



**Bal Bharati**  
PUBLIC SCHOOL

Sector-21, Noida, G.B. Nagar

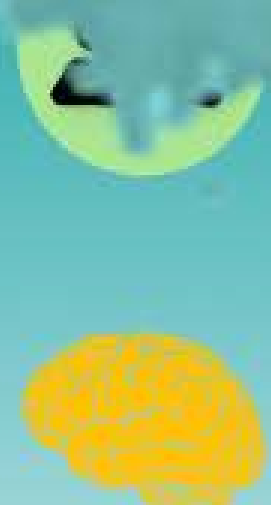


# TECH स्पर्धा

**3.0**

**AN ATL FEST**

21<sup>st</sup> OCTOBER 2022





Dear Sir/Madam,

*"You cannot discover new oceans unless you have the courage to lose sight of the shore."*

- *The school has the rare distinction of being amongst the first 250 schools to be selected for setting up the ATL Tinkering Lab in the first phase from amongst 6000 applicants; under the Atal Innovation Mission (AIM), a Government of India's flagship initiative to promote a culture of innovation and entrepreneurship in the country in the year 2016. The school, with the objective to foster innovation in different sectors of the economy and create an umbrella structure to oversee the innovation ecosystem of the country, has been empowering the students through various events and activities.*
- *The School has strong collaborations with Adobe, Moglix, Code and many more tech companies with the imperative to introduce the young minds to the latest technologies and has also adopted Artificial Intelligence in the school curriculum from Classes IV to XI and coding from classes VI to VIII with an objective for students to leverage the full potential of Atal Tinkering Lab and help them to innovate and create valuable solutions benefiting societies at large.*
- *We are proud to announce that the Atal Tinkering Lab of BBPS Noida will be hosting 'Techस्पर्धा 3.0' for the young, brilliant minds brimming with new ideas and skills on 21 Oct, 2022. It will be a platform which will not only encourage students to participate in learning - based activities in an environment of bonhomie and camaraderie, but will also promote healthy competition where students will be able to give expression to their creativity and contribute to scientific advancements. Please find the details of the event in the enclosed brochure.*

*We look forward to welcoming your school at 'Techस्पर्धा'.*

*Thanking you*

*Yours sincerely,  
Asha Prabhakar  
(Principal)*



# GENERAL GUIDELINES

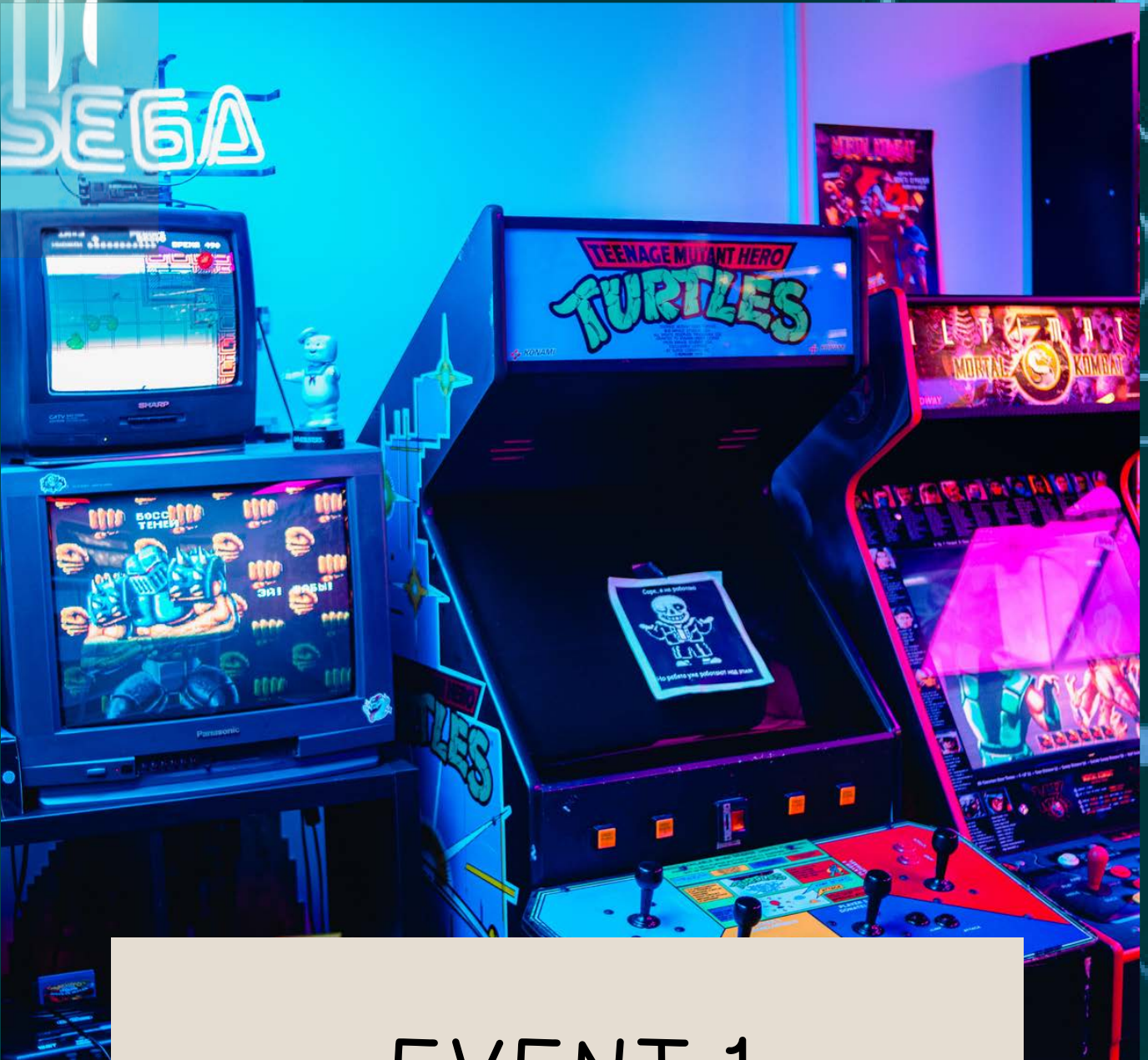
- A child cannot participate in more than 1 event.
- The entries must be submitted as per the specified format and adhere to the rules and regulations of that particular event.
- All submission files must be named as-  
EventName\_SchoolName\_ThemeChosen
- The registration link will close on 30 September 2022 at 11:59 p.m.
- Use of copyrighted material or plagiarism will lead to immediate disqualification.
- The entries are to be submitted latest by 17.10.22.
- The decision of the judges will be final and binding.

