Antheia

The Botanical Society, Miranda House

-presents

QUISQUALIS

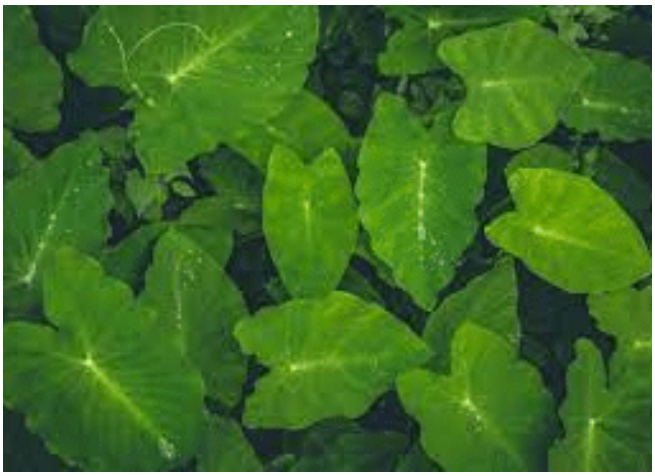
The Annual Botanical Magazine

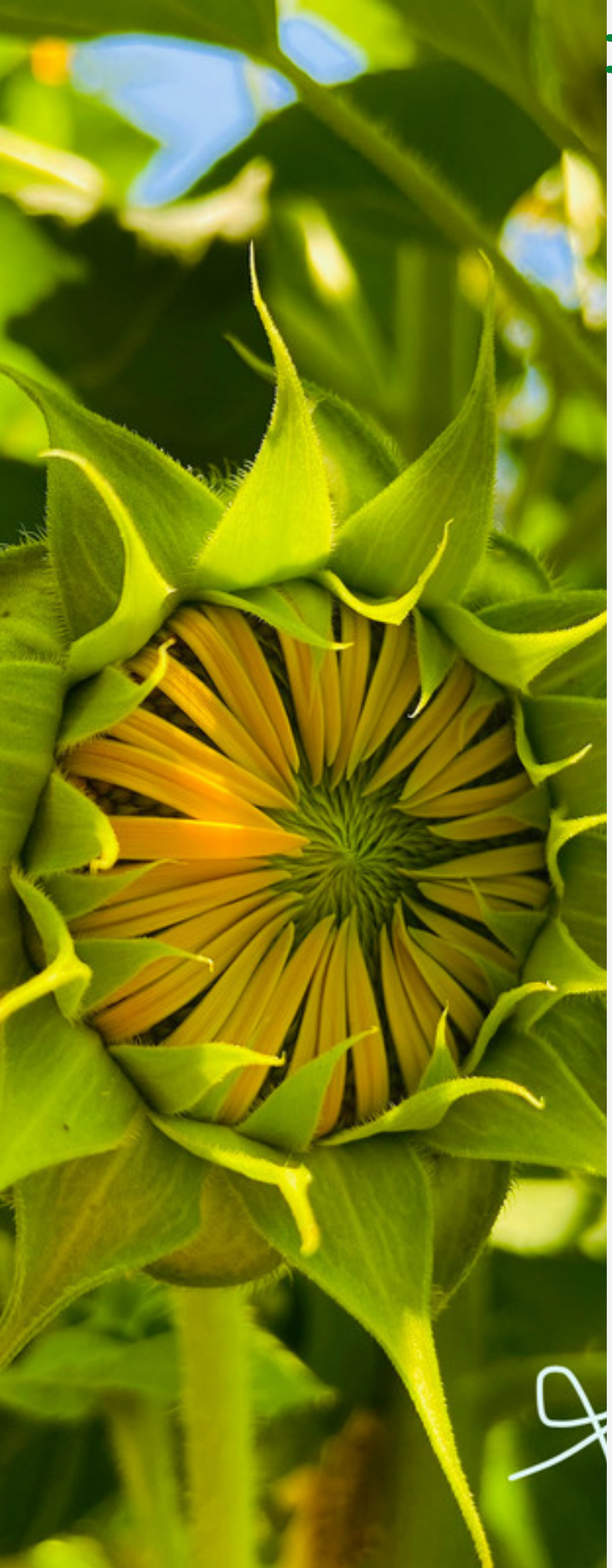
By- Vanshika, 1st year

CONTENTS

BOTANY I REGARD AS THE BEST SCIENCES IN WORLD
JEFFERSON

BOTANY - The science of
knowing the beauty of nature





ANTHEIA THE BOTANICAL SOCIETY OF MIRANDA HOUSE

Antheia, the Botanical Society of Miranda House is named after one of the Graces of Greek mythology. Antheia was the goddess of flowers and flowery wreaths. She was depicted in Athenian vase painting as one of the attendants of Aphrodite. Her name, which is derived from the ancient Greek word ‘Anthos’, means 'flower' or 'blossom'. The Romans knew her as Anthea.

