# CORSIT

ROBOCOR-25

22 MAY, 2025

RULE BOOK

GENERAL RULES

- ❖ Certificate of excellence will be awarded to top teams. Certificates of participation will be provided to all.
- ❖ All participants should have a valid identity card of their respective colleges.
- ❖ The organizers reserve the right to change the rules as they deem to fit.
- ❖ Judge's decisions are final and binding on all the participants.
- ❖ Violating any of the rules will lead to disqualification of the whole team.
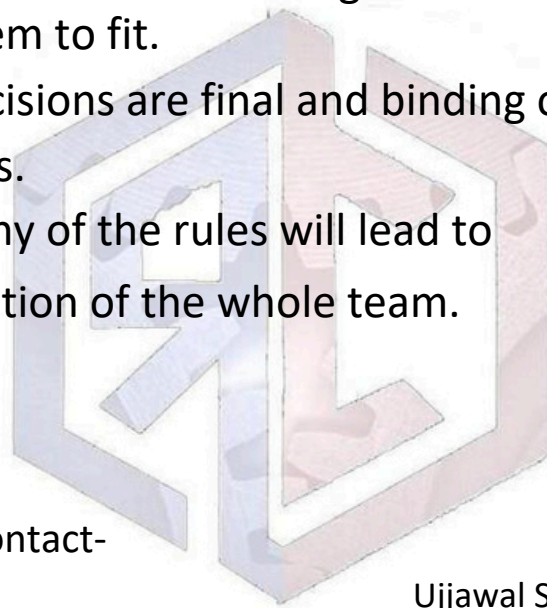
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NEXUS QUIZ

A technical quiz event where we'll put your technical knowledge to the test! Get ready for a challenge that will not only assess your fundamental understanding but also probe into the depths of advanced concepts.

Rules:

- Maximum 1 member
- This event consists of 2 rounds. The quiz will be conducted in online mode . Proper internet connectivity will be required. The quiz can be attempted from anywhere. The number of questions will be 60 in the first round and 60 in the second round.
- Quiz round 1 start timing is 12:45 pm.
- Round 2 timings will be announced later for those who qualify for round 1. Quiz
- timings will be very strict; if you miss the slot, you will not get another chance.
- The top 10% members will be selected for round 2.
- Winners are determined based on the maximum score.
- If scores are tied for both participants, the winner will be declared based on timings.
- If there is still a tie, then one more round will be conducted. The judge's decision will be final.

NOTE: The rules may be slightly modified during the competition. The organizers reserve the right for the same. Violation of any of the rule can result in rejection of participant.

Registration Fee: Rs. 50/- per Team

Coordinator Details:

Ketaki Jojane
Mobile Number: 95918 18570

CYBER TRACK

Fumble and it's all over!! Trace it and track the prize!!! This event is for the code masters. Here's your chance to prove your robot's worth. A series of simple yet complex path are to be traced by the autonomous robot. Build the right circuit and test the precision of your programming. And as the saying goes, "You don't fall out of track and you shall emerge victorious", stay on line and pave the path to success!!!

Problem Statement

An autonomous intelligent robot has to be made, which can traverse a path that runs through junctions, breaks, unusual curves and pointed angles. The machine should follow the path without deviating from it.

Dimensional Specifications

The robot should fit in a cube of 30 cm cube side and weight is at choice.

Control Specifications

The robot should be autonomous.

Power Specifications

The robot should have on-board power supply and voltage between any two points on the robot should not exceed 12V.

Note: A tolerance of 5% is allowed in the above mentioned dimensional and power specifications, taking into consideration the error of the measuring instruments that we use here and those used by the participants in the making of the robot.

Arena Description

• Surface of the racing track will use base material suitable for racing such asa flex banner. The surface of the racetrack shall normally be level; however, portions of the track may be inclined at a maximum of 10 degrees.

• Surface of the racing track is white, with continuous black line (35 mm wide) drawn in the middle as the pilot line

• The racing track can intersect with a crossing angle of around 90°.

The Event

The event will be conducted in two rounds each of increasing complexity, among which the first will be the qualifying round.

Qualifying Round

In this round the basic line following mechanism is tested. The robot should reach the end point without deviating from the line. It is mandatory to clear the qualifying round to progress for the further rounds. A maximum of two trials (changes can be made by coordinators at the time of event) are given to each team.