For registration, head over to the given link-



[REGISTRATION LINK](#)

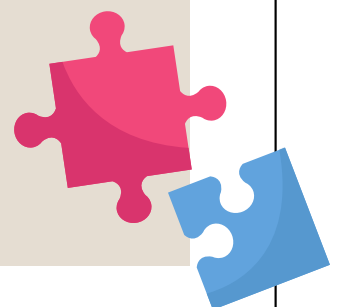




# EVENT 1

# GAMETHON

Let's gamify STEM





India, despite being the birth place of many globally popular games like Chess, Ludo, Snakes and Ladders, is still not among the leading developer of toys.

Gamethon-2022-23 is conceived to challenge the young innovative minds to conceptualize novel toys and games based on Bhartiya civilization, history, culture, mythology and ethos under the physical or digital category.

## *GENERAL GUIDELINES*

Number of Participants : 02  
Classes : VI-IX  
Date : 17.10.22 (Preliminary-online)  
              : 21.10.22 (Final-offline)  
Time duration : 3 Minutes

## *THEMES*

Participants have to build a commercially viable toy catering to any one of the following themes.

- Bhartiya civilization
- Mythology and Ethos
- Clean and Green Technology
- Disaster Management.
- Road Safety

## *RULES AND REGULATIONS*

- Idea should be original, non- fictional, and economic.
- Falsification of the project will lead to instant disqualification.
- It is mandatory to attach a picture of the prototype.
- Last date to submit the document or PPT is 17.10.22 on the email Id [umesh.verma@nd.balbharati.org](mailto:umesh.verma@nd.balbharati.org).



## *PRELIMINARY ROUND*

- The participant will prepare a word document /PPT and a short video in mp4 format of not more than 3 minutes, describing their idea and it's working and mail it to umesh.verma@nd.balbharati.org
- The document should be based on one of the themes and should mention problems faced at home or around us and provide the possible solution using robotic materials like sensors, digital tools etc., and application of each part used to design project.
- A detailed description of technology used in making the project and its working is to be submitted.

## *FINAL ROUND*

- Selected participants will be asked to come to the host school with their prototypes and present their projects. Guidelines for presentation will be sent to selected teams through WhatsApp group created by the host school.
- Time limit for each presentation will be 3 minutes.

