COOL TIPS FOR THE EXAM WARRIORS
After a long gap, once again we are back with a new design, new features and a new name!! Here we present the all new VIPNET Newsletter ‘Curiosity’. Our monthly magazine-cum-newsletter is to showcase your creation, innovation and creativity in the world of science. We look forward to make this platform worth its name by generating curiosity to explore most exciting innovations, ideas and knowledge resources. Showcasing and displaying your work will help other clubs follow, replicate and monitor their efforts.

We are thankful to Dr Nakul Parashar, Director of Vigyan Prasar who motivated and encouraged the team to present Curiosity in its new avatar from March 2020 onwards. We look forward to bring original activity-based articles, columns, puzzles and unique activities performed by our clubs. Curiosity should be By The Club. For The Club - a platform for nurturing new ideas, innovations and concepts and to meet the challenges of 21st century. As you are aware, in 2015 we started the process of rejuvenating VIPNET and in 2016 we introduced new method of registration and evaluation of clubs. In 2017, 88 clubs were recognized in various categories. Since then the graph has steadily gone up; 188 clubs were recognized for 2018; 233 clubs were recognized for 2019 and 297 clubs were recognized for 2020. Today, we have about 3000 registered clubs. Nearly 300 of them show great enthusiasm to pursue science communication activities in the society and strongly work towards developing scientific attitude and temper in young minds. We want more clubs to follow their examples and come up with innovative activities and programmes of their own. Vigyan Prasar promises to support every such effort and provide best possible assistance in the form of resources, opportunities to be a part of capacity building programmes as well as to get recognized through awards, rewards and prizes.

Through Curiosity, we will discuss about recent development in science and technology, scientific activities, upcoming events, contemporary issues and its relevance for our VIPNET network. You will be happy to note, on June 21, 2020, India will witness the Annular Solar Eclipse from Northern India. This eclipse will be visible in Rajasthan, Haryana and Uttarakhand. We look forward to organize a National Camp in the belt of annularity, and undertake exciting astronomical activities for the benefits of our young generation. We will have nation-wide plan for such events and we want our clubs to play a major role in all such activities.

We hope, the new format of Curiosity will be accepted and appreciated by our members and they would come forward with their contributions, suggestions and feedback so that we make it even more exciting. We wish all our readers a happy and colourful Holi and urge to make it environment friendly and free of pollution.
The prosperity of any nation can directly be linked to the progress in Science and Technology of the country and its applicability for the nationhood. India’s progress in Science, Technology and Innovation can be linked from its ancient to modern period. At Vigyan Prasar we are always focussed in depicting such contribution through various means and modes like publications, audio-visual programmes and by developing popular knowledge products in the past 25 years of our existence. With the motto of “Think scientifically, act scientifically” we have also initiated Vigyan Prasar’s Network of Science Clubs (VIPNET) in 1998, with the objective of generating scientific awareness by encouraging the science club’s movement in India. VIPNET clubs are the extended arms of Vigyan Prasar through which dissemination of scientific information to masses is conducted. Our clubs are doing these activities as a voluntary service to the society.

The presence of Science Clubs helps to focus on several local challenges and provide better learning opportunities. Vigyan Prasar use to send suitable resource materials such as books, kits, posters, interactive CDs, DVDs etc. to provide momentum to this interaction. To further enhance the skills of the club coordinators, they were provided with the opportunities to participate in regional, state and national level workshops. Science learning was made joyful through activities performed by Science Clubs. Efforts were made to make these clubs more resourceful and scientifically updated. Lectures/debates/seminars/symposia, hands-on activity demonstration, regular astronomical activities, science exhibitions and fairs were organised; birthdays of eminent scientists were celebrated and visual programmes of scientific interest along with field visits were arranged to hone their scientific skill.

Along with the establishment of science clubs, Vigyan Prasar also started a monthly newsletter named “VIPNET News” for VIPNET club members. Works done by the clubs were also showcased by publishing their activity reports. By 2014, around 14,000 clubs were registered with VIPNET, spanning across 25 states and 7 Union territories through 543 districts.

In order to incorporate latest technologies, better techniques and efficient methods for better impact, growth and progress changes were introduced in the VIPNET network. New ideas came up and commitments increased. The other purpose was to revamp and revise the clubs such as coding format, address, and activeness of club in the new style and design. In 2015 VP initiated a process called re-registration with the view to strengthen pre-existing clubs and 1031 clubs re-registered with us.

In the new framework, several novel changes have been introduced to encourage the clubs to perform and to keep their morale high. One such change is to introduce a system of categorisation of the clubs. The registered clubs are now categorised into five different groups, namely, White club, Bronze club, Silver club, Gold club and Platinum club. To start with, each club is granted with the white club membership. Regular reports are requested from them. However, promotion and demotion of each club is carried out by Vigyan Prasar through an annual evaluation. The evaluation is based on the benchmark prescribed by Vigyan...
Prasar as well as on the frequency of submitting the reports by the clubs. A club that sends their report annually is eligible for the Bronze category whereas the club that sends reports twice in a year are eligible for the Silver category. Similarly, clubs that send reports quarterly are eligible for Gold category and one that submits reports every month gets a chance to be in the Platinum category.

