

KRITANJ

THE TECHNO-MANAGEMENT FEST

RULE BOOK

CODING

GAMING

ELECK-TRON

ROBOTICS

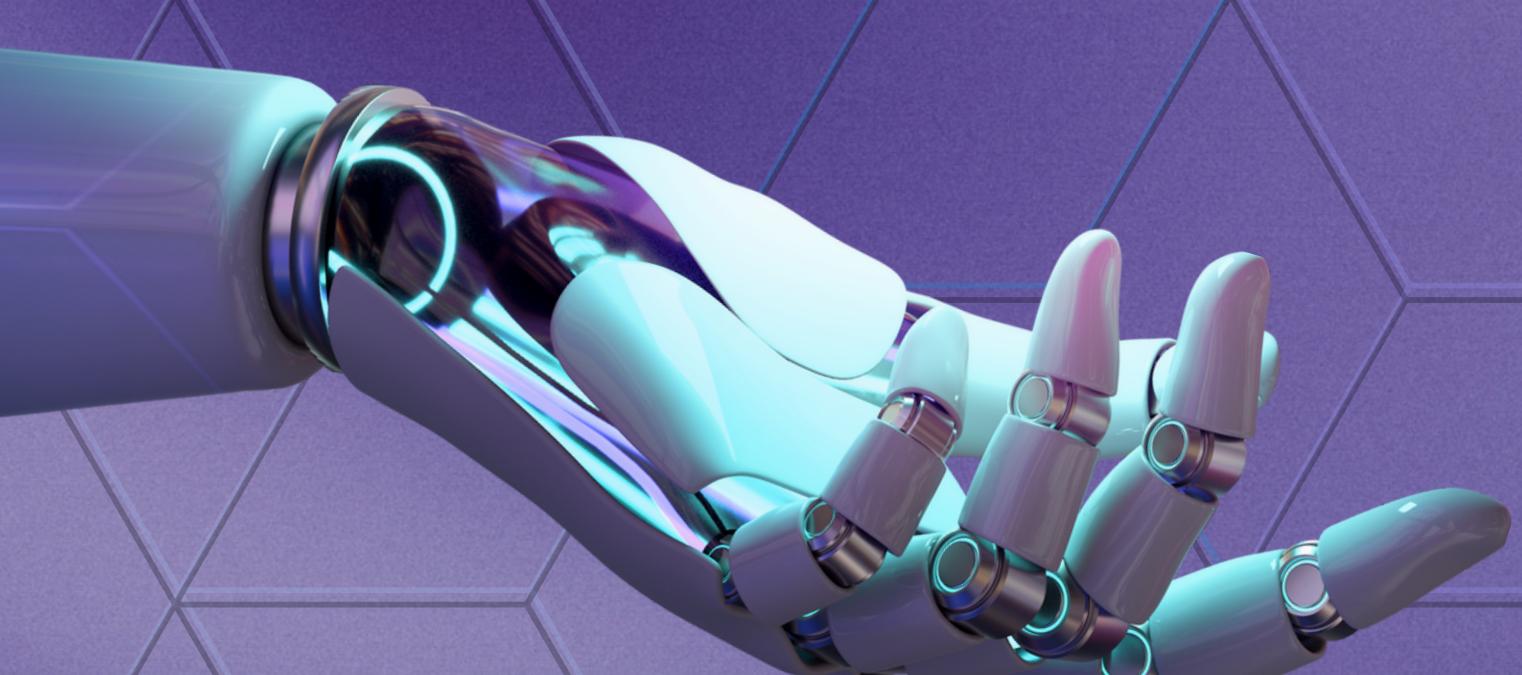
MECH-TECH

CIVIL-CREATION

FUN EVENTS

APT-VENTURE

MBA EVENTS



KRITANJ
THE TECHNO-MANAGEMENT FEST

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CODING

CODE-IT

- There will be online registration and participants need to pay the registration fee at the registration desk.
- Participants need to have Hackerrank account(have to remember the user name and password of Hackerrank)
- Participants need to enter the lab 15 minutes before the start of the competition.
- There will be two rounds and the difficulty of the questions will increase every round.
- The 1st and 2nd round will have 5 questions and the top participants from round 1 will go to round 2.
- Rounds 1 and 2 will have a 45 mins time limit.
- Ranking will be based on the number of problems solved and ties will be broken with the time taken to solve them.

- For the last round, participants who can solve the codes within minimal time will be declared the winners.
- Participants can code using the following languages with some restricted libraries - Java, C, C++, and Python3.
- Any kind of cheating will not be tolerated. Any kind of USB drive is strictly prohibited.
- Participants will must have group of two members.
- A4 paper will be provided for rough work.
- Participants can not bring anything excluding pen at the event room.
- Bags are not allowed inside the lab corridor also.
- Shoes, food items, water bottles and mobile phone will not be allowed inside the lab room.

WEB-PICASSO

- There will be online registration and participants need to pay the registration fees at the registration desk.
- The participants should reach the lab 15 minutes before the competition.
- Students can participate solo or they can come with a team of two. You will be provided with a platform.(Sublime text)
- The participants have to design a similar page from a document given to them. It would be a static web page. Knowledge of HTML and CSS is required.
- The required images will be provided so the use of the Internet is prohibited.
- The round will be of 1 hour ; no extra time will be given.
- The top scoring participants will qualify for the Finals.

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Final Round:

- The participants have to design a page on a topic given to them using (HTML, CSS, JavaScript, jQuery etc.)
- The website cannot be of more than 3 pages; it can be a 1 page site also.
- The internet can be used to download media files but copying of code snippets is prohibited (In the presence of the event coordinators).
- This round will be for 1 hours 30 min; no extra time will be given.

Judging Criteria:

Content, Aesthetics, design, Responsiveness, Usability and Accessibility,

- Participants can not bring anything excluding pen at the event room.
- Bags are not allowed inside the lab corridor.
- Shoes, food items, water bottles and mobile phone will not be allowed inside the lab room.
- The internet can be used to download media files but copying of code snippets is prohibited (In the presence of the event coordinators).
- This round will be for 2 hours; no extra time will be given.

PATTERN PLAY

- There will be online registration and participants need to pay the registration fee at the registration desk.
- Participants need to have Hackerrank account(have to remember the user name and password of Hackerrank).
- Participants need to enter the lab 15 minutes before the start of the competition.
- There will be two (2) rounds.
- 1st round will be a qualification round where participants have to solve patterns within 45 minutes. The greater number of questions you solve greater the points you will get.
- The questions will be displayed only one after another.
- The top participants will be selected for the last and final round.
- For the last round, participants who can solve the codes within minimal time will be declared the winners.

