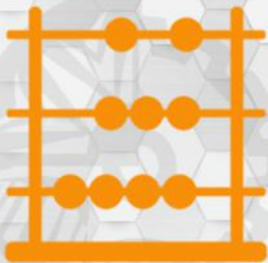


6th NATIONAL SCIENCE BEE



MATHLETICS

MODULE GUIDELINES

INTRODUCTION

Mathletics is a beautiful amalgamation of Mathematics and Athletics. A race where high functioning minds compete to prove their ability. A race where every second of your clever thinking will matter.

The competition is designed keeping in view the aptitude of participants. Round 1 warms up the participants with its objective questions. Round 2 tests the speed of mathletes via gaming. And the final round tests the stamina of its best participants through proof work. Through this structurally designed system the competition is intended to extract the best mathlete. May the odds be in your favour!

ROUND 1: DISPLAY-YOUR-NERD

The first round will be a basic test of problems related to mathematics. Each team will be given a question sheet comprising of Objective (75%) and Subjective (25%) questions. The teams must bring their calculators to solve the questions.

RULES AND REGULATIONS:

- Each team will be given 45 MINUTES to solve the paper.
- Any team found using unfair means to solve the paper will be disqualified immediately from the module.
- For every correct answer there will be +4 score while for every incorrect answer there will be negative marking of -1.

- For each round students will be given a lifeline option where he/she can ask for hint of a SUBJECTIVE question only. This lifeline can be used only once in a round.
- Any team failing to surpass this round will be eliminated from the game.

ROUND 2: THE DECIPHERER

The qualified teams will be given several puzzles to solve. It will be a race against time so the teams which correctly solve their puzzles in the least time will move on.

The puzzles to be solved are as follows:

- 1) Sudoku: Easy-level, 9x9 Sudoku
- 2) KenKen: Medium-level, 6x6 KenKen, all operations included
- 3) Magic Square: 5x5 magic square, sum to be achieved unknown, 6-7 blocks unknown

*Instructions for all puzzles will be briefed before the start of the round, however it is to the teams own advantage if they know the rules in advance!

RULES AND REGULATIONS

- Teams will be given a maximum of 15 minutes to solve Soduko, 20 minutes to solve KenKen and 25 minutes to solve Magic Square.
- Solution of each puzzle will need to achieve a certain pre-set criteria in order to move forward to the next round; 90% correct Sudoku, 80% correct KenKen, 70% correct Magic Square.
- Only teams meeting criteria will move forward.
- No electronic gadgets (calculator/mobile phones) are permitted in this round.

ROUND 3- THE BEAUTIFUL MIND

The final round is where the participants will be given extensive math problems and they'll be required to solve it by giving appropriate proof. Participants will be presented with 3 problems (likes of the "Tower of Hanoi").

RULES AND REGULATIONS

- Participants will be given 30 minutes per problem.
- The judgement criteria will be as following:
 1. Correct solution (50 raw points)
 2. Correct explanation/proof; technically accurate terminology not required (30 raw points)
 3. Clarity and conciseness (Extra 20 points)
- Use of calculator is permitted in this round
- Team with the highest total will win the entire module. However, in case of a tie, team with the highest total in round 1 will be declared winner. In the unlikely case of another tie, a time-crunch round consisting of one easy Sudoku puzzle will be played between tied teams. Best time wins the module!