Rubik's Cube Challenge

Categories:

- **A.** Team Competition
- **B.** Individual Competition

A. Team Competition Rules:

- Each team should comprise of 4 members.
- No individual can be a member of more than one team.
- Participants should be in the age group 9 to 17 years. (i. e. 4th standard to II PUC)
- The competition is open to all in the age group specified above.
- Decision of the judges will be final.
- Each team has to bring three 3×3×3 Rubik's cubes.

B. Individual Competition Rules:

- Participants should be in the age group of 8 to 17 years. (i. e. 3rd standard to II PUC)
- Decision of the judges will be final.
- The participant has to get at least one 3x3x3 Rubik's cube.

The different rounds of the competition will be disclosed during the event.

Sudoku Challenge

How to play Sudoku?

The enormous popularity of sudoku across the world is due to a couple of simple facts:

- Sudoku rules are easy to learn.
- Sudoku puzzles vary in difficulty from simple to devious.
- Puzzles have a unique solution that can be arrived at using pure logic. No guessing is required.
- Sudoku is not a math game, but is rather about identifying logical patterns.
- Complex strategies must be utilized in order to solve the hardest puzzles.

1	6	8				9		2
			3		1			
	3		6	2				
		9				1		6
		1				3	7	
	4	3	5					9
			8		2	6		
			9		5		2	3
2		6		3		7		

This is a typical sudoku puzzle as it is presented to the player.

The goal of sudoku is simple: fill in the numbers 1-9 exactly once in every row, column, and 3x3 region. For example, look at the above puzzle and compare it to the solved version below. Notice that every row, column and 3x3 region contain every number from 1-9 exactly once.

The different rounds of the competition will be disclosed during the event.

Bot Soccer

Eligibility: Age – Up to 18 years

The knack of fusing technology with sports seems to be an inherent quality among us and to celebrate this very spirit, we hail this event as BOT SOCCER.

Game Play:

- This is a 1 on 1 type game and 3 members in each team
- Robots will be placed in different halves of the arena with the ball in the center of the arena.
- Each team will try to score goals by pushing the ball into the goal post to win points.
- Team with the maximum points will win the match.
- If the ball goes out of the arena, it will be placed in the center and the match will resume.

Design Specifications:

- The following size limitations apply for each robot:
 - Width: 30cm Length: 30cm Height: 20cm
- The robot should weigh under 3kg.
- The robot can be wired or wireless.
- The Robot must not be made from Lego parts.
- Participants are allowed to use their own creativity for designing the bot.
- The length of the wire should be of minimum 5m for wired bots.

Rules and Regulations:

- A team can have a maximum of 4 members.
- Each game shall have 2 halves, each half lasting for two minutes.
- The bots should not remain immobile for more than 10 seconds.
- On scoring a goal, the team will be awarded with 4 points.
- 2 points will be deducted for damaging the opponent's bot.
- The bots are not allowed to enter the goal post. Entering the goal post will result in deduction of 1 point.
- Pushing the opponent's bot into goal post is allowed.
- The name of the person who is controlling the bot should be announced before the start of the game. The controller cannot be changed during the game.
- One member should hold the wires of the bot during the game. The wires should remain slack throughout the game.
- The team which gets the highest points will be the winner of the game.
- · All decisions about scoring, gameplay and timing made by the organizing committee are final
- In case of a tie, extra 1 minute of time is provided for a golden goal. i.e; whoever scores a goal will be declared the winner.
- In case no goal is scored in the extra 1 minute, penalty shots will declare the winner.

Egg Drop Contest

Introduction:

Participants will design and build an apparatus that will protect an egg from breaking as it is under freefall. The height of the fall would start from 10 feet upto 60 feet.