- Participants can code using the following languages with some restricted libraries - Java, C, C++, and Python3.
- Any kind of cheating will not be tolerated. Any kind of USB drive is strictly prohibited.
- Participants are not allowed to form a team. One has to appear individually.
- Participants can not bring anything excluding pen at the event room.
- Bags are not allowed inside the lab corridor.
- Shoes, food items, water bottles and mobile phone will not be allowed inside the lab room.

DEBUGGING

- There will be online registration and participants need to pay the registration fee at the registration desk.
- Participants need to have Hackerrank account(have to remember the user name and password of Hackerrank).
- Participants need to enter the lab 15 minutes before the competition.
- In total there will be two rounds. Each round will contain 5 questions and the timing will be 40 minutes. A code with errors will be given with respective questions. They need to debug the code according to the required output.
- The first round will be the qualification round. The top participants from round 1 will go to round 2.
- For the last round, participants who can solve the codes within minimal time will be declared the winners.
- Participants can debug the code using C, C++, java or Python.
- Any kind of cheating will lead to disqualification.

- A4 paper will be provided for rough work.
- Participants can not bring anything excluding pen at the event room.
- Participants are not allowed to form a team. One has to appear individually.
- Participants can not bring anything excluding pen at the event room.
- Bags are not allowed inside the lab corridor.
- Shoes, food items, water bottles and mobile phone will not be allowed inside the lab room.

BLIND CODING

- There will be online registration and participants need to pay the registration fees at the registration desk.
- Participants need to enter the lab 15 minutes before the start of the competition. This is an individual event.
- Participants can code using the following languages with some restricted libraries - Java, C, C++, and Python 3.
- There will be two rounds, the first one will be a qualifying round.
- Number of Questions: 2
- Time Limit: 30 minutes
- The 2 questions will be given before time.
- Participant needs to write the code in separate Notepad files.
- The monitor screen will be OFF during the event.
- Participants who can solve max number of code where the number of errors and the time taken to complete the code will be taken into consideration to qualify for the next round.

- In the final round, participants who can solve the codes within minimal time will be declared the winners.
- Participants are not allowed to edit any code after compilation.
- Any kind of cheating will not be tolerated. Any kind of USB drive is strictly prohibited.
- Participants are not allowed to form a team. One has to appear individually.
- Participants can not bring anything excluding pen at the event room.
- Bags are not allowed inside the lab corridor.
- Shoes, food items, water bottles and mobile phone will not be allowed inside the lab room.

CODE QUEST

- There will be online registration and participants need to pay the registration fees at the registration desk.
- Participants need to enter the lab 15 minutes before the start of the competition. This is an individual event.
- There will be two rounds.
- Time Limit for round one is 30 minutes and for two is 20 min.
- Participant needs to solve the pseudo codes and have to guess the output from the given options.
- The top participants who can solve the maximum number of questions will be qualified for the 2nd round.
- In the final round, participants who can solve the maximum number of questions in the minimum time will be declared the winner of the event.
- Any kind of cheating will not be tolerated. Any kind of USB drive is strictly prohibited.

GAMING

FREE FIRE

Solo:

- Each player must be a college student.
- Each and every player must be present in their given time slot. No players will be allowed to play from another location.
- Minimum level 30 is required to enter the Match Lobby.
- Participants must use a personal account when registering.
- Player names and nicknames in the game must not contain any explicit/vulgar words.
- The use of VPNs and other supporting network connectivity applications is not advisable.
- Players are strictly advised to bring their own device, earphones and charger.
- Internet connection will be provided. Players can also use their own mobile data.
- Shoes, bags, food items and water mobile will not be allowed inside the room.

Points Calculation :

- Players will be ranked in their separate groups.
- Players will be allocated points based on points earned at the end of each match.

Tiebreaker:

- If 2 players have the same match score, the placement point will be the tiebreaker.
- If 2 players have the same points in your group, the total match points will be the tiebreaker, followed by the total kill points.

Game settings:

- Solo mode Battle Royale
- Gun Properties: Off
- Qualifiers will be played in Bermuda Map
- Finals will be played in Bermuda, Nexterra and Kalahari maps.

(Players should download all these maps before end)

Squad:

- Each player must be a college student
- Each and every player must be present in their given time slot. No players will be allowed to play from another location.
- Minimum level 30 is required to enter the Match Lobby.
- Participants must use a personal account when registering.
- Each participant can be a member of only one team in the tournament.
- Team names and nicknames in the game must not contain any explicit/vulgar words.
- A team must consist of a minimum of 4 members and maximum of 5 members.
- Registered team members can't be changed/replaced. Teams are only allowed to play with players who have been registered. Teams found using multiple accounts will be disqualified.
- The use of VPNs and other supporting network connectivity applications is not advisable.
- Players are strictly advised to bring their own device, earphones and charger.
- Internet connection will be provided. Players can also use their own mobile data.
- Shoes, bags, food items and water mobile will not be allowed inside the room.

Points Calculation:

- Teams will be ranked in their separate groups.
- Teams will be allocated points based on points earned at the end of each match.

Tiebreaker:

- If 2 teams have the same match score, the placement point will be the tiebreaker.
- If 2 teams have the same points in your group, the total match points will be the tiebreaker, followed by the total kill points.

Game Settings:

- Squad Mode Battle Royale
- Squad Size: Minimum 4 Members and Maximum of 5 players(4 Players and 1 Substitute)
- Gun Properties: Off
- Qualifiers will be played in Bermuda Map
- Finals will be played in Bermuda, Nexterra and Kalahari maps.

(Players should download all these maps before hand)

E-FOOTBALL MOBILE

Match Requirements:-

- Match time: 10 mins.
- Match Format: Knock out System(ET + penalties)
- Players should each have a light-coloured jersey and a dark coloured jersey and should choose the opposite of one another to avoid confusion. If Players can't agree, the home player should choose a dark-coloured jersey and the away player a light coloured jersey.
- Match score , goal difference all matters in a single match.
- In case of lag the score will be carry forward in a new match with the time remaining in the previous match. If the score becomes a draw then a extra time of 5mins match will be played where the host will on only PK not ET.

Team Requirements:-

- No team strength limit.
- Team can have any number of legends or iconic or team pack players.
- The player who hosts will keep the extra time and penalty on.
- If The Host Player does not on ET and PK and the match is drawn, then the opponent will be considered as a winner. No re-match will be considered.

Time Limits:-

- Both players must report the match results within 10 minutes of its completion. If they become unable to give the results it will cost disqualification of both players. (First Come First Serve Method will be followed)

Disconnections:-

- In the event of a disconnect, the game should be resumed with an implied score and the remaining time in the match played out.