## *JUDGEMENT CRITERIA*

- Relevance of topic
- Creativity/ Originality
- Content
- Overall presentation
- Working

## *EVENT IN-CHARGE*

Mr. Umesh Verma (9811336317)  
Mr. Anshul Dubey (9717617293)



CLICK TO JOIN





Bal Bharati  
PUBLIC SCHOOL  
NOIDA



TECHस्पर्धा

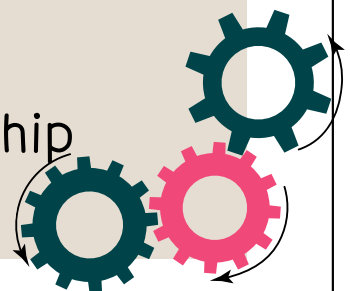


## EVENT 2

# HATCH - PITCH

---

STEMifying entrepreneurship





Technology has entered the field of finance and entrepreneurship and has scaled up the innovation level of a lot of start-ups. Professing this ideology, we present to you, 'Hatch-Pitch', a radical pitch competition for innovative start-ups tackling environmental, social and economic challenges to make this world a better place.

## *GENERAL GUIDELINES*

Number of Participants	: 02
Classes	: IX-XII
Date	: 17.10.22 (Preliminary-online) 21.10.22 (Final-offline)
Time duration	: 90 second video (preliminary) 5 minute presentation (final)

## *THEMES*

Each team will pitch a business idea on the following divisions with the help of a 90-seconds video:

- Research and development
- Marketing
- Finance
- Corporate social responsibility

## *RULES AND REGULATIONS*

- Only one team per school is allowed.
- The participants must strictly adhere to the time limits of pitches.
- The video should be submitted in mp4 format on the email id [mandeep.kaur@nd.balbharati.org](mailto:mandeep.kaur@nd.balbharati.org) latest by 17.10.22



## *PRELIMINARY ROUND*

- Applicant schools will submit a 90 second video explaining their idea, and pitching their vision in the first round.

## *FINAL ROUND*

- The applicant teams will be whittled down to 8 teams for the final offline round, wherein the finalist teams will be given 5 min each to present their idea to the judges with a Powerpoint presentation.
- The teams will have the opportunity to pitch to a live panel of judges which will include the presentation regarding the product prototype, research, verbal presentation, logo, tagline, and website demonstration.

## *JUDGEMENT CRITERIA*

- Innovation
- Financial feasibility
- Use of technology
- Research
- CSR addressed

## *EVENT IN-CHARGE*

Ms. Anita Panda (9811737378)

Ms. Mandeep Kaur (9911168764)