Final Round

The robot should begin from the start point and reach the end point. Similar to the qualifying round the path consists of junctions, curves, misleading paths. The entire path from start to end should be traversed by the robot to progress into the final round. If the bot stops automatically at the finishing line of track, a bonus of -15 second will be added to the final time. Arena for the final round will not be revealed until the day of the event. This round may have very sharp curves, loops, misleading junction's discontinuities etc. Similar to the qualifying round the course line is black and made on white coloured flex sheet.

Rules:

• A maximum of 4 participants are allowed in a team.

•The Robot should be completely autonomous. It should not receive any sort of external assistance.

• No Lego kits or Vega kits are allowed. If any robot is found sceptical, it will be immediately disqualified.

• At any point of the time, only one robot is allowed into the arena with only one participant if necessary.

• The Robot must deal with lighting conditions as they appear. No changes will be made individually to any participant. IR focusing cameras and flash photography will be allowed unless judges deem such activities.

- The participant cannot change the orientation of the robot before starting the race.
- Judges reserve the right to ask for the explanation of the robot. Judges also reserves a right to stop a run and disqualify the robot.
- Do not make any assumptions about the amount or type of light present at the site. However, a chance for calibration of the sensors will be provided.
- There may be alternative elimination methods in some cases. These may be posted before the race.
- All the robots will be racing on the same track for a given round.
- The number of robots qualified for the next round will be revealed prior to the contest.

- A maximum of four participants are allowed per team.

- No team is allowed to check their robot trials on the arena. They will be provided a small flex with a circle to test their robot.

- The selection into the next round is based upon the performance (time) in the previous round.

- All the figures given above just denote the shape of the arena but not their dimensions.

FAQS :

Q. What if there is any tie among the participants?
Ans: If there is any tie between two robots then the two robots are asked to make a greater number of laps. Even if the tie doesn't break, the previous round scores will be considered.

Q. What if the robot exceeds size constraint?

Ans: It will be disqualified.

Q. What if the robot stops in the middle of the match?

Ans : 5-minute break is given to the robot to repair and join back in the race. If not, it will be disqualified.

Q. Can you brief about the final round? Ans: Similar to qualifying round there will be junctions, acute angles, sharp curves, discontinuities, spaces, etc.

NOTE: The rules may be slightly modified during the competition.
The organizers reserve the right for the same.

Registration Fee: Rs. 400/- per Team
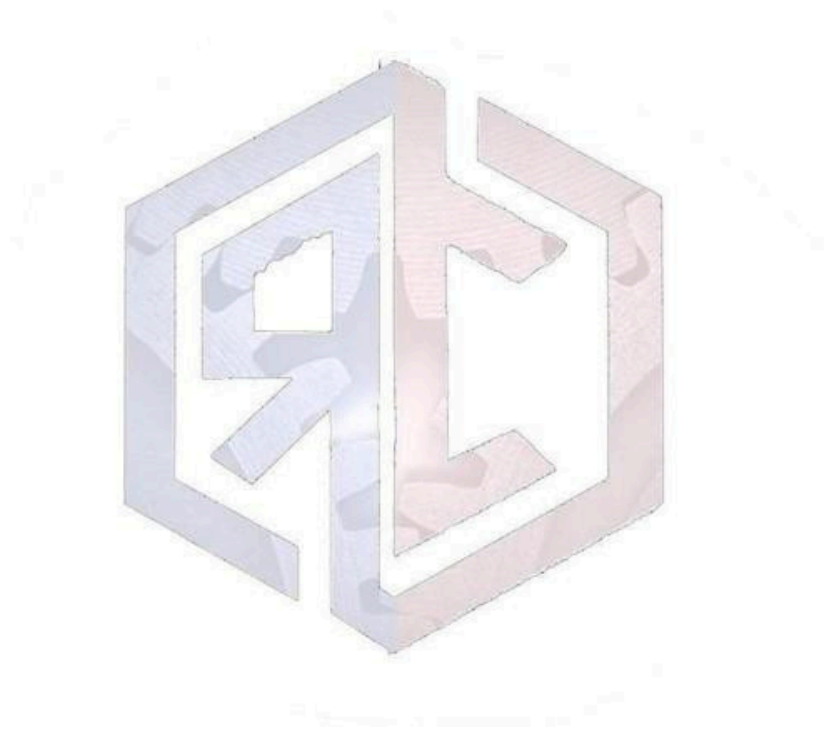
Coordinator Details:

NM Sai Likhitha
Mobile Number: 89193 91644

Ananya C R
Mobile Number: 87926 51820

NEON RUN

Participants must design and build a manually controlled wired or wireless bot capable of traversing a predefined track with various terrains as quickly as possible.