Cheating:-

- Breaking any rule and any form of cheating, glitching, abusing , match-fixing or unsportsmanlike behavior may result a disqualification of the participants. (In the case of match-fixing both will be disqualified)
- For all cheating claims, the burden of proof is on the accuser.

Recording:-

- Players can record all their matches using the built-in recording on their console or external recording device, these should be saved and available to be uploaded in case of a cheating or dispute.

Warning:-

- A player may get a warning if he does not obey the code of conduct available in the rules section.

Disqualification:-

- A player may be disqualified if he does not obey the code of conduct available in the rules section.



CLASH ROYALE

- Only 1 v 1 matches are allowed.
- Game Settings: All Clash Royale matches must be played in tournament mode with standard tournament rules. Players must ensure that their game settings are correct before starting the match.
- Fair Play: All players must follow to the principles of fair play. Cheating, hacking, exploiting, or any other form of unfair play will result in immediate disqualification.
- Game Time: Each Clash Royale match will have a time limit of 3 minutes. In the event of a draw, an overtime period of 1 minute will be played. If there is still no winner after overtime, the match will be considered a draw.
- Game Format: Clash Royale matches will be played in a best-of-three format. The player who wins two out of the three games will be declared the winner of the match.

- Deck Building: Each player must create their own deck using the cards they have unlocked. Players may not use any third-party software or tools to modify their deck during the match.
- Card Levels: Players can use their own level of cards there is no rule of same level deck any player can play with any level of cards.
- Tournament Bracket: Clash Royale tournaments will use a bracket system. Players will be matched up against opponents based on their current standing in the tournament.
- Player Conduct: All participants must conduct themselves in a respectful and sportsmanlike manner. Any form of verbal abuse, harassment, or unsportsmanlike conduct will result in immediate disqualification.
- Tournament Rules: All participants must familiarize themselves with the tournament rules before the start of the tournament. Failure to comply with any of the rules may result in disqualification.

- Disputes: In the event of a dispute, the tournament organizers will have the final say. Participants must follow the instructions of the organizers at all times.
- Remember, the primary goal of Clash Royale tournaments is to have fun and enjoy the game. So, make sure to adhere to the rules and play fair!



NFS - MOST WANTED

Team Formation: Single Player
Courses: NFS WORLD LOOP

Options :

- Race Mode: Sprint
- Track Direction: Forward
- N2O : On
- Collision Detection: Off
- Performance Matching: On
- Min Num. Players: 4 (Player limit subject to change at the discretion of the volunteers committee)

Car Settings:

- Car: Any
- Personal save files are NOT allowed.
- ACC provided save file must be used for car setting.

*** No customization will be allowed ***

Unfair play:

- Use of the “RESET” button during the match.
- Use of any cheat program.
- Intentional disconnection.
- Use of any settings exceeding standard and permitted settings.
- If the match is disrupted due to unnecessary chatting, the player may be given a warning or lose by default at the referee’s sole discretion.

Upon discovery of any player committing any violations regarded as unfair play, that player will be disqualified from the tournament.

During the course of any match, the operations staff and/or referee may determine other actions to be unfair play at any time.

Disconnection:

- Any disconnection of the connection between match players due to System, Network, PC, and/or Power problems/issues

VALORANT PC

GAME ACCOUNTS

- A player is allowed to have only one (1) Valorant account active on their account.
- You are not allowed to share or use another person's game account. Your account is for your use, and your use alone.

TEAMS AND ROSTERS

- Each team's roster must consist of at least 5 players.
- Each team's roster will be allowed to have 5 main players and 1 substitute. Once the tournament starts, you cannot replace any player.
- A substitute player may only be added before the Tournament Start.
- This player cannot be part of any other team's roster which is participating or has participated in the same tournament.
- Match has to be played in the following format: 5v5.
- A player is allowed to represent only one (1) team's roster in the same tournament.

AGE RESTRICTIONS

- Each participant (Player) needs to be of the age of eighteen (18) or older at the point of the tournament start date.

MATCH RULES

Before the Match:

- All the captains must send friend request to the main host's account. The main host will start the custom room.
- The server has to be set up as written in GAMEPLAY SETTINGS.
- All the players have to be in the lobby before the time limit goes down (15 minutes). If there are players missing after this time limit, take a screenshot. The team which has less than 5 players after the time limit will be disqualified from the tournament. If both teams are missing players, then both are disqualified.
- Once all the players are connected to the lobby, team captains have to check all the players are ready within 15 minutes.

- Team captains of each team will have to choose maps and sides as described:

BO1:

Team 1 bans a map from the map pool. Team 2 bans a map from the map pool. Team 1 picks a map from the remaining 2 maps. Team 2 will pick a side (Attackers/Defenders) to start on.

BO3:

Team 1 – choosing the first map from the map pool. Team 2 – choosing a side on which they will start on the first map. Team 2 – choosing the second map from the map pool. Team 1 – choosing side on which they will start on the second map. Team 2 – choosing the third map from the map pool. Team 1 – choosing side on which they will start on the third map. Each map from the map pool can be chosen only once. (If the map is banned, then it cannot be chosen).

We suggest taking a screenshot after the map selection is completed.

- After map selection team captains have to write that their team is ready in the lobby chat. The game should not start before that.

- The match has to start at the latest 10 minutes after the tournament round started. Before starting team captains have to take a screenshot of the lobby.
- We recommend having the game host being located in the most central area of your region in the tournament to make it the fairest with ping.

During the Match:

- If one of the teams will not pick all the agents in the character selection screen and the game goes back to the lobby, the game has to be remade.
- In the case that the game started before writing ready from both sides, the team which did not write ready has the right to call a remake before round 1 of the game starts. (before the countdown in the game of round 1 reaches 0).
- If any of the players are not connected to the game before the counter reaches 0, the team can call a remake and the game has to be remade.
- If the game started on the wrong map, the game has to be remade.

- In order to do the remake, all the players have to leave the match. Start the next game as soon as possible. Both team captains will have to write ready again. If the team is not ready by 5 minutes after the remake, the team which is not ready will be disqualified.
- Game can be remade only once, the game has to be played in the way it started after the remake, even if the issues will occur.
- If a player disconnects during the game, the game has to continue and will not be paused or remade. (If the game has the observer and cheats are enabled, the game can be paused during the game, but a team has to write before the countdown of the round reaches 0).

After the Match:

- Once the match finishes, both team captains have to take a screenshot of the results after each game.
- On the game result screenshot, results above the scoreboard, all the players and information of the match on the right of the results have to be visible.