The name Antheia was also given to Hera and connected to the Horae, under which she had a temple at Argos. It was also an epithet of Aphrodite at Knossos. She was the goddess of vegetation, gardens, blossoms, especially worshipped in spring and near lowlands and marshlands, favourable to the growth of vegetation.

She was also the goddess of human love. Antheia is also the Greek name of Ancient Sozopolis in modern Bulgaria, and another Antheia was a village, which was later, adopted into Patras around 1000 BC.

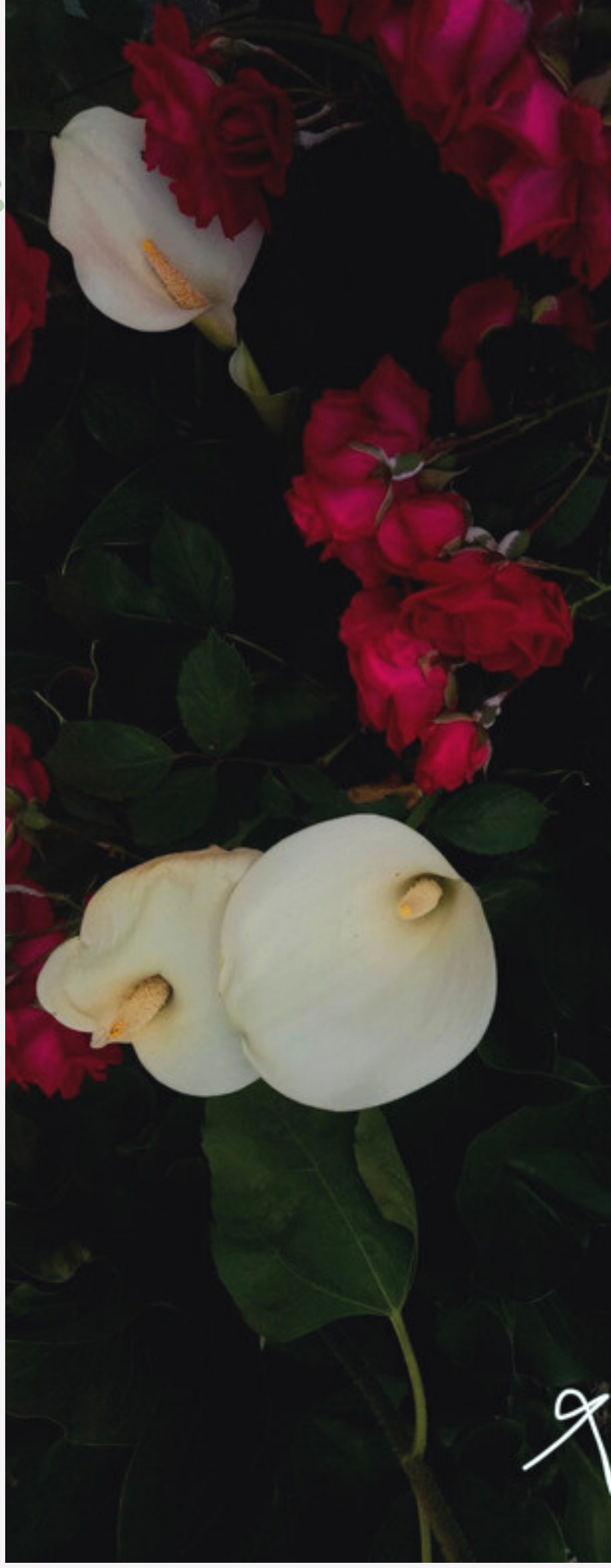
Hence, we the family of Antheia live together and we represent all the botanical symbolism synonymous with the harmony of nature and embodies it in our works.

QUISQUALIS

Quisqualis indica, also the Rangoon Creeper is a small genus of tropical Asiatic, Indo-Malayan, and African woody vines (family Combretaceae) having red or orange spicate flowers with a superior calyx whose limb is deciduous from the long tube and a fruit possessed of five wings. The plant is described as a creeper.