Arena Specifications:

- The arena will include a mix of terrains such as Pebble, Sand, Water, Bumps, Wedges and other obstacles.

- The track width will be 65cm throughout.

- Leaving the track will result in a penalty added to the final completion time.

- There is a pit stop provision to allow participants to repair or adjust their bot during the race.

- Participants may take up to 4 pit stops of up to 20 seconds each. If the bot is placed back on the track before 20 seconds, the remaining time is saved.

- In case of an issue, Technical Timeout (TT) can be taken, up to 1 minute, with a penalty of 30 seconds. Only 1 TT is allowed per race.

- If the bot remains non-functional after the TT, it will be disqualified.

Rules:

• The arena layout will be disclosed 2 hours before the event start.

• Each team can have a maximum of 4 members.

• Teams may include students from different colleges.

• Bots must remain intact until results are declared.

• Judges' decisions are final.

• Only bots constructed from scratch or with pre-made gear assemblies are allowed (no LEGO kits).

• Participants must carry their own batteries; organizers are not responsible for battery availability.

- Only 1 person is allowed to control the bot for the whole race
- The organizers reserve the right to change the rules as they deem fit.
- All students with a valid identity card of their respective colleges are eligible to participate in the event.
- Qualifications for further rounds will depend on the number of participants.
- Slots are made available at the beginning of the game and no changes will be made thereafter.
- There are different terrains and checkpoints through which the bot has to pass.
- Various limitations to the path are made on the terrain to encourage innovative designs.
- The bot completing the arena in the least time will be declared the winner of that race.

Bot Specifications:

- Maximum size: 30cm x 30cm x 30cm.
- Maximum power supply: 12V (on-board or off-board). IC engines are not allowed. Wired bots must have at least 3 meters of wire with measures to prevent tangling.
- The bot will be disqualified if any part fails or falls off the track and cannot
- continue.

Race Structure:

The event will consist of two rounds.

Round 1

- Each bot runs individually.
- Points are awarded based on the number of checkpoints crossed within a given time.

Round 2

- Two bots compete simultaneously.
- The total lap time is recorded, and the fastest team will be declared the winner.

Pit Stop and Technical Timeout Rules:

- **Pit Stop**: Up to 20 seconds each, maximum of 4 allowed. No time is added if the bot resumes within this period.
- If the bot is not placed back within 20 seconds after a pit stop, it's counted as a TT.

- **Technical Timeout (TT)**: Adds 30 seconds to the final time, only 1 allowed per race
- The race clock is NOT paused during pit stops and TTs.
- Participants are not allowed to touch the bot unless a pit stop or TT is taken.

NOTE: The organizers reserve the right to modify these rules as needed during the competition

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Registration Fee: Rs. 400/- per Team

Guru Srisha

Mobile Number: 79752 15782

Purbayan Biswas

Mobile Number: 98832 70491

NEON MAZE

Gear up for rumbling engines, flamboyant wireless cars and adrenaline packed races at the all new Cross Roads. It's all about speed, control and accuracy, the bot that covers the track in the minimum time collecting the maximum points will be the champion.

Rules:

• The aim of this event is to design and build a wireless controlled carthat can compete in various challenges such as a Maze and Obstacle Course.

• Teams must build their own wireless controlled Car forthis event and no Lego Kit bots are allowed.

• The maximum dimensions of the wireless controlled Car should be 17cm (width) x 17cm (length) x 12cm (height).

• Robot must be controlled manually via wireless communication (Ex: Bluetooth, Radio, Wi-Fi).

• Rules of the event: The cars are required to find their way out of a 3-dimensional maze collecting the coins along the way (Both positive and negative points for coins will be allotted).

• At the start of the race each team will be having X (to be decided on event day) amount of points which will keep decreasing by some points after each interval of time..

• The participants have to guide their car in an obstacle filled course. The obstacle course will test the car's speed and robustness.

• Dimensions will be strictly followed, if not the team will be disqualified.