- If one of the teams will not send the screenshot within 15 minutes of the match end, the screenshot which was sent by the other team will be taken into account.
- If the screenshots of both teams are missing within 15 minutes of the match end, the game will not be counted and in case of BO1, both teams will be disqualified.
- If the screenshots from both teams are not matching, the situation will be looked into by the admin team. The team which provided the incorrect screenshot can be disqualified or banned based on the circumstances.
 - If the game is BO3 or higher, the games have to start as soon as possible between each other.

GAME FORMAT

- Qualifying round: Double Elimination bo1 to semifinals
- Semi-finals round: Double Elimination bo1 to Finals
- Grand final: bo3

GAMEPLAY MAPS SETTINGS

- Bind
- Haven
- Split
- Ascent
- Lotus
- Fracture
- Pearl

SERVER SETUP

- Map: depending on which map has to be played from the map pool
- Mode: Standard
- Options:
 - Allow Cheats: Off
 - Tournament Mode: On
 - Overtime: Win by Two: On

CHEATING

It is forbidden to cheat, modify the game files, exploit bugs, and/or use any third-party application which would give an unfair advantage against other users. All cheats are completely forbidden to use under any circumstance while playing in any event.

Using any cheat will result in bans and disqualifications. This includes, but are not limited to:

- ESP
 - Radar hacks
 - Wallhacks
 - Speed hacks
 - Aim hacks
 - Hitbox manipulation
 - Teleportation (any kind of teleportation, which is not possible in the game)
 - The usage of a bug/bugs to gain an advantage versus your opponents
-
- If a team uses a player that has an active ban by GLL, the team will be disqualified from the tournament.
 - GLL reserves the right to monitor any player, for any reason, during the tournament.

RULING AND PUNISHMENTS

Anything that can be viewed as a bug or exploit will be reviewed by the admin team and judged on a case-by-case basis;

Examples of such can be:

- Using cypher cameras on spots that allows you to see through the walls.
- Sitting on the spots which are not supposed to be used by map design.
- Activating Sova's Drone the way that it spawns clipping through the wall.
- Using Sova's Arrow on the spots, where they cannot be destroyed and they can spot players (Example: Fixed billboard on Split).
- Bugging yourself into the doors on the Ascent map, that you can see on both sides.
- Spamming between Omen Phaser with ultimate to see through walls.

BEHAVIOR AND SPORTSMANSHIP

- Show respect to everyone involved in the tournament. This includes but is not limited to players and staff.
- Treat everyone the same way you would like to be treated yourself.
- Always show integrity while playing in every tournament, be honest and play fair.
- Do not use any discriminatory language, including but not limited to any language regarding ethnicity, nationality, race, gender, religion, sexual orientation or personal beliefs.
- Do not use any extreme foul language, including but not limited to excessive profanity or language that is graphically sexual, grotesque, or violent.
- Do not make threats of real-world violence or other intended harm to anyone involved in the tournament.
- Do not harass, stalk, or purposely do things to make someone else feel uncomfortable or threatened.
- Do not share personal information about yourself or other individuals.
- Do not engage in, request, arrange, or offer illegal activities or materials.
- Do not impersonate other individuals.

- Do not spam, be it in text or voice.
- Do not share your account, your account is for your use and your use alone.
- Do not grant access to your account to anyone else, and do not access anyone else's account, even with their permission.



ELEKTRON

- All students must participate in a team of two, the first-year students have to form their team strictly with first year students irrespective of department and 2nd, 3rd and 4th year students can make teams within themselves.
- All the students from first year are eligible for LITE and only the 2nd, 3rd, 4th year students are eligible for PRO irrespective of departments.
- The students have to take part in (Teams Of 2).
- There will be three rounds.
- The first round will contain a riddle based question and the students will have to think, analyse and re-arrange the circuit correctly. The jumbled circuit will be provided along with the question.
- The second round will be MCQ based.

- The third round will be a circuit building round where no components will be assigned to the students. They have to read the question, determine the components needed to build the circuit, and ask the volunteers to provide the specific components.
- All the rounds will be Timer Based.
- The three rounds will be similar for LITE and Pro.
- The questions will be harder in PRO and easier in LITE.
- All the participants will get a participation certificate and the winning team will get a handsome monetary reward and also a winning certificate.
- Students must report at the venue little early, as it might take a little time to settle down and start the process.

ROBOTICS

BLIND MAZE

Rules:

- Problem Statement:
- To build a wireless autonomous robot (preferably with ultrasonic sensor) that is able to go through a 3D maze within a given period of time.

General Rules to follow:

- A team may consist of maximum 4 members and minimum of 1 member. The participants in a team can be from same college or different colleges.
- It is mandatory to present college id at registration desk.
- Teams are not allowed to replace robots during the runs. However, any malfunctioning sensor / part can be replaced, with a time penalty against it.

- Code modification/battery replacement is allowed, with a time penalty against it.
- Any deliberate damage caused to the arena by bot or team member will lead to the disqualification of that team.
- A bot will be given 3 runs to solve the maze. The shortest timing among 3 runs is considered.
- Only self-made bots are allowed. Any off-shelf bot is not allowed.
- The event will take place within the premises of Narula Institute of Technology.
- No changes to the bot weight can be made during the runs.
- Decision taken by the event coordinator is the final decision.

Bot Specification:

- The dimension of the bot should be between the range of : length – upto 45cm, breadth – upto 45cm, height – upto 15cm.
- The weight of the bot should not exceed more than 1.5kg.
- All bots must be wireless and autonomous using ultrasonic distance sensor. No manual control is allowed.

- All sensors and actuators of the bot should be checked by the team. Any extra sensors/actuators should be brought by the teams. No sensors/parts will be provided by the organizer.
- Bots must be self-made. No off-shelf bot or DIY kit bot is allowed.
- The voltage at any part of the bot circuit should not exceed ~25V and current not more than 2 Amperes throughout the run.
- The bot should be able to detect walls in front of it and turn left/right in order to solve the maze.

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LINE FOLLOWER

Problem Statement:

- To design an autonomous robot that can propagate by following a specific line on the track.

General Rules to follow:

- A team may consist of maximum 4 members and minimum of 1 member. The participants in a team can be from same college or different colleges.
- It is mandatory to present college id at registration desk.
- Teams are not allowed to replace robots during the runs. However, any malfunctioning sensor / part can be replaced, with a time penalty against it.
- Code modification/battery replacement is allowed, with a time penalty against it.
- Any deliberate damage caused to the arena by bot or team member will lead to the disqualification of that team.
- Only self-made bots are allowed. Any off-shelf bot is not allowed.