Reports submitted by the clubs undergo a rigorous three-stage evaluation process. In the first stage, a preliminary analysis is done to check repetition and format of the report. At the end of the year, an expert panel evaluates the reports based on its format, relevancy of the concept, social impact and collaborative efforts. At the final stage an executive committee decides a benchmark and the clubs attaining or surpassing the benchmark get upgraded to the next category. A year of dedication and determination of upgraded club coordinators is honoured by Vigyan Prasar with appropriate incentives such as activity kits; CDs and publications of Vigyan Prasar; Club ID-embossed pens; calculators; pen-drives; whiteboard; opportunity to participate in national-level workshops; support to organise state-level workshop or teaching aids based on their category. First such evaluation was performed in 2017 where 88 clubs got upgraded to various categories and till now the graph is continuously rising. As a result of this, non-active clubs also get encouraged to perform and upgrade the status of their clubs and take advantage of the incentives. Post-evaluation, a national level club recognition programme is organised. First such camp was organised at NCERT, New Delhi in 2018 and the next was organised at Arpit Institute, Rajkot in August 2019.

Gradually, VIPNET club's activities also transformed into people-oriented activities that are not just confined into formal classroom or laboratory experiments or to theoretical knowledge. They invite and involve people to see, do and learn by doing things themselves. Today, the science club activities have become a strong link between the science and the community. At present, around 3000 Science Clubs are registered with us wherein the maximum numbers of clubs are from Madhya Pradesh. The efforts made are significant but a lot more is required as the figure looks very small as compared to the landscape and population of the country.

We are so happy to bring the new version of our VIPNET Newsletter which is reinstated under the completely new identity named Curiosity. This newsletter will provide a significant platform for the clubs to exchange views and ideas, express opinion and gain insight(s) into the vast array of scientific and technological developments going around us. The newsletter also acts as a medium to publicise activities performed by the clubs. To make this newsletter a knowledge product we are focusing to cover a wide range of subjects. Soon we will launch the newsletter in Hindi and other regional languages too.

In the next step, we are planning to bring technology into the VIPNET network. Vigyan Prasar will soon launch a separate website for VIPNET. This will improve the efficiency of Network as it will make people more informed, creative and productive. To make this network more vibrant and fresh we are planning to redesign the VIPNET logo for which a logo competition is running live on MyGov Portal.

At Vigyan Prasar we are working hard to make this Network more strong, impactful and dynamic. We believe that we will have the support of our club members in future endeavours of VIPNET also and together we will take this mission closer to its goal. We conclude with the dream that one day we will be the part of a nation where science will shape the society and its culture through scientific temper.

Dr. Arvind C. Ranade, VIPNET National Coordinator, Vigyan Prasar & Dr. Nidhi Shrivastava, Project Scientist, Vigyan Prasar
### Astronomical Events of March 2020

**MARCH 9**
**Full Moon, Supermoon**
The Moon will be located on the opposite side of the Earth as the Sun and its face will be fully illuminated. This phase occurs at 23:18 IST. This is the second of four supermoons for 2020. The Moon will be at its closest approach to the Earth (358180 km) and may look slightly larger and brighter than usual.

**MARCH 20**
**March Equinox**
The March equinox occurs at 09:20 IST. The Sun will shine directly on the equator and there will be nearly equal amounts of day and night throughout the world. This is also the first day of spring (vernal equinox) in the Northern Hemisphere and the first day of fall (autumnal equinox) in the Southern Hemisphere.

**MARCH 24**
**New Moon**
The Moon will located on the same side of the Earth as the Sun and will not be visible in the night sky. This phase occurs at 14:59 IST. This is the best time of the month to observe faint objects such as galaxies, star clusters and messier objects because there is no moonlight to interfere.

**MARCH 24**
**Mercury at Greatest Western Elongation**
The planet Mercury reaches greatest western elongation of 27.8 degrees from the Sun. This is the best time to view Mercury since it will be at its highest point above the horizon in the morning sky. Look for the planet low in the eastern sky just before sunrise.

**MARCH 24**
**Venus at Greatest Eastern Elongation**
The planet Venus reaches greatest eastern elongation of 46.1 degrees from the Sun. This is the best time to view Venus since it will be at its highest point above the horizon in the evening sky. Look for the bright planet in the western sky after sunset.
The Government of India provides free and compulsory education to children from 5 to 14 years of age under Article 21A of the Indian constitution. Examinations form a major component of the academic journey of a child. But does this process tend to put undue pressure on students to score high grades? This has been a hot topic of discussion for the longest time, debates have been held and various conclusions have been drawn. Stress during examination is almost inevitable for children under our education system. In my opinion, the cause of stress lies with four major stakeholders: society, parents, teachers and the students themselves.

The natural human tendency to compare gives rise to societal pressure. We have set benchmarks for our children which may be completely misaligned with their potential. Less than 5% of the students score more than 90% in Board examinations, and their achievements get glorified, which leads to the other 95% pressurising themselves into setting benchmarks for themselves.