• Venue to be informed on spot

• Maximum of four members in a team.

NOTE: The rules may be slightly modified by the co-ordinators during the competition.

Registration Fee: Rs. 400/- per Team

Coordinator Details:

Varsha T K

Mobile Number:97396 36826

BINARY DUELS

Coding is an integral part of Robotics. This event encourages students from all branches to participate and improve their coding and critical thinking skills.

Rules:

- A team can have a maximum of 2 members. The event has 2 rounds.

- For the first round, a set of questions on coding aptitude will be provided.

- Separate 1st round for 1st years and whoever comes first will get a consolation prize.

- Top 10 teams of 1st round will be selected. 2nd round will be organized on HackerRank.com There will be 4 programming questions.

- All participants must report at the venue 30 minutes before the event's commencement.

- The participants Id card must be signed by the coordinator.

- No time extension will be provided.

- Timing will be used as tie breaker.

- Copy pasting of code will not be allowed.

- Browsing or opening any other tab will not be allowed.

NOTE: The rules may be slightly modified during the competition. The organizers reserve the right for the same.

Registration Fee: Rs. 100/- per Team

Coordinator Details:

Aishwarya Acharya

Mobile Number: 6363 099 766

CYBER KICK

The objective is to design a manual robot which can compete on an arena specially designed for robotic soccer match. It will be a one v/s one soccer match in which the aim will be to push the ball in the opponent's goal post. The most dexterous and quirky design prevail.

Robot Specifications:

• The robot should fit inside a box of 30 cm × 30 cm × 30 cm with a tolerance of ±10% in each dimension.

• Robot should not exceed 6 kg.

• The robot can be wired, wireless or autonomous.

• The robot should be self-powered with supply not exceeding 12V (on board power supply).

• Power supply (only DC) should be on board. Participants cannot draw power from outside.

• Only one participant should control the robot, no player can be exchanged in the match.

Rules:

• Team can have maximum number of 4 members.

• Only one participant should control the robot no player can be exchanged in the middle of match.

• A robot can push or hit the ball. It cannot withhold or grab the ball.

• If the ball goes out of arena, it will be placed in the centre and match will be resumed.

• In case of a tie, 3 penalties will be taken by each team.

• Match duration will be announced on the event day.

• Human interference (e.g. touching the robot) during the game is not allowed.

• Decision of the Judges and Event Organizers shall be treated as final and binding on all and cannot be contested.

• No more AC/DC power supply will be provided at the sight of play.

- Coordinators reserve the right to ask for the explanation of therobot. The coordinator can change the rules of the game depending on the situation.

- Rules & Regulations may change without prior notice by theEvent organizers.

- Positions of balls and obstacles in the arena will be decided by the organizers on the particular day of event.

NOTE: The rules may be slightly modified during the competition. The organizers reserve the right for the same.

Registration Fee: - Rs. 400/- per Team
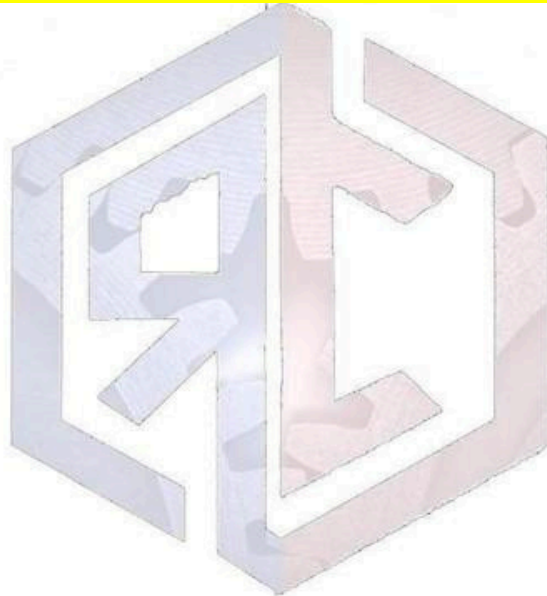
Coordinator Details:

Om
Mobile Number: 76249 18999

ARDUINO FORGE

Come, let out the inventive genius in you. In this event, participants will have to go through a written test. The selected teams have to complete a task based on Arduino. The team taking minimum time will be the winner. Rules:

- A team can have a maximum of 3 members.
- The event has 2 rounds.
- For the first round, a set of 30 questions on general technical skills will be provided.
- Top 7 teams of 1st round will be selected
- There will be 3 tasks in 2nd round, based on Arduino and electronics.
- After completion of each task, next problem statement will be given.
- Arduino kit will be provided, participants will have to bring their own laptops.
- All participants must be at venue 30 minutes before the event's commencements.
- Judge's decision will be final.
- Rules & Regulations may change without prior notice by the Event organizers.