CLICK TO JOIN

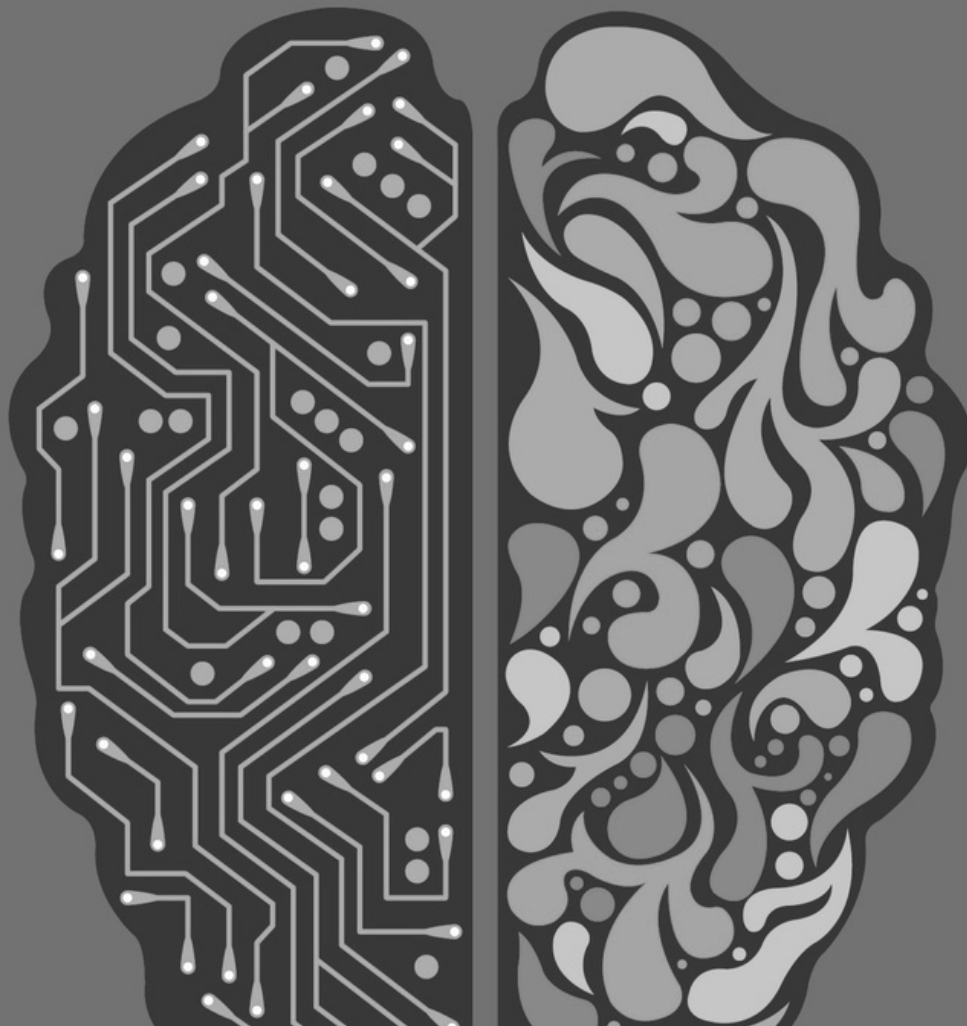




Bal Bharati  
PUBLIC SCHOOL  
NOIDA



TECH स्पर्धा

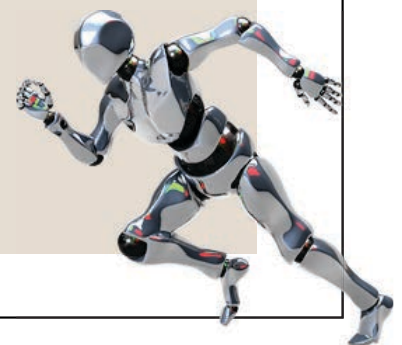


# EVENT 3

# ROBO RACE

---

Get. STEM. Go.





Robotics integrated with technology leads to the development of smart machines and bots that can take smart decisions.

We introduce, Robo raceDesign a robot, either wired or wireless within the specified dimensions that can be operated manually and can travel through all turns of the track! Get. STEM. Go! Let's see whether your robot makes it in the least time or not.

## *GENERAL GUIDELINES*

Number of Participants : 02

Classes : VII-XI

Date : 21.10.22 (Mode- offline)

Time duration : 5 minutes

## *RULES AND REGULATIONS*

- Every team will have 2 trial runs. After the trials are over, the fastest team during those trials will be chosen for the second round.
- One trial should not last more than five minutes. After the trial time is over, the time-up buzzer will be rung and the team will be asked to remove the robot from the competition field.
- If the robot is on the field halfway and operating when the time-up buzzer goes on, the team will be given 2 more minutes so the robot's operation is not interrupted.



## IMPORTANT DETAILS

- First preference will be given to the robot, reaching the finish-line fastest.
- The Second criteria would be scoring maximum points as per the following norms:
  1. The competition field consists of a 40cm track.
  2. The track surface and course line may have unevenness.
  3. There will be certain obstacles on the race track that will try to slow down the robot.
  4. The arena will consist of Switch Bridge, speed breakers, marble pit, slippery path, rotating ting disc, curve ramp down, seesaw, etc.

## JUDGEMENT CRITERIA

- In the shortest period of time, the racer must complete the set number of laps from the starting position to the finish, without going outside the track.
- The competition area is a special place defined for the robot's operation (hereafter competition field).
- The robot that will reach the finish point through various laps and hurdles in the shortest time will be the winner.

## EVENT IN-CHARGE

Mr. Umesh Verma (9811336317)

Student coordinator: Kushagra Pant (7217863201)



CLICK TO JOIN



# EVENT 4

# SPACE

# CHALLENGE

# Finding space in STEM





Space science will continue to riddle mankind. Finding new planets around other stars, and also identifying other resources in our solar system are possible events. Therefore, we need to ensure the long-term sustainability of the space environment.

The goal of this event is to raise awareness about the space sciences, foster interest in earth and space science technology, and encourage and nurture the interest in STEAM in the young generation.

## *GENERAL GUIDELINES*

Number of Participants : 03  
Classes : VII-XII  
Date : 17.10.22 (Mode- Online)  
Time duration : 10 minutes

## *THEMES*

Each team, based on their interest and understanding, must select one problem which falls under ANY ONE of the themes mentioned below and provide a solution that can be implemented and adopted by leveraging technologies:

- Explore Space
- Reach Space
- Inhabit Space
- Leverage Space

## *RULES AND REGULATIONS*

- . The competition will have only one round which will be held in the online mode.
- . The last date to submit entries is 17.10.22
- . The final innovation can be a physical/ digital solution (App, Game, 3D Design, etc.) developed using any of the Module/ Platform or on any Open-Source/ Free platform.
- . Each unique solution must be submitted under one theme only.





