



STEAM



SelaQui Science Decathlon QSD-2023

A Celebration of STEAM



21-22 July, 2023

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The Science Decathlon is not any other academic competition. With the global recognition of the urgent need for sustainable solutions to protect our planet, we are thrilled to continue our tradition of promoting scientific knowledge and innovation among young minds. Taking the cue from India's G20 Presidency, the theme for QSD'23 is "Sustainability and Beyond: Nurturing Young Innovators for a Better Tomorrow." It is a reminder that we have borrowed this precious planet from our children, and it is our responsibility to pave the way for a sustainable future. Science and Technology continue to be the indispensable tools in our journey towards addressing the challenges of today and tomorrow.

RULES AND REGULATIONS OF SELAQUI SCIENCE DECATHLON '23

GENERAL INSTRUCTIONS

- All events can be participated either standalone or as part of a School Decathlon Team. Every School Decathlon Team to be comprised of 6 students.
- The students must be from Grades 7-12 depending on the eligibility of individual events.
- To be eligible for the Champion's Trophy, it is mandatory for a School Decathlon Team to participate in all the events.
- All students must be in school uniform.
- The decisions of the judges will be considered final and no further clarification will be entertained.
- The overall winner of QSD '23 will be decided by compiling the results in the different events.
- For those with individual registrations, the participants / school will not be considered for the position of overall champions.
- There will be separate winner trophies for each event.
- There is No Registration Fee for the entire Event.



Q S D

SelaQui Science Decathlon

Q-TANK

Type : Team Event

No.of Participants: 03

Eligibility: Grade 7-12

- A live forum to pitch your idea for a sustainable future.
- Medium of communication: English only. Appropriate words to address each other are to be used at all times.
- Teams will have to select one SDG goal ONLY from the following list (SDG 1, SDG 2, SDG 3, SDG 6, SDG 11), then identify a real life local/national challenge which can be resolved under the ambit of the selected SDG goal. Finally, present an idea of an app to meet the goal (or resolve the challenge) in a 5 slide ppt.
- Each team will get 5-7 minutes to pitch their solutions.
- It would be appreciated if the participants cite the references (if any) while sharing their solutions on the topic.
- The judgment will be based on the following criteria:
 - a) Creativity
 - b) Resourcefulness
 - c) Originality
 - d) Economic feasibility
 - e) User Experience

MATHS P & R

Type : Team Event No.of Participants: 02 Eligibility: Grade 7-9 (1 student) & 10-12 (1 student)

- Participant will have to solve 5 riddles and 5 Puzzles in a maximum of 90 minutes.
- For every correctly solved Riddle/Puzzle, 5 points will be awarded.
- For every incorrect submission, 2 points will be deducted.
- Final leader board will be decided based on the cumulative total from the 10 Riddles/Puzzles.



Q S D

SelaQui Science Decathlon

SHUTTER UP

Type : Team Event No.of Participants: 02 Eligibility: Grade 7-9 (1 student) & 10-12 (1 student)

- A theme based on STEM will be given on the spot.
- The participants must submit soft copies of the photographs. Soft copies of the photographs can be submitted on a CD/Pen drive/sd Card at the allotted time.
- The team has to capture 10 photographs on the theme announced on the spot by the judges.
- The photographs that are submitted should be captured within the campus.
- No mixing, matching or morphing of photographs will be permitted. Software such as Photoshop etc. for enhancing the images is not permitted.
- The organizers will have all rights for the use of these pictures as and when they deem fit.
- The digital camera should have a memory card which will be formatted by the judges before the commencement of the contest.
- Additional instructions will be announced on the spot.
- The use of tripod, monopod and octopus-legs will be permitted.
- Professionals or teachers will not be allowed to assist the participants during the event.

MATHS DOJO

Type : Team Event No.of Participants: 02 Eligibility: Grade 7-9 (1 student) & 10-12 (1 student)

- Participant will have to solve 3 Sudoku grids in a maximum of 60 minutes.
- The 3 grids will be in increasing order of difficulty.
- If no participant is able to complete any or all of the grids in its entirety, the position will be decided based on the number of correct entries in the grid.
- Final leader board will be decided based on the fastest to complete the cumulative 6 grids.