- A bot will be given 3 runs to solve the maze. The shortest timing among 3 runs is considered.
- The event will take place within the premises of Narula Institute of Technology.
- No changes to the bot weight can be made during the runs.
- Decision taken by the event coordinator is the final decision.
- The line to be traced (black coloured) is of 3cm in width.
- The final track is disclosed on the day of the event.

Bot Specifications:

- The robot should have an autonomous control using IR sensors.
- The robot dimensions should not exceed 25cm*25cm*15cm (l*b*h) at all times. The maximum weight of the robot must not exceed 1.5kg. Tolerance level of 10% on dimensions is acceptable.
- External controlling device and external power supplies are not allowed.
- The robot has to be powered through on-board power source. The supply voltage of the robot must not exceed 12 volts and the current not more than 2 Amperes throughout the run.

ROBO SOCCER

Problem Statement:

To design a manual robot which can compete in an arena specially designed for robotic soccer matches. The event is aimed at testing the Flipping, Kicking, Manoeuvring skills and control of the robot.

- General Rules to follow:
- A team may consist of maximum 4 members and minimum of 1 member. The participants in a team can be from same college or different colleges.
- It is mandatory to present college id at registration desk.
- Teams are not allowed to replace robots during the runs. However, any malfunctioning sensor / part can be replaced, with a time penalty against it.
- Code modification/battery replacement is allowed, with a time penalty against it.
- Any deliberate damage caused to the arena by bot or team member will lead to the disqualification of that team.
- Only self-made bots are allowed. Any off-shelf bot is not allowed.

- The bot which will score more goals will win the match and move to the next round. The number of rounds will be decided according to the number of participating teams.
- After each goal, the bots will be placed in their own halves. If any bot falls down the arena, it will be placed back in the arena at the zone it fell down from.
- Game begins with a toss. After first half, the sides of the arena will interchange for the teams.
- The event will take place within the premises of Narula Institute of Technology.
- No changes to the bot weight can be made during the runs.
- Decision taken by the event coordinator is the final decision.

Bot Specifications:

- The robot should be manually controlled using some type of remote device operated by a team member.
- The robot dimensions should not exceed 25cm*25cm*15cm (l*b*h) at all times.
- The maximum weight of the robot must not exceed 2kg.

- Both wired and wireless robots are eligible to participate in the same category.
- Tolerance level of 10% on dimensions is acceptable.
- External controlling devices and power supplies will not be considered in the size or weight constraints.
- The robot can be powered on-board or externally.
- The outlet will be roughly placed in the centre of the arena. Participants will have to arrange for other requirements themselves (like extension cords).
- The potential difference between any two electrical points on the robot must not exceed 24 volts.

ROBO RANGER

Problem Statement:

- This is a manual robotics event in which the participants need to design a manually controlled robot (wired or wireless) that can race through all possible terrains like sand, pebbles, obstacles, bumpers, bridges, Marbles, grease, inclines, dips, cliffs, mazes, ramps, banks etc.

General Rules:

- A team may have a maximum of 5 members. A team may comprise members from different colleges.
- It is mandatory to present your school or college ID card at the registration/event desk while registering to participate.
- An individual cannot be a member of more than one team for the event.
- A robot cannot be shared by two or more teams.
- Adopting unfair means will lead to disqualification of the team.
- The right spirit of participation is expected from every participant.

- Any or all of the rules are subject to change at any point of time.
- The decision of the coordinators will be final and binding.

Event Rules:

- The event will be conducted in two rounds.
 1. Time Trial Prelims
 2. Finale

Rules to Follow:

- The prelims will be a one team at a time event. The teams have to register their name at the spot. According to the sequence of registered names the 50 teams will perform. For any kind of technical issue teams have to inform the coordinators.
- Every team will be given 2 minutes just before its run to judge the arena by taking a trial run. After 2 minutes, the team will have to perform.
- The robot will start from the point marked as “START” on the arena and will have to traverse through the entire track consisting of multiple obstacles of different types and the surface will keep varying as well.

- The race will start at the moment when the event coordinator gives the green signal and the time keeper will turn on the timer at the same moment.
- A team can take a maximum of 1 TIMEOUT for not more than 2 mins. The teams can check and repair their robots during this time. After the TIMEOUT is over, the robot will be placed at the last crossed checkpoint and the race will be continued. The timer won't be stopped during this time.
- The teams cannot make any major mechanical or technical changes to the robot within this time. Teams cannot reduce weight or increase weight of the robot during this time to manoeuvre it better. Teams having 51 on-board power supply cannot change their batteries during this time.
- A team may take a maximum of 1 RESTART. The robot will start again from the "START" point and the timer will be CLEARED. It will be considered as a NEW RUN. The teams can check their robots during this time. But teams taking a RESTART will incur a penalty of 3 mins.

- A team can take any no. of HAND TOUCH. Every HAND TOUCH will incur penalty. After the HAND TOUCH, the robot will be placed at the last crossed checkpoint and the race will be continued. The timer won't be stopped during this time. Only one team member is allowed to control the robot while the other team member is allowed inside the arena to assist the movement of the robot by handling the wires and power supply units.
- One may skip any hurdle if he is not able to cross it. Skip will incur a penalty of 2 mins. But thy cannot skip the NO SKIPZONES.
- Voltage Modifications during performance is strictly prohibited. Any bad means will cause disqualification.

Bot Specifications:

- The(wired or wireless) robot should be manually controlled using some type of remote device operated by a team member.
- The robot dimensions should not exceed 25cm*25cm*15cm (l*b*h) at all times.
- The maximum weight of the robot must not exceed 2kg.
- Tolerance level of 10% on dimensions is acceptable.

- External controlling device and external power supplies will not be considered in the size constraint.
- The robot can be powered on-board or off-board.
- Participants will have to arrange for other requirements themselves (like extension cords).
- The potential difference between any two electrical points on the robot must not exceed 24 volts throughout the run.
- The external controlling device can communicate with the robot either using wires or wireless technologies. In case of using off-board power supply units, or wired communication, or both, the wires must be kept slacked all the time.
- The length of wires used for power supply and for controlling the robot (if any) must not be less than 12m.
- For wireless communication, it is recommended to keep two frequencies for communication, so that there is no case of electromagnetic interference with another team's wireless communication.

- The coordinators shouldn't be held responsible for any kind of electromagnetic interference in wireless communication.
- The robot cannot be constructed out of readymade kits available in the market. LEGO kits are also not allowed.

CONCENTRIX

Problem Statement:

To design a manually controlled wired / wireless bot along with a robotic arm that can move through obstacles, pickup an object using a hook attached at the end of the robotic arm and place the object back at designated location in the arena.