## IMPORTANT DETAILS

- Participants are responsible for making sure that they have the necessary rights, licenses, and/or permission for any content used in making the entry for this challenge.
- The final model and videos are to be uploaded on YouTube and the link must be shared through the google form
- ( <https://forms.gle/JkAGCeHD3meBK2VWA> )
- The online application form includes-
  - 1.Document Submission (300 words only, description of innovation- Why have you selected the Space Challenge Theme, the idea behind the innovation/solution, which technique/ technology has been used, the various technical components of the application/ solution (e.g. cloud connect, database, etc.)
- Video submission content- (not more than 10 minutes)
  - 2.Introduction to the current working prototype/ solution (360-degree view)
  - 3.Which technology is being used?
  - 4.Functionalities and salient features
  - 5.On-ground testing/ implementation – The journey

## JUDGEMENT CRITERIA

- Originality and creativity
- Relevance to the theme
- Functionality
- Content
- Scientific thought and approach
- Economic (low cost/portability/durability)
- Overall Presentation



CLICK TO JOIN

## EVENT IN-CHARGE

Mr. Prabhat Mishra (8800204810)

Ms. Swati Chawla (99117 33761)

Student coordinator: Aaditya Kartikeya (9798336347)





Bal Bharati  
PUBLIC SCHOOL  
NOIDA



TECHस्पर्धा



# EVENT 5 SCIENCE SYMPOSIUM

---

Let's talk Finance





In today's world, it's an imperative skill to discuss, debate and express your thoughts on the status-quo and to bring about a change in the society by voicing your opinions. We present, Science Symposium, a platform for the changemakers to amplify their voice.

### TOPIC FOR THE SYMPOSIUM

"Is higher education a necessary prerequisite for an individual's financial success in the future."

### *GENERAL GUIDELINES*

Number of Participants : 03

Classes : XI-XII

Date : 17.10.22 (Preliminary-online)  
: 21.10.22 (Final-offline)

Time duration : 10 Minutes

### *THEMES*

The competition focuses on the theme,

- SDG 9: Industry, Innovation and Infrastructure

### *RULES AND REGULATIONS*

- The competition will be conducted in two rounds in the specified modes.
- One team per school is allowed.
- Participants are supposed to follow a dress code, white shirt and black trousers.
- The video shall be submitted in mp4 format to the following email id: [vidhi.oberoi@nd.balbharati.org](mailto:vidhi.oberoi@nd.balbharati.org)





## PRELIMINARY ROUND

- Each school team should consist of three students only, one speaker 'For the Motion' and the second speaker 'Against the Motion' along with an interjector.
- Preliminary round will be recorded. Total presentation time for a team is seven minutes. Since it is a Turncoat Debate, either of the speakers may begin. Every two minute, the change of motion will take place and will be indicated by ringing a bell.

## FINAL ROUND

- Total presentation time for a team is seven minutes. Since it is a Turncoat Debate, either of the speakers may begin. Change of motion will be indicated by the ringing of a bell.
- The speaker(s) from each team will be given 3 minutes each to speak on the topic using a digital presentation. Schools are to bring their own electronic devices, dongles, etc., required for the presentation.
- After each presentation there will be a question-answer session.
- Participants must not, at any time during the competition, reveal the name of the school they represent. They will only be identified by the number assigned to them. Failure to comply will lead to disqualification of the team from the competition.

## JUDGEMENT CRITERIA

- . Oral Communication
- . Content and relevance
- . Artistic Endeavor
- . Overall Presentation

## EVENT IN-CHARGE

Ms. Indula Mishra (9868473498)

Ms Vidhi Oberoi (9871775115)



CLICK TO JOIN





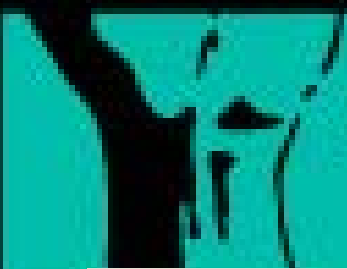
#BREAKING THE STEREOTYPE



Build STEM based solutions  
that change the society



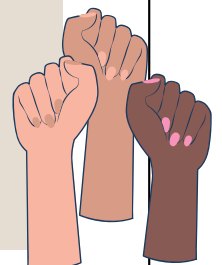
INNOVATE. DESIGN. BUILD.  
BE A CHANGEMAKER



EVENT 6

InnovatHER

Amplifying the voice of women in  
STEM





The event primarily focuses on empowering girls in STEM and reducing the gender gap in STEM disciplines. This is a platform for the 'InnovatHERS' to design solutions related to the given themes. The participants must come up with innovative STEM-based solutions that have the potential to change society and can bring value with themselves.