NOTE: The rules may be slightly modified during the competition. The organizers reserve the rights for the same.

Registration Fee: Rs. 150/- per Team

Coordinator Details:

Pavan J

Mobile Number: 82177 16056

PROJECT CONCLAVE

Are you ready to show your skills? A Platform to build, develop and showcase your ideas.

SWEAT YOUR MIND AND WORK TO INNOVATE THE FUTURE!

Rules:

- A team can have 2 - 4 members.
- Project related to any domain will be accepted.
- Last date for abstract submission is 20th May,2025. The document format has to be in Microsoft Word (.doc or .docx) or Printable Document Format (.pdf) only.
- Soft copy of the abstract should be mailed to corsit@sit.ac.in.
- There will be 2 rounds of judgement.
- The first round involves project demonstration, where each team must showcase their project in front of the judges. Qualified teams will advance to the second round, where they will deliver presentations utilizing the designated PPT template available for download.
- The PPT template can be downloaded from the official website: robocor.corsit.in.
- Component sharing is not allowed.
- Minimum one member should be there at desk at all times.
- Ideas related to robotics and new innovative technologies will help participants to gain bonus point.
- Bring at-least one extension per team.
- Judge's decision will be final and binding to all.
- Co-ordinators reserve the right to ask for the explanation of the robot. The coordinator can change the rules of the game depending on the situation

NOTE: The rules may be slightly modified during the competition without any prior notice. The organizers reserve the rights for the same.

Registration Fee: Rs. 400/- per Team

Coordinator Details:

Chaithra H R

Mobile Number: 81528 75878

BGMI PUNKS

"Come, unleash the sharpshooter in you. In this high-voltage BGMI clash, squads will first face off in a screening round. The chosen few will battle it out in custom rooms — and the last team standing takes the crown!"

Rules:

- **Account Requirements**
  - All players must have an active BGMI account in good standing and link it to their profile.
- **Game Version**
  - All players must install the latest version of BGMI.
  - Ensure all updates are completed before the tournament starts.
- **Team Composition**
  - Each squad must consist of 2-4 players only.
  - No changes to the squad are allowed after registration is submitted.
  - Each squad must designate one leader for all official tournament communications.
- **Match Format**
  - The tournament will be played in TPP Squad Mode.
  - Room ID and password will be provided before the match begins.
  - All players must join the room at least 3 minutes in advance.
  - The organizers will not be responsible if someone else takes your slot due to late entry.
- **Technical Issues**
  - Teams are responsible for their own devices and connections.
  - Matches will not be rescheduled due to technical problems on your end.
- **Fair Play & Prohibited Actions**
  - The use of third-party programs that alter gameplay, visuals, or files is strictly prohibited.
  - Intentional use of bugs, glitches, or game errors is forbidden.
  - Any team caught violating this will be disqualified and banned from future events.
  - Emergency Pickup is not allowed during matches.
- **Monitoring and Verification**
  - All the players must record their entire gameplay with in-game sound.
  - Always keep screenshots of match results in case organizers ask for them.
  - If accused and unable to provide POV, you forfeit prize money and may face disqualification.
  - If you believe you were killed by a hacker, you must provide video proof or death cam footage.
- **Disqualification**
  - The management reserves the right to disqualify any team for rule violations or inappropriate behavior.
  - The decision of the Game Master is final.
  - To challenge a decision, you must provide a screenshot within 10 minutes after the match ends.

The points table followed will be :-

Placement	Points
#1	15
#2	12
#3	10
#4	8
#5	6
#6	4
#7	2
#8	1
#9 - #12	1
#13 - #16	0

PER KILL 1 POINTS

NOTE: The rules may be slightly modified during the competition without any prior notice. The organizers reserve the rights for the same.

Registration Fee: Rs. 200/- per Team

Coordinator Details:

Aditya Agarwal

Mobile Number: 70034 36522