span) neatness and technical aspects of coding.
- [7]. Judges Decision will be final.

Eligibility:

ITI /Diploma / B.Tech / M.Tech / Automation and Robotics Engineering, Automobile Engineering, CAD/CAM, Industrial Engineering, Civil Engineering, EEE, ECE, Mechanical Engineering, Production Engineering

Every participant must carry their valid college id-card. without id card you will not be allowed to participate .

Head coordinator:-Mohit Arora

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Technical Quiz

Technical quiz will contain technical questions and your presence of mind. It will be a joyful experience with cash prizes.

Rules for technical quiz:-

- There will be two rounds in quiz and second round will contain further four stages.
- Two members per team are allowed.
- First round will be written question paper round with 20 multiple choice questions
- Only 6 teams will be selected after first round on basis of marks in first round.
- 2 teams will be eliminated after second stage of round two.
- Every student has to keep his college identity card with him.
- Rest of rounds will be based on your technical skills and mental ability.
- No electronic device is allowed during quiz.
- The decision of quiz master will be final ,no arguments will be entertained.

You can having or getting idea contact with coordinator

Event Coordinator:- Sagar jain

9877955546

Head coordinator:-Mohit Arora

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