General Rules to follow:

- A team may consist of maximum 4 members and minimum of 1 member. The participants in a team can be from same college or different colleges.
- It is mandatory to present college id at registration desk.
- Teams are not allowed to replace robots during the runs. However, any malfunctioning sensor / part can be replaced, with a time penalty against it.
- Code modification/battery replacement is allowed, with a time penalty against it.
- Any deliberate damage caused to the arena by bot or team member will lead to the disqualification of that team.

- Only self-made bots are allowed. Any off-shelf bot is not allowed.
- A bot will be given 2 runs to complete the arena. The shortest timing among 2 runs is considered.
- The event will take place within the premises of Narula Institute of Technology.
- No changes to the bot weight can be made during the runs.
- Decision taken by the event coordinator is the final decision.

Bot Specifications

- The dimension of the bot should be between the range of: length – upto 45cm, breadth – upto 45cm, height – upto 30cm (with robotic arm fully extended upwards).
- The weight of the bot should not exceed more than 2kg.
- All bots must be wireless/wired with manual control.

- All sensors and actuators of the bot should be checked by the team. Any extra sensors/actuators should be brought by the teams. No sensors/parts will be provided by the organizer.
- Bots must be self-made. No off-shelf bot or DIY kit bot is allowed.
- The voltage at any part of the bot circuit should not exceed ~25V and current not more than 2 Amperes throughout the run.

AIR-DROP

PROBLEM STATEMENT:

- The challenge is to Build a Quadcopter which is aerodynamically stable to achieve a successful flight.
- Quadcopter must be built within the specified dimensions.
- The Quadcopter should be able to take off, land and can do simple and complex manoeuvres.
- The competition has 2 Rounds i.e., elimination round and final round. Performance of the 60 Quadcopter in all the Rounds/Arena will be evaluated individually.
- Team Scoring the maximum points in the final round will be nominated as the Winner of the competition.
- The performance of the Quadcopters in all the round will be evaluated individually.

THE QUADCOPTER

Dimensions:

- The Quadcopter must be electrically powered only
- The complete Quadcopter (including Battery and landing gear) should be of length 75cm*75cm*75cm (LxBxH) and must weigh less than 2Kg.
- There is no restriction on the use of the any Quad frame material or specification of the BLDC Motors, Electronic Speed Controllers, Propellers, Batteries and Weight of the Quadcopter.
- Ready-made toy quadcopter kits are strictly restricted.
- Construction: Any building material may be used, if the Quad fits the above specifications and as long as the design and construction are primarily the original work of the team.

- Team Members & Mentors: Maximum of 5 members are allowed in each participating team. Multiple teams from same school/college can participate in the competition.
- Different Teams from the same school/college must use their own individual Quadcopter for the competition.
- The Quadcopter should follow the Quadcopter specifications provided. Any deviation from the mentioned specifications will lead to disqualification
- If the Quad is found making damage to the arena, Judges reserve rights to eliminate a particular Stage/Check Point/Complete Participation.
- The requirement of time for charging the batteries during the conduct of competition will not be entertained.
- Replacement of the parts of Quad will be allowed in case only if accident occurs and the referee permits. Penalty will also be administered in the total points scored in case of accident.
- Replacement and charging of battery are allowed only before the commencement of round.

Air Drop Gameplay:

- The Quadcopter will be evaluated on various parameters such as design, construction, and innovation.
- Every aspect of the Quadcopter will be observed for scoring which includes the connection of various parts, fixing of components, materials used, aeromodelling etc.
- Number of rounds will depend upon the number of teams participating.
- Fair play is expected from all the teams and team members.

MECH-TECH

SLOW BIKE RACE

- Riders must wear helmets.
- Riders must stay in their lane and cannot go backwards.
- Riders must not touch the ground with their feet while riding on the track.
- If anyhow the ignition goes off during race that participant will be disqualified.
- Anyone touching the marked track will be disqualified immediately.
- Riders cannot stop on the track during the race.
- Decision of the committee will be final.
- Rider taking maximum time to complete the track will be adjudged winner.
- Winner and first runner-up will be awarded.
- Girl participants can also participate with their bikes

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CAD/CAM EVENT

- Use of Internet or any electronic gadget is restricted.
- The decision of the committee will be final, which will be judged on the basis of completing in optimum time.
- The Coordinator of event reserves the right to modify the contest rules without any prior notice.
- For any clarifications or further details the interested candidates can contact the coordinators.
- Participants need to complete the given task in given time.
- Task will be announced before the competition.
- For discrepancy in computer, contact coordinator immediately.
- Points will be awarded on the basis of perfection of the task and timely completion.
- Only First Prize will be awarded.
- This is individual participation event.
- Participants should reach CAD lab 15 minutes before start of the competition.

Rules:

- There will be a total of three Rounds.
- Total Participant per Team: 4
- Coordinators reserves the right to modify the rules before start of the competition.
- Use of any kind of Electronic gadgets is strictly prohibited during the competition.
- Team with maximum number of points wins the competition

Round 1: General Round

- In this round each team has its own quota of 4 questions and other questions passed to it from the previous team that did not answer.
- A team gets 30 seconds to answer the question intended for it, and is awarded 20 points for answering it.
- If the team gives a wrong answer, the quiz master will give the correct answer.
- For pass Questions teams will get 15 seconds to answer it and is awarded 10 points for the right answer.
- The team members can discuss before giving the answer.

- If a team cannot answer a question they can pass it or after 30 seconds it gets automatically passed to the next team.
- If a team is answering a question and the time passes, then the team gets to complete the answer and is awarded points for the right answer.
- There is no negative marking for wrong answer.

Round 2: Rapid Fire Round

- In this round each team will be asked 10 questions one after another.
- On the immediate completion of a question, each team gets 5 seconds to answer it.
- If a team is not able to answer a question, they can ask the quiz master for the next question for the next question.
- 10 points is awarded for the correct answer.
- 2 negative points awarded for the wrong answer.
- No passing of questions will be allowed.

Round 3

Visual Round

- One question each.
- Each Team will be shown a picture.
- The team has to give the proper name of the object shown in the screen.
- The team has 15 seconds to give the answer.
- Questions will not be passed to the next team and at the end of the round answers will be announced by the quiz master.
- 20 points will be awarded in case of right answer.
- 5 points will be deducted in case of wrong answer.
- No Negative marking in case of no attempt of Question.