## *GENERAL GUIDELINES*

Number of Participants : 03 (girls only)

Classes : IX-XII

Date : 17.10.22 (Preliminary-online)

: 21.10.22 (Final-offline)

Time duration : 5 minutes (Final Round)

## *THEMES*

- **Women's Safety** - Child abuse, Dowry deaths, Acid attack, Child marriage
- **Menstruation** - Period poverty, Stigmatization, Sanitation issues
- **Domestic Violence** - Physical, Sexual, Psychological violence, Lack of effective helplines and counselling
- **Sex Education** - Absence of awareness about preventive measures, Apprehension regarding hormonal and body changes, Reproductive health, Importance of consent

## *RULES AND REGULATIONS*

- The participants have been provided with 4 themes based on real-world problems that women face, from which they have to unravel the theme of their choice and send innovative STEM-based feasible solutions in the form of a physical or digital prototype and talk about their problem statement, vision, technologies used in detail.



## PRELIMINARY ROUND

- Each team has to send a product proposal in ppt format (not more than 10 slides) and a video presentation of a maximum duration- 3 minutes in .mp4 format on the mail id : rani.vaid@nd.balbharati.org latest by 17.10.22
- Subject of the mail should be as follows-  
innovather\_theme\_schoolname

## FINAL ROUND

- Shortlisted teams will give a verbal presentation (not more than 5 minutes) explaining and showcasing the working of their solution.
- Ideas must be original and non-fictional.
- Falsification of the prototype will result in immediate disqualification.
- The decision of the judges will be final and binding.

## JUDGEMENT CRITERIA

- Practical feasibility
- Originality and Creativity
- Functionality of prototype
- Verbal Presentation
- Research and Technology

## EVENT IN-CHARGE

Ms Rani Vaid (9891312120)

Ms Asha Menon (9810956329)

Student coordinator: Samridhi Bisht (9971764912)



CLICK TO JOIN



THE NAME'S BOND,



HYDROGEN BOND

EVENT 7

# MEME-OUT-LOUD

---

Adding humour to STEM



We have seen technology taking a big leap and providing us with things contributing to our comfortable lives. Just like technology, humour has also seen great development. The meme culture has made its way into our daily lives and provided us with giggles and laughter. With this event, we aim to create the same effect, where the memes and science meet.

## *GENERAL GUIDELINES*

Number of Participants :	01
Classes :	IX-XII
Date :	17.10.22
Mode :	Online
Time duration :	4 Minutes
Software :	Canva

## *THEMES*

IT memes on:

- Cyber security
- Intellectual Property Rights
- Applications of AI

## *RULES AND REGULATIONS*

- Only one team per school is allowed.
- The language used in the meme must be appropriate and respectful.
- Usage of foul language will lead to immediate disqualification.
- Participant has to create a meme related to the given themes only.



## IMPORTANT DETAILS

- The meme must be saved in .jpeg form.
- The whole process of designing and developing the meme has to be recorded to rule out plagiarism.
- The video will have the process and the final meme, and the duration of the video should not be more than 4 minutes. The video is to be compressed using time lapse and should be shot in landscape mode.
- The video and image are to be submitted as a YouTube link through the form given below:  
<https://forms.gle/thKJBFLfMNvXmwx9>
- The content will be named as:  
eventname\_participant'sname\_class\_school.

## JUDGEMENT CRITERIA

- Relevance
- Creativity
- Content
- Overall presentation
- Humour quotient

## EVENT IN-CHARGE

Ms. Meetu Tripathi (98187 51479))  
Ms. Meenakshi Gulati (98734 20106)