To add to the confusion, Quisqualis flowers open white and age to red. Eventually, a taxonomist, with a sense of humor, must have scratched his head and named the mixed samples "Quisqualis." which funnily translates to "Who, What"

Translated from Latin, Quisqualis means Who? What? A fine definition of curiosity. This is exactly what our magazine is about. Can you find it? Can you make it work for lives? How do they do it “there”? How can I make or find or do...? Not a bad approach but a complex daunting in the brain. We hope that this magazine is able to embody the quirkiness and the wit the very name "Quisqualis" encompasses.



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Dr. Saloni Bahri

Dr. Rashmi Shakya

Dr. Elangbam Geetanjali

Dr. Deepali

Dr. Renuka Agrawal

Dr. Somdutta Sinha Roy

Dr. Neetu Chaudhary

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(President)

Angel Malhotra
(General Secretary)

Anjali Pandey
(CR, 3rd Year)

Nancy
(CR, 2nd Year)

Jiya Janvi Singh
(CR, 1st Year)

FIRST YEAR

1st Row (Left to Right) : Anagha Ann Jose, Vishakha Sharma, Muani Mizo, Devika Yumnam, Chinglembi Haobam, Lenthoibi Thokchom, Muskaan Sharma, Madhu Kumari, Shalini, Sakshi,Mallika

2nd Row (Left to Right): Garima, Vidushi, Dhanvanti,Chetna Saini, Gargi, Sethulakshmi K, Daminee, Skoon Sharma, Samia Azmi, Tarana Shahreen, Harsha,Aditi Asthana.

Absentees: Aishwarya Mishra,Anam Eshaal,Anamika Choudhary,Anjali Kumari, Anshika Tripathi, Anushka Goel, Archana Singh,Arti,Astha,Aysha Nidha, Ayushi,Bhawna, Brishti,Cheshta, Diksha Meena,Guguloth Akhila, Ilma Moin,Jhanvi Rajput, Jiya Janvi Singh, Kamal Jeet Kaur,Muskan Yadav, Nandini Jain,Nazanin,Neelam, Neha Kumari,Oindrila, Paramita Dixit, Riya, Rucha,Sakshi, Samriddhi,Shaheen, Shrinidhi Yadav,Soman,Srishti,Vanshika,Varsha.

SECOND YEAR

First Row (Left to Right) - Poonam, Prachi, Priyanka, Sneha, Angel, Irya, Priti, Bhavna, Vanshika

Second Row (Left to Right) - Sonam, Yoshita, Neetu, Lobsang tsekey, Sheen, Bidyalakshmi, Aastha, Suruchi, Amgoth Mahalakshmi, Manisha, Khushi, Sandhya, Prateeksha, Mrinalini, Sapana, Ornella, Aiechea, Aseng, Chetna

Absentees - Alka, Anuradha, Bhukya Nandini, Dooda Vyshnavi, Garima, Ishika, Nancy, Neerati Krupa, Palak, Priya, Puttala triverni, Sakshi, Soumya

THIRD YEAR

1st row (Left to right)- Jyotika Tuteja, Shubhra Singh, Anjali Pandey, Shreya Pandey, Kanika Singh, Garima Dubey, Atulya Thakur, Simran Bano, Ayushi Yadav.
2nd row (left to right)- Sonam Palmo, Preeti Gupta, Anjali Karn, Tanzeela Nazir, Vineeta Singh, Deepti, Saloni, Muskan Tyagi, Kanika Bhardwaj, Aayushi Sahay, Priyanka Moirangthem.
3rd row (left to right)- Pragati, Banoth Sravani, Sheetal, Neha Sehrawat, Rushda Khan, Binisha Shrestha, Komal, Umang Mishra, Aditi Soni, Chahat Kaushal, Prachi Choudhary & Laimayun Isani Devi
Absentees- Kirti Singh, Gitanjali Sharma, Makula Supriya, M Shanti, Prerna Yadav, Safeeda Hussain NK, Shagun Singh, Shreshti Agarwal, Smriti Rathee, Srishti Kaner, Theertha Pradeep.