Round 4

- In case of a tie.
- In case of a tie after the 4th round, the tied teams get into a rapid fire. Rules are similar to rapid fire round If a team answer right they get 10 points.
- If they answer wrong they get minus 2 points

LATHE WAR

- If any damage to tool, lathe machine, surrounding etc, or any malpractices including negligence during machining will lead to disqualification.
- Fine will be taken if any major damages to tool, lathe machine or surroundings occur during the operation.
- After the completion of the task all the accessories must be returned to the respective IC.
- No extra work piece will be provided and carrying of any extra material is banned.
- Judge's decision will be final.
- Participants are responsible for their own safety.
- The winner will be decided on the basis of accuracy, Surface finish and time duration.
- Winner and first runner-up will be awarded

VENUE:-Workshop Lab

- participants should reach workshop 15 minutes before start of the competition.

MAX PARTICIPANT:- 5

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BRIDGE-TRIX

INTRODUCTION: -

Bridges are one of the most useful and magnificent structures of the modern civilization. With ever improving designs bridges carry immense loads daily and are also expected to handle incidental loads due to natural calamities. We bring you the bridge making competition that would test your ability to design and construct the most efficient bridge within the given specifications. Model bridges are intended to be simplified versions of real world bridges, which are designed to accept a load in any position and permit the load to travel across the entire bridge.

RULES: -

- Maximum 4 Members are allowed per team.
- The Minimum clear span of the bridge must be 600mm. i.e. supports will be placed at a distance of 600mm from each other while applying load on the bridge.
- The minimum effective span along breadth of the deck must be 11.43cm i.e. length of 1 Popsicle stick.

- The Minimum depth/height of the bridge must be 11.43cm; the depth/height can be extended as much as needed for the contestant.
- The self-weight of the bridge is limited to 600 grams.
- The choice of the type of bridge is upon the discretion of the participant.
- Use of white adhesive is allowed only and it must be of Fevicol brand. No other brands are allowed even if they are white in colour. Participants must not apply gum on free surfaces and no other materials are allowed which can increase the strength of the structure.
- Loading will be applied on the middle point of the deck (as marked by the contest-ant). A rod will be placed horizontally across the deck and the loads will be hanged on the rod accordingly.

If Rules are seen to be violated, then the team will be disqualified immediately.

TESTING AND JUDGING CRITERIA:

Prior to testing of the bridge, the dead weight of the bridge will be noted down. Failure to adhere to the maximum weight limit of the bridge would result in disqualification. All construction and material requirements will be checked prior to testing. Bridges failing to meet these requirements will be disqualified. Bridge failure is defined as the inability of the bridge to carry additional load, or a load deflection of 30 mm under the loading location, whichever occurs first.

The bridge with the highest structural efficiency, E, will be declared the winner. $E = \frac{\text{Load supported in kg}}{\text{Mass of the bridge in kg}}$ Failing to meet the dimension specifications of the 78 bridge would result in immediate disqualification. Decision of the judges shall be final.

CADDIST

CAD (Computer Aided Design or Computer Aided Drafting) is a computer program that allows you to create 2D technical drawings and 3D models from which something will be built.

Traditionally, design and drafting involved paper, pencils and erasers but today most designs are done in computer applications that allows you to do complex things much more productively and accurately than before. We at the CADDIST will check your ability to work with the AutoCAD software, your speed and ingenuity.

GENERAL RULES:-

- 1 member is allowed.
- Eligibility: All students with a valid student id card from their respective colleges are allowed to participate

PROBLEM STATEMENT:-

A problem will be given on the spot. You have to come up with a realistic yet aesthetic architectural solution. Plans, Elevation & Section of the given problem are needed. (Participants are asked to bring their own laptop for convenience. Any version of AutoCAD can be used.)

CONCRETRONIX

Design and create your own high strength concrete and impress your friends!

GENERAL RULES:-

- A maximum of 3 members are allowed in a team.
- Eligibility: All students with a valid student id card from their respective colleges are allowed to participate.(**REQUIREMENTS:** - 1. Either 1 day or 7 days (depending upon authority) COMPRESSIVE STRENGTH will be considered.)
- Any kind of ADMIXTURE (PLASTISIZER / SUPER PLASTISIZER) can be used , carried by participants itself.
- SIZE of AGGREGATE should be mentioned.
- 1 set of Concrete Cubes of (150mm* 150mm* 150mm) is required.
- CEMENT & the aggregates will be provided.
- Grade of Concrete (M20/M25) Preferable.

TESTING & JUDGING CRITERIA:-

- 3 days COMPRESSIVE STRENGTH will be the only deciding factor.

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TENSIGRITY

Tensegrity structures are a unique form of engineering that utilize the balance of tension and compression for stability. They are composed of a network of bars and cables that are arranged in such a way that the bars remain in tension, while the cables remain in compression. This makes them highly resistant to external forces and allows them to distribute weight evenly across their structures.

Tensegrity structures are used in a variety of applications, such as architecture, aerospace, and even robotics. They have gained popularity in recent years due to their ability to create lightweight, flexible, and resilient structures. At a tech fest, tensegrity structures can be showcased as a unique and innovative use of engineering principles in various fields.

GENERAL RULES:-

- A maximum of 3 members are allowed in a team.
- Maximum Ice-cream sticks given are 80 nos.
- Given time for your project – 4 hours.

- Use of white adhesive is allowed only and it must be of Fevicol brand. You also received two packs of Feviquick (Its limited) and required string.

TESTING AND JUDGING CRITERIA:-

- All Tensegrity structures must be designed and built using tension and compression elements. It's mainly judged by Structural Stability and Integrity.
- The structure must be stable and able to support its own weight and any additional loads or stress.
- The design should be aesthetically pleasing, using clean lines and minimalist forms.
- The final structure should be distinct, creative, and innovative, pushing the limits of what is possible with Tensegrity engineering.
- The project should demonstrate a thorough understanding of Tensegrity principles and showcase different applications and possibilities of Tensegrity structures.

FUN EVENTS

PING PONG BUCKET BALL

- Once the Bucket Ball court and equipment have been set up properly, Player will start the game.
- The player will throw the ball thrice and make sure that the ball enters the bucket just after a single bounce.
- Player will get five chances to throw the balls.
- There will be volunteers on the spot to guide the players how to play this game.
- Winner will be specially awarded
- Participants must bring their College ID Cards and Registration Receipt at the time of the event.

TAIL PULLING

Rules:

- It is a game of two teams. Each team consists of 2 players..
- Players of one team will pull the tail of another team members while also keeping their own tail safe.
- The team will win if all the members of the team can save their tail.
- Winner team will be specially awarded.
- Participants must bring their College ID Cards and Registration Receipt at the time of the event.