CLICK TO JOIN

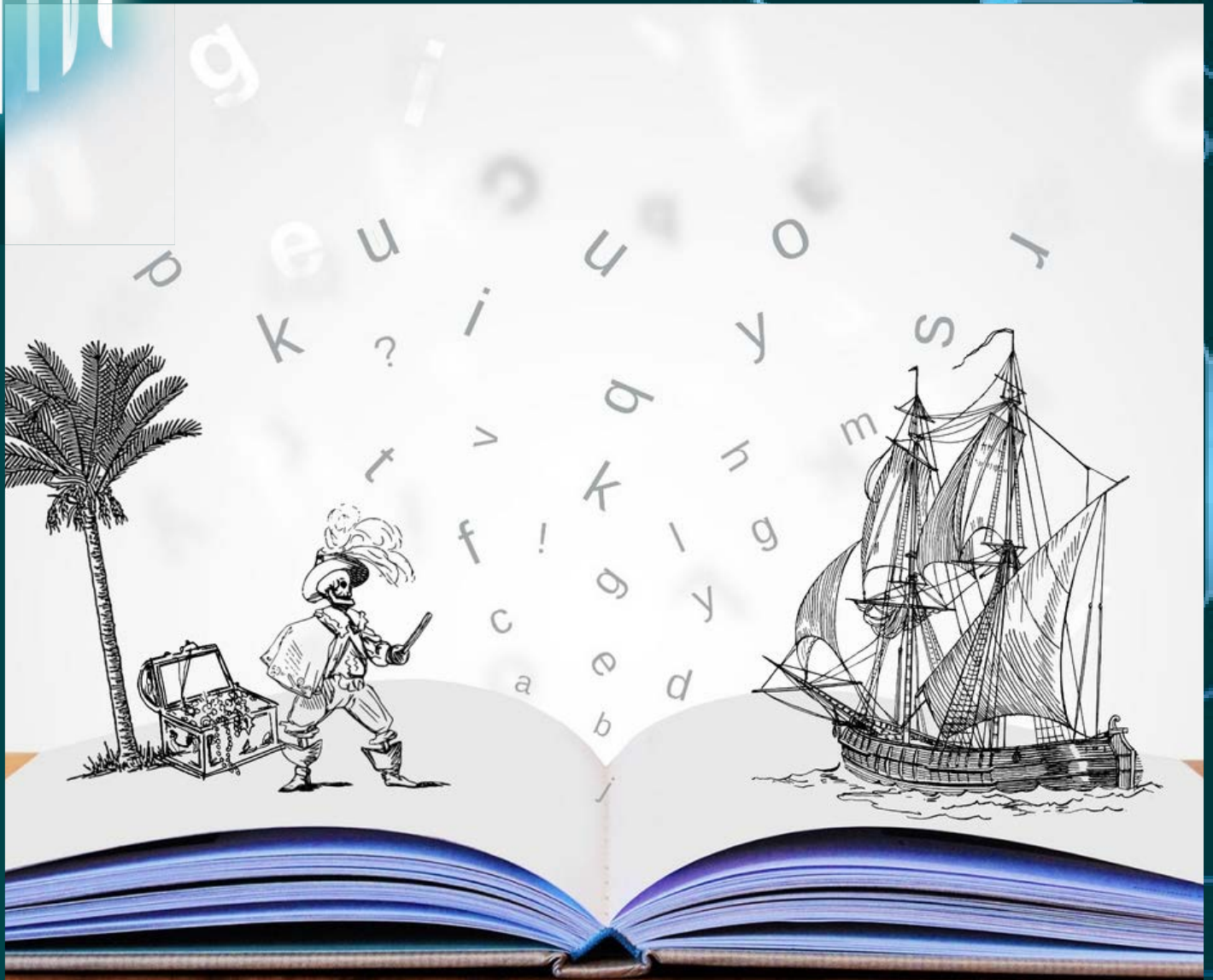




Bal Bharati  
PUBLIC SCHOOL  
NOIDA



TECHस्पर्धा



# EVENT 8 COMMUNITY OUTREACH

STEM for social good





With inclination to the pursuit of Atal Innovation Mission, we intend to evoke spirit of innovation and creativity amongst masses and the under-privileged sections irrespective of their social and economic background to ensure that inclusive development takes place. Keeping this in mind, we initiate this event to encourage students facing lack of resources to use this platform as an opportunity to express their thoughts with story-telling and imbibe holistic skills that will make them future-ready.

## ***GENERAL GUIDELINES***

Number of Participants :	04 (at least 1 community student)
Classes :	VI-XII
Date :	17.10.22 (Preliminary-online) 21.10.22 (Final-offline)
Time duration :	5 Minutes (Final round)
Mode :	Offline
Language used :	Hindi/ English/any Indian regional

## ***THEMES***

- Climate Change
- Water scarcity
- Global peace

## ***RULES AND REGULATIONS***

- Each participating team must have one community student (students from under-privileged sections/NGO).
- During the final round, story telling must be done within 5 minutes and roles should be allotted equally.
- In the final round, shortlisted teams will present their stories using puppets/toys.