ROBO WAR

Type : Team Event

No.of Participants: 02

Eligibility: Grade 7-12

- The objective of the battle is to push the opponent's bot out of the arena and survive until the end to win the event.
- Bots must remain within the boundaries of the arena during the battle. Crossing the boundaries will result in disqualification.
- Teams will be provided with common kits and assembling instructions for building their bots. These kits will serve as the basis for bot construction.
- Teams are responsible for assembling the provided kits to create their bots. The instructions should be followed carefully to ensure proper assembly.
- Battles will have a predetermined time limit. If neither bot is pushed out within the time limit, the bot with less damage will be declared the winner.
- The event organizers have the final authority on matters not explicitly covered by the rules and regulations.

ROBO RACE

Type : Team Event

No.of Participants: 02

Eligibility: Grade 7-12

- Teams are responsible for designing and constructing their own bots capable of navigating an off-road track with various hurdles while adhering to safety guidelines.
- Common kits and Assembling Instructions will be provided by us.
- Teams have two chances to drive their bots and complete the off-road track. The team with the shortest overall completion time wins.
- Bots must navigate through various hurdles, such as ramps, slopes, mud pits, and water crossings, without external assistance.
- Teams must exhibit fair play, avoiding cheating, tampering, or unsportsmanlike behaviour that could lead to disqualification.
- Bots must stay within defined boundaries, with penalties or disqualification for crossing them. Boundaries will be clearly marked.
- The event organizers have final authority on matters not covered by the rules and regulations.



Q S D

SelaQui Science Decathlon

SALVAGE SLOG

Type : Team Event

No.of Participants: 03

Eligibility: Grade 7-12

- Recycled and conventionally discarded materials will be utilized to make something that serves a scientific purpose.
- Materials will be provided on the spot. Once the material is provided, the model is to be prepared by optimal utilization of those resources only.
- The time for the entire activity is 45 min to 1 hour.
- The judgment will be based on the following criteria:
 - a) Creativity
 - b) Resourcefulness
 - c) Timely completion
 - d) Originality
 - e) Usefulness
 - f) Presentation

LUCID LAYOUTS

Type : Team Event

No.of Participants: 02

Eligibility: Grade 7-9

- A live poster making event.
- The theme will be given on the spot.
- Participants will have 90 minutes to create the poster using the images provided.
- The poster must not contain any content that is obscene, indecent, provocative, slandering, or promoting individual, commercial or political interests, lest would lead to a disqualification.
- The organizers will have all rights for the use of these pictures as and when they deem fit.



PARENTHESIS

Type : Team Event

No.of Participants: 02

Eligibility: Grade 11-12

- A coding event which will challenge the analytical skills of the teams.
- Three scenarios will be given to solve which need to be addressed with Java/C/C++/Python programming within the duration of 1 hour and 30 minutes.
- Participants will not be allowed to bring any kind of textbooks, notebooks or scribbling pads etc.
- Blank sheets will be provided to the participants.
- Every team must use a Single device to write and test their codes on their machines.
- Teams are not allowed to seek help regarding questions during the contest. However, anyone may clarify any doubts about the whole procedure from the Volunteers or Coordinators.
- Every team should provide only one solution. Multiple solutions are not accepted and once it is submitted it can't be changed.
- Copying the source code from the internet will lead to immediate disqualification from the contest.

JEOPARDY

Type : Team Event

No.of Participants: 04

Eligibility: Grade 11-12

- A live quiz.
- An initial ELIMINATION ROUND will be played to decide the top 5 teams.
- The TOP 5 will compete in a quiz game comprising two rounds: Jeopardy! and Double Jeopardy!!
- The Jeopardy! and Double Jeopardy! rounds will each feature five categories, with topics ranging from Physics, Chemistry, Biology, Computer Science, Astronomy and Current trends in Science, each of which contains five questions, which will be ostensibly valued by difficulty.



- The highest ranked team from the ELIMINATION ROUND will start the Jeopardy! round.
- The Jeopardy! round will begin when the first team selects a question, which may be from any position on the game board. The question is revealed and read aloud by the host, after which the team is given a chance to answer.
 - a) If the team responds correctly, the question's points value will be added to the team's score, and then the board will be passed to the next team.
 - b) An incorrect response will deduct the question's value from the team's score and will allow the next team the opportunity to respond. There will be no deductions on passed questions.
 - c) If no team responds correctly or the question passes through all the teams, the host will provide the correct answer.
 - d) Teams are not allowed to seek help regarding questions during the contest. However, anyone may clarify any doubts about the whole procedure from the Volunteers or Coordinators.
 - e) Every team should provide only one solution. Multiple solutions are not accepted and once it is submitted it can't be changed.
 - f) Copying the source code from the internet will lead to immediate disqualification from the contest.

CONTACT DETAILS

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REGISTRATION FORM