Rules:

- The apparatus may be constructed of any material except metal, glass or other shatterable material (for safety reasons). Failure to use approved materials will result in automatic disqualification.
- Usage of packing materials such as bubble wrap, sponge and styrofoam is not allowed.
- The apparatus (without the egg) shall not exceed 500.0 grams in weight. Apparatus weighing more than 500.0 grams will result in automatic disqualification.
- The apparatus must fit completely inside of a 20 cm x 20 cm x 20 cm box. Apparatus that do not fit in within the prescribed space will result in automatic disqualification.
- The apparatus must freefall without contacting team members, other persons or objects; no strings, chutes, etc. may be used. Tethers, parachutes and other air resistance devices are prohibited.
- Containers must be designed so that the egg may be inserted easily before competing, and easily checked after the drop test.
- The egg must stay inside the apparatus throughout the drop test.
- Unique and innovative design will be an important part of the competition. A "minimum dimension" measurement will be used.
- Only the eggs provided by the coordinator must be used.
- Weight of packing needs to be 500 gms and 250 grams depending on the age group

The egg will be provided by the judge at the time of the competition. It will be a grade A raw egg. Any manipulation of the egg to alter its physical properties will result in automatic disqualification.

The apparatus must allow for the egg provided to be unbroken and uncracked upon completion of the drop test. Participants will remove the egg from the apparatus and show it to the judge for verification. Only the judge determines whether the egg survived the drop test.

Photography Contest

Wings - BIG FRAME - Adults

Swing, Balloon - SMALL FRAME - Students

Phone image - Environment

Rules & Regulations:

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- All the participants must register themselves at the photography desk of the event.
- The Photographers must capture the 'Theme: Makers Fete Experience'.
- The Photographers can use a mobile phone or any digital camera for the contest.
- The photo must be in its original state and cannot be altered in any way.
- Submissions will not be accepted once the deadline lapses i.e. 6pm on 17th December 2022.
- Entries should be submitted via both the official photography desk & by uploading it on Instagram and tagging @elc.india. Entries not submitted through the proper channel will not be considered.
- Entries will be judged by the Jury. All decisions are final. The Learning Centre reserves the right to disqualify any entry that is deemed inappropriate or does not conform to stated contest rules.
- By entering the contest, entrants agree that photos submitted can be used by The Learning Centre for advertising purposes.
- The winner will be announced on the succeeding day of the competition via our instagram handle @elc.india. Make sure you follow us to stay tuned.
- The prize must be collected by the winner and is non-transferable.
- The winner will be contacted via the email address & contact No. provided during registration. If no response is received after 3 business days, a new winner will be selected and the previous winner will forfeit all rights to the prize.
- The contest is void where prohibited or restricted by law.
- Any violators of this contest rules will be removed from the contest, stripped of any prize(s), and banned from entering future contests.

Math Sherlock

Eligibility: Age 12-18 years.

Math Sherlock is a way to bring out the Sherlocks in you. Get your Dr.Watson and join us in this event where you both are locked up in Professor Moriarty's lab and the only way to get out is by knowing the right numbers. Help yourself get to it quickly by joining our preceding math session.

Rules & Regulations:

- Each team comprises of 3-4 members.
- No Individual can be in more than one team.
- The competition is open to anyone in age group specified above.
- Decision of judges will be final.
- Each team should have at least one smartphone.
- Participants are not allowed to disturb any other event going on and not allowed to damage college property.
- The different rounds, procedures of competition will be disclosed during the event.

Newspaper Tower Challenge

Rules:

- Each tower must be constructed from the Newspaper supplied. No other materials or substitutions are allowed.
- 3 Sheets of papers and twelve inches of tape will be provided.
- Contestants have a 15-minutes period to construct their towers. Any modifications made to the tower after the allotted 15-minute period will be disqualified.
- Each tower must be free-standing; it must not be attached to, or lean against any other surface (e.g. floor, wall, desk, etc.)
- Towers, whether standing straight or curved, will be measured from base to highest vertical point. Towers that curve or sag may not be straightened and then measured; they will be measured to the highest vertical point while curving.
- Towers will be judged only once. In case of a tie, the shorter construction time will determine the winning team. You must notify the judge when construction of your tower is completed. The tower will then be judged and measured.