Parents are the first teachers to their children and no one understands them better than their parents. However, parents often fail to identify their children's capabilities and impose upon them their own concepts of perfection which includes acing academics, sports, music, dance, etc. Since it is not humanly possible, it only ends up pressurising the children. My request to such parents would be to analyze your children's strengths and weaknesses and sit down with them to draft their own personal success journey. I would also request them not to impose their dreams on their children. Let them find their own calling and bless them with the courage to follow their dreams.

One thing that we, as parents, often forget is to positively acknowledge our children's failures. Their failures are not to be reprimanded as that might end up lowering their confidence level. Celebrate their failures, for it is the first step to success, after all! The parents must understand this and make their kids believe it.

Family atmosphere plays a vital role in the personality development of a child. Crucial domestic issues should not be discussed in the presence of the child, unless it is absolutely necessary. This should especially be kept in mind during their examinations.

For all the teachers out there, always encourage your students to ask more and more questions! Never let the '5Ws and 1H' (why, where, what, who, when and how) die in them. Sometimes, you might not know the answers. Please don’t hesitate to accept it. This teaches them that learning is an endless process and knowledge knows no limits; the key lessons of life.
Try to correlate the topic you are teaching with daily life examples. This way, children will feel connected to the topic and learn it effectively.

In my twenty-seven years of teaching experience, I’ve observed that too much stress is given on solving previous year’s papers. This shifts the entire focus on getting high grades from learning. In our current education system, marks are very important, indeed, for a secure academic future. But at the same time, the purpose of education should be to learn rather than just to get qualified. It is very important that the students learn the basic concepts for their thorough understanding and a better academic growth. These questions must be worked out only after understanding the concepts.

Now, these three stakeholders may or may not be able to completely cater to the needs of the fourth and the most important stakeholder: the students. So, they must be aware of how to cope with stress. Here are a few tips:

- Keep your table or study area uncluttered because it negatively affects your thinking abilities subconsciously and reduces your retention power. And of course, it wastes a lot of time and energy on finding things amidst the clutter. If possible, keep the area around you clean as well.
- Exercise regularly. Physical exercise works as a mood booster. It secretes happy hormones which help you stay calm and focus better. Yoga is highly recommended since it caters to the health and well being of your body as well as mind.
- Eat right and eat light. Eat fruits and vegetables instead of fried snacks. Switch over to light munch like melon seeds, shea seeds, dry fruits and fox nuts (for those who like midnight snacking). Those who feel the need to drink that steaming cup of coffee to stay awake, switch over to eating an apple along with green tea, instead. Apple serves the purpose of coffee and green tea contains antioxidants which help you stay healthier. Consume a lot of fluids to stay hydrated, energetic and focussed.
- STOP comparing yourself with others. Everyone is wired differently. Someone might be able to pull off longer hours at a stretch while others may not, and that’s completely fine. You must take small breaks in between to avoid fatigue and increase concentration.
- Find your own techniques to understand your lessons better. You may have a completely unconventional approach to memorise or understand certain lessons, and that is okay as long as it works for you. Whatever floats your boat!
- If you find it difficult to memorise certain chemical equations, formulas, diagrams, dates and events, here’s a hack: Write them on a plain A4-sized sheets using bright colours and larger fonts and paste them on a wall. It is widely known that human brain reacts to bright colours and larger fonts more actively. Working hard is as important as working smart.
- Avoid discussing your exam paper after you’ve written it. It’s important to understand that whatever is done, cannot be undone, and whatever is yet to happen, needs to be given complete effort thereafter.
- Sleep enough before the exam. It is essential that your brain is well rested and relaxed before you walk into the exam hall.

Last but not the least, don’t stress even if you don’t score as much as your parents and teachers have expected. It isn’t the end of the world. For all I know, I might be speaking to a few scientists, singers, actors, entrepreneurs, poets, investment bankers and a whole lot of other future successful professionals through this article.

Wish you all the best for annual examinations 2020!
1  **WORLD CANCER DAY CELEBRATION**  
Little Einstein Science Club (VP-DL0041), Delhi, enthusiastically celebrated the World Cancer Day on 4th February 2020 by organising a poster exhibition to raise awareness about cancer, its causes, prevention and treatment available.

2  **INDIAN MILESTONES IN FUTURE SPACE TECHNOLOGY**  
Sambhav Science Club (VP-HP0017), Kangra, conducted a programme on 24th January 2020 to make students aware about the mission, vision and achievements of one of the prestigious organisations, ISRO, through models and chart demonstration.

3  **MATH MODEL MAKING WORKSHOP**  
Vijnana Bindu Children’s Club (VP-KA0041), Tumakuru, conducted a Math Model Making Workshop on 12th January 2020 to develop concept related to Polygons with the help of 2D and 3D models.

4  **AWARENESS ABOUT CORONA VIRUS**  
Anveshna Science Club (VP-DL0040), Delhi, organised an interactive session on 2nd February 2020 to make students aware about Corona Virus and precautions to be taken.

5  **RANGOLI COMPETITION**  
Chem Star Science Club (VP-MH0077), Bhiwandi, organised an innovative rangoli competition on 31st January 2020 to explain students the role of chemistry to balance an ecosystem.

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