## PRELIMINARY ROUND

- Each team has to send the script of the story in PDF format and two best pictures of the toy/puppet on the google form latest by 17.10.22
- Subject of the mail should be as follows-  
communityoutreach\_schoolname\_theme
- Link of the form: <https://forms.gle/5fp9AWUx5iDTkxAi7>

## FINAL ROUND

- Shortlisted teams will give a verbal presentation (not more than 5 minutes) using puppets/toys to convey their stories with proper expressions and coordination.
- Stories must convey the social message properly.
- The decision of the judges will be final and binding.

## JUDGEMENT CRITERIA

- Creativity
- Relevant use of puppets
- Co-ordination and clarity
- Oral narration
- Participation of community student

## EVENT IN-CHARGE

Ms. Shally Walia (8800439562)

Ms. Neha Gupta (9818603341)

Student coordinator: Chandani Saxena (9818356562)

Nupur Goyal (8383892654)



CLICK TO JOIN



# SAVE THE DATES

**30  
SEP**



LAST DATE FOR  
REGISTRATION

**17  
OCT**



PRELIMINARY  
ROUND

**21  
OCT**



FINAL ROUND &  
RESULT  
DECLARATION





Link for Registration- <https://forms.gle/Fndnd5jYiBucLwqs7>

. Last date for Registration- 30th September 2022

. Event Incharges to join the communication group using the links provided below, after registration.

. Kindly follow the activity planner for submission of videos and the online events

. The Valedictory Function will be held on 21st October 2022.

S.No	Name Of Event	Class	Teacher Incharge	Communication Group Link
1	GAMETHON	VI-IX	Mr. Umesh Verma Mr. Anshul Dubey	<a href="https://chat.whatsapp.com/II_FibHJZCe07xsEaD45t7N">https://chat.whatsapp.com/II_FibHJZCe07xsEaD45t7N</a>
2	HATCH-PITCH	IX-XII	Mrs. Anita Panda Mrs. Mandeep Kaur	<a href="https://chat.whatsapp.com/GuK3Fj6CM0IAglEnByZQaS">https://chat.whatsapp.com/GuK3Fj6CM0IAglEnByZQaS</a>
3	ROBORACE	VII-XI	Mr. Umesh Verma	<a href="https://chat.whatsapp.com/G4x2lJl3dAF3b6CRaxvxnc">https://chat.whatsapp.com/G4x2lJl3dAF3b6CRaxvxnc</a>
4	SPACE CHALLENGE	VII-XII	Mr. Prabhat Mishra Ms. Swati Chawla	<a href="https://chat.whatsapp.com/ETX2pfPj5uJ63Cxi0FYTrb">https://chat.whatsapp.com/ETX2pfPj5uJ63Cxi0FYTrb</a>
5	SCIENCE SYMPOSIUM	IX-XII	Ms. Indula Mishra Ms. Vidhi Oberoi	<a href="https://chat.whatsapp.com/F3sAbI455w3ACsH0GU5jkD">https://chat.whatsapp.com/F3sAbI455w3ACsH0GU5jkD</a>
6	INNOVATHER	IX-XII	Ms. Rani Vaid Ms. Dhanya Patil Ms. Asha Menon	<a href="https://chat.whatsapp.com/DTDjfkYxHdhBi0ocz44Ru9">https://chat.whatsapp.com/DTDjfkYxHdhBi0ocz44Ru9</a>
7	MEME OUT LOUD	IX-XII	Ms. Meetu Tripathi Ms. Meenakshi Gulati	<a href="https://chat.whatsapp.com/HgU31IXgDEjJOHjqKUH2k1">https://chat.whatsapp.com/HgU31IXgDEjJOHjqKUH2k1</a>
8	COMMUNITY OUTREACH	VI-XII	Ms. Shally Walia Ms. Neha Gupta	<a href="https://chat.whatsapp.com/KynTujZZB0ZFbc9FhwtAJ6">https://chat.whatsapp.com/KynTujZZB0ZFbc9FhwtAJ6</a>



# For any queries, you may contact



## Convenors

- Ms. Rani Vaid (+91 98913 12120)
- Mr. Umesh Verma (+91 98113 36317)

## Student Coordinators

- Kushagra Pant (+91 72178 63201)
- Kavish Srivastava (+91 98114 50127)
- Samriddhi Bisht (+91 99717 64912)
- Vaani Gupta (+91 87501 44640)



[ATAL TINKERING LAB FACEBOOK](#)



[ATAL TINKERING LAB LINKEDIN](#)



[REGISTRATION LINK](#)