PRESIDENT WRITES

"Believe it can be done. When you believe something can be done, really believe, your mind will find the ways to do it. Believing a solution paves the way to solution."
— David J. Schwartz

Shubhra Singh
(President)

April 21, I still recall that day like yesterday when I received a video call from my closest that I got elected as president of Antheia, the Botany department of one of the top college of Delhi University, Miranda House. The opportunity of becoming president was something I always wanted to get but never believed and always doubted that I will not be able to justify.

I was exhilarating and nervous about the bunches of expectations and work I got to manage after taking the position, but regulating things becomes incredibly manageable when you have the whole department by your flank supporting you altogether.

My getting into Miranda house was completely astounding for my friends and me because I never intended to do B Sc & I thought I would regret it after joining MH. Still, after getting into it, I never regretted even a single day, making this decision because I learned a lot, not only about subsiding the stress of managing studies along with extracurriculars and being more passionate about tasks which I dislike entirely before even doing them, I became more explorative throughout this journey of 3 years being Mirandian. I comprehended myself better now that it's alright not to be the best at everything; what is more important is to give an honest try and learn from the experience, which one can engrain to become better. Now I think I am more open to new challenges to face, and I stand still against the adversities.

Since I got the only single year in total, which I spent with my friends on a college campus because of Pandemic, the time we spent online, studying, talking and discussing various issues of the day to day affairs made things feasible. I want to thank all the teachers of the Botany Department for investing their time and efforts and sharing the reservoir of knowledge that they own and sprinkled on us.

Being the president has given me immense contentment, gratitude and confidence. But I'm not stopping because the sky is the limit.

Good luck to all and happy reading!!

Angel Malhotra
(General Secretary)

Getting an opportunity to be a Mirandian was a dream come true moment for me. However, the online mode killed my excitement and hopes of happening in college life. But, Miranda never fails to amaze you.

Even in the online mode, I learned a lot about myself. When I started my Miranda journey, I came across a lot of talented girls who inspired me to evolve into a better version of myself.

I feel very grateful that I got the opportunity to be the General Secretary of Antheia. Along with this, I also became the creative head. These opportunities gave me a lot of exposure. They also expanded my horizons of creativity and enhanced my professionalism.

One of the many things which Miranda has taught me is that you should never compare yourself with others and always accept yourself just the way you are.

Anjali Pandey
(CR 3rd year)

It's a great honour and privilege to be a part of a prestigious institute like Miranda House. I deem it to be a matter of great pride and prestige to write this message as the CR of batch 2019.

Being part of this college and being part of the botany department imparted immense self-confidence and excellence to my creativity and also contributed to the enhancement of my college expertise, opening up new prospects of opportunities for me.

I am blessed to be a part of "Quisqualis ", the Annual Magazine of Miranda House, and it was truly an enriching experience.

I would like to thank my teachers, my classmates for believing in me and giving me this responsibility.

Nancy
(CR 2nd year)

"Information is not knowledge. The only source of knowledge is experience. You need experience to gain wisdom."
- Albert Einstein

Our college has played a significant role in each student's life. Miranda House helped us to evolve from kids to sensible and intellectual people. I'm obliged to get education in such a prestigious institute. It has taught me to be ambitious to reach the pinnacle but at the same time be humble person. I feel very privileged to have been elected as the class representative for second year botany department. Being appointed as the CR is indeed a great achievement for me and the very fact allowed me to increase my confidence and determination. Sharing this experience and leadership with my fellow classmates is an honour. I'm very much thankful to everyone who have shown faith in me and gave me the opportunity of becoming the CR.

I am honoured to be a part of one of India's top colleges, Miranda House which is widely known for its legacy and superiority and also to be the CR of 1st year in the Botany department.
I have engrained so many practices in my life which I have learned here working in different societies and our department as well.
With the utmost exposure to various activities which I got to do here, I always needed these exposures to get started with better experiences which I can apply to achieve better things in future. This institution has given me all the things which are favourable to look forward to having the greatest life ahead.
I am extremely thankful to everyone here whom i met and learned bits of good beings.

Jiya Janvi Singh
(CR 1st year)

Editoral Board

Left to Right - Samridhi Upadhyaya (1st year), Shailza Bhati (2nd year), Shubhra Singh (3rd year), Lenthoibi Thokchom (1st year) & Yoshita Bhardwaj (2nd year).

EDITORIAL

Lenthoibi Thokchom

Hello everyone!! First of all, I heartily welcome everyone to the Quisqualis we prepared with love. Our team took great care to display the talents of our students through this magazine. As a newbie myself, being a 1st year student, the seniors helped and guided me alot. throughout this journey. I would proudly say, I've learnt and experienced many new stuffs and becoming a part of this Editorial Board is the best thing I've done so far after joining this college.

It was truly a ground of learning. As much as we enjoyed & learnt while making this magazine, I sincerely hope you all enjoy and learn through each of these pages as well. Your enjoyment and every piece of new knowledge gained would truly be a blessing to me, editorial team and our efforts.

. Thank you and goodbye for now!!! -

Samridhi Upadhyaya

Hola Amigos!

Welcome to Quisqualis. Fasten your seatbelts and get ready to explore the world of Botany- a wholesome reading experience that'll not only enrich you with amazing facts but also entertain you with fun crosswords, beautiful sketches and some awesome photographs! Sounds interesting right?

So here I am- Samridhi Upadhyaya, a first year student, along with my team- all excited to present this magazine to you all! Working on this magazine was so much fun and a great learning experience. I extend my heartfelt gratitude to the seniors for guiding me throughout the making of this magazine on how to go about all the little details and help bringing out my full potential! Hope you enjoy reading the magazine and gain the most out of each page.

Yoshita Bhardwaj

Still seems like yesterday was the day I found out that I made it to Miranda and today I sit again to pen the Editorial message. Being part of the EB not once but twice consecutively is a moment of great pride and happiness for me. I would like to specially thank our society conveners, Sommdutta ma'am and Neetu ma'am for giving us this platform to express our ideas and talents through this magazine. And also heartfelt gratitude to our President, Shubhra Didi for selecting me and counting upon me always.

The capacity to learn is a gift, the ability to learn is a skill, and the willingness to learn is a choice. From aesthetic infrastructure to the confluence of diversity, MH provides us all to shine bright and I'm blessed to be reposed with the trust of my teachers, seniors, juniors and my classmates.

But making a magazine is never a easy task to do, it takes the labour of love, passion and patience when the deadlines stare our faces. And then, you feel the exburent creativity in ***Quisqualis***, an amalgam of efforts, talents and creativity.

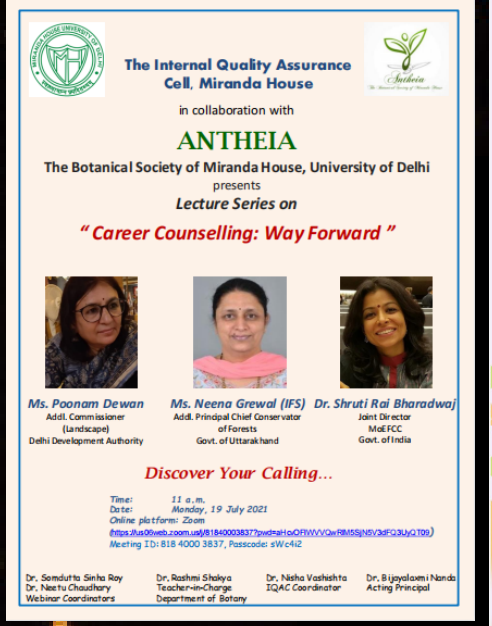
As ***Quisqualis*** bathe the ambience with an everlasting fragrance, I along with my co-editors hope you relish this piece of work with sheer joy!

Shailza Bhati

Hello Everyone,

I shailza welcome you all to the botanical world of our department through this yearly magazine ***QuisQualis*** edition. Working on which was a great moment of gratification. This was indeed a new & fruitful experience. This is achieved by integrated efforts of all the students who gave their pretty entries - insightful articles, delightful photographs, inspiring poems, their enriched experiences & beautiful paintings. The editorial team members are easy to work with, they always had a cheering mood, learned a lot of new elements to do from my senior & juniors too, which finally led to the completion & splendid execution of this ***QuisQualis*** edition. I hope you all enjoy reading it as much as I enjoyed editing it.

HAPPY READING



Flashback
2021 - 22 shows
the journey of the
academic year

REWIND 2021 - 22

FAREWELL

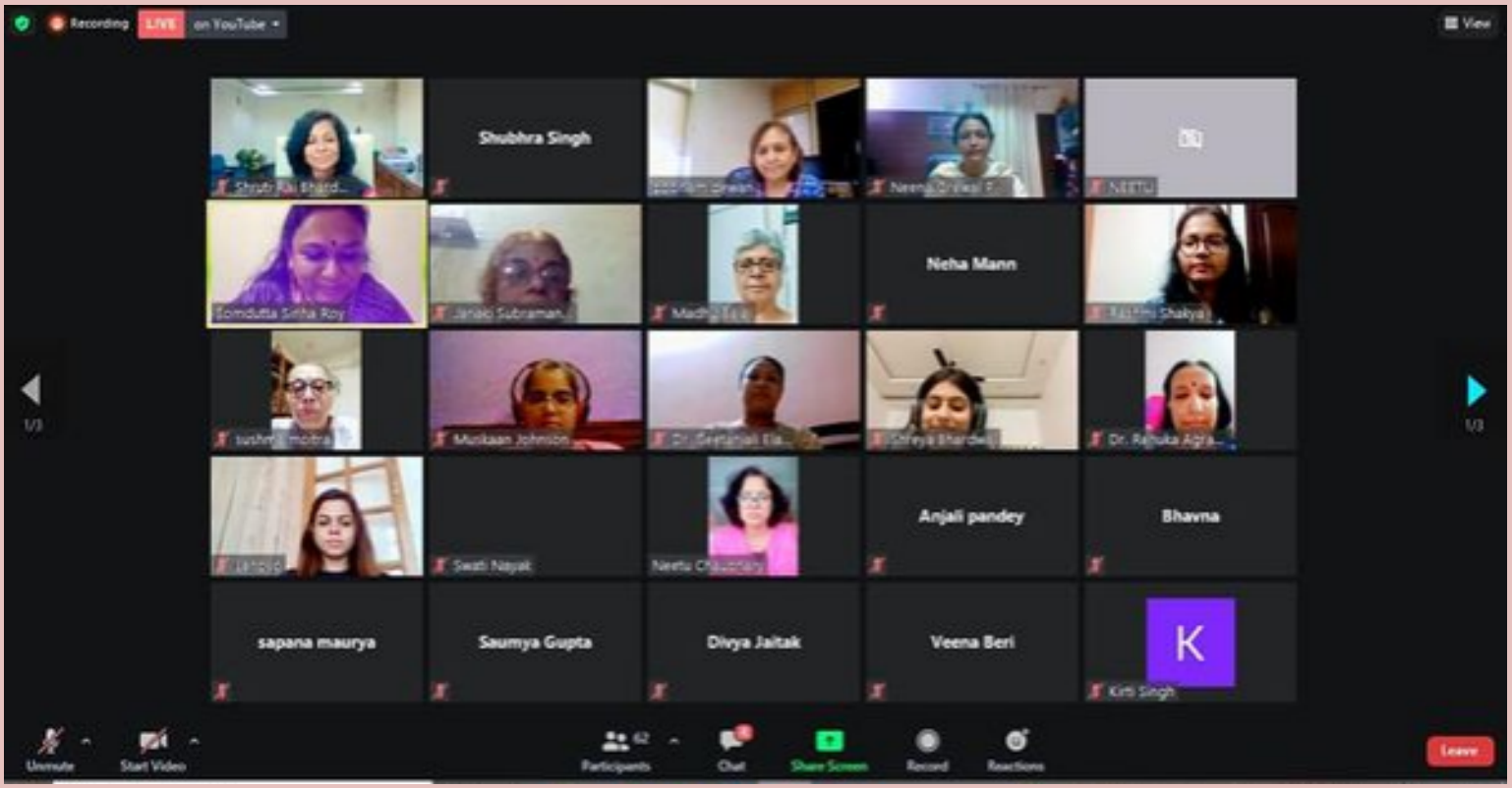
Farewell, batch'21 – Celebrated as Revoir'21, we bid farewell to the batch of 2021 in the Department of Botany with a heavy heart and teary smile. Students of the First & second-year organized Revoir on 6th July 2021 via a google meet platform. On this day, Titles had distributed to each senior. Swati Nayak was awarded the Best Student Award by Dr Janaki Subramanyan. E-Certificates were distributed to former union members. The event was concluded with uplifting and touching messages from teachers and lab staff members. Beautiful videos were videoed and presented by Juniors of the first and second years. The event was beautifully hosted by Gitanjali and Kirti Singh of the 3rd year.

Seniors were the guiding lamps and a constant citation of motivation and encouragement for Juniors. They will be remembered for the reservoir of knowledge they own and share with us from time to time.

The juniors heartly miss them.

CAREER COUNSELLING SESSION