BLOW THE BALL

Rules:

- This is a fun event. There is no registration fee. In this game, each participant will get 3 chances to blow a ball from starting point to finishing point. Participants must bring their College ID Cards and Registration Receipt at the time of the event.

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WALKER BOTTLE

Rules:

- This is a game between two players. There is a track and a bottle is set at the middle of the track. The bottle will be moved to the left direction by the right player from the middle position and moved to the right direction by the left player.
- After each proper flipping of the bottle, the bottle on the track will move one cell towards the direction according to the player.
- Time limit for the game is 30 secs. The player will win the game if he/she will reach at the end of the track with in minimum duration.
- Winning player will be specially awarded.
- Participants must bring their College ID Cards and Registration Receipt at the time of the event.

RIVER BANK

Rules:

- Four players can participate in the game at once.
- Everyone should stand behind the line on the floor, facing the person leading the game. They should pretend they're stood on the bank of a river.
- When the person leading the game calls 'in the river', or just 'river', everyone should jump and land with both feet over the line.
- When the person leading the game calls 'on the bank', or 'bank', everyone should jump back to the other side of the line where they started.
- There will be few rounds till we get the winner.
- There will be a volunteer on spot to guide you how to play this game. This event will be assisted by professionals.
- Participants must bring their College ID Cards and Registration Receipt at the time of the event.
- There is no prize money.

FOOD FIGHT

Rules:

- Time Limit 30 seconds per
- The person who eats the maximum number of Fuchkas within 30 seconds wins and the winner will be specially awarded.

Participants must bring their College ID Cards and Registration Receipt at the time of the event.

TREASURE HUNT

Rules:

- This will be a Team game and a Team can have a maximum of 4 members.
- There will be a total number of 7 barcodes around the Campus.
- Team has to scan the barcode and after proper scanning your question will be unlocked to which you have to solve the answer for the question.
- The Team who will successfully solves the 7 questions with proper answer in a time & reach the starting point will win. Top 2 Teams will be declared as winners and runners and will be specially awarded.
- Participants must come with their college ID Cards and the Registration Receipt.

ZORBING

Rules:

- Zorbing is an event and not a competition so there's no particular rule for this event & hence no prize money. Although you will be guided by a volunteer on spot to know how to play this game. The event will be assisted by professionals.
- Participants must bring their College ID Cards and Registration Receipt at the time of the event.

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HAND AND FOOT PRINT GAME

Rules:

- There will be prints of hands and foots in different directions.
- Starting from the source point, the player has to follow the prints to reach the destination. The player, who will finish it with minimum time, he or she will be winner and specially awarded.
- Participants must bring their College ID Cards and Registration Receipt at the time of the event.

SOCCEER SHOT

Rules:

- In the soccer shot each player will get 3 chances to goal in the short bar post perfectly.
- Maximum scorer will be selected for the next round.
- If there is a tie, a tie-breaker round will be held.
- The winner will be specially awarded.
- Participants must bring their College ID Cards and Registration Receipt at the time of the event.

DART THROWING

Rules:

- Dart Throwing is a free event. So there's no particular rule for this event & hence no prizes. Although you will be guided by the volunteers on the spot to know how to play this game.
- Participants must bring their College ID Cards and Registration Receipt at the time of the event.

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APT-VENTURE

you can participate as single member. This event will make you placement ready, as all the rounds are made, based on the placement processes. There will be 3 rounds total and round 1 and round 2 are elimination rounds.

Cognitive

- Quantitative aptitude
- Verbal
- Reasoning

Round 1:

Round 2:

Will be same as ROUND 1 but the merit will be based on time.

Round 3/Final round:

- Group discussion
- Lecturette

After clearing all these rounds and based on the scores, winner will be decided and will be given prize money. Anyone from any college is welcome to participate.

AD MAD COMPETITION

Group of four students, will be asked to create a marketing plan including creating a full fledged creative campaign. Students have to present a conceptual ad of either a product or a service. Students will act out a TV / radio script and present ideas relevant on creating social awareness, etc.

- The topics for the Ad Mad Show will be given on the spot.
- Each team will have 15 minutes for the preparation.
- Maximum Time Limit for performing the Ad is 5 minutes.
- The criteria for assessment includes content, spontaneity and adherence to the topic, coordination, appeal of the advertisement and performance on the stage.
- There should be no exposure to biasness against any caste or community or religion through your performance.
- Use of vulgar expression and language will lead to disqualification of the team.

Criteria for Judgment:

- Content-information, Awareness and Humour.
- Spontaneity/ expressions /Acting/ fluency.
- Appeal of the Advertisement.

Overall Script and Play Awards:

- Top 3 teams will be awarded.
- Decisions of the judges will be final.

General Rules:

- Participants are required to reach 15 minutes before the starting of competition.
- No cell phone use will be allowed.
- Winning poster will receive cash prize and Decision taken by organizing team will be the final decision.
- Time 45 minutes

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POSTER MANIA

- Drawing / painting must be on white sheet of A2 size (420 x 594 mm or 16.5 x 23.4 inch) which will provided at the venue.
- Acceptable tools of drawing / painting include pencil, crayon, sketch, pastel, water color, poster colour, etc.(Photographs, wires, and other 3D objects are not acceptable.) Individual must bring their own tools of drawing. The completed artwork must be on a flat piece of paper.
- The drawing / painting must not include words, national flags, or slogans.
- The drawing / painting must not represent any particular individual, organization, or brand name and must not depict any religious theme.
- Name and class/course of participant as well as schools/college's name and address must be clearly mentioned on the back of poster in the English Language.
- The theme should be the main focus of the poster.
- Scoring will be done on basis of neat and clean work as well as idea of painting.

General Rules:

- Participants are required to reach 15 minutes before the starting of competition.
- No cell phone use will be allowed.
- Winning poster will receive cash prize and Decision taken by organizing team will be the final decision.
- Time 45 minutes



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IDEATHON

Rules:

- Each group needs to present ideas on their new entrepreneurship ventures in the form of PowerPoint Presentations (PPT) mode.
- Total number of slides: 10 3. Total number of members: 5
- Each group should have a Unique Name that should justify with their idea.
- The contents of the PPT should comprise of the Problem Statement, Financial Plan and the Viable Solutions.
- Time Limit: 15 minutes
- Lastly the Format and the overall Delivery of the PPT shall also be noted.

CAPTION MANIA

Rules:

- The caption/tag line must be Original.
- The Event is an Individual Event.
- All participants will caption a photograph which will be given.
- The captions should be regarding “Product selling/ advertising” and should not have more than two statements.
- Languages allowed: - English
- Timing: 1 min. per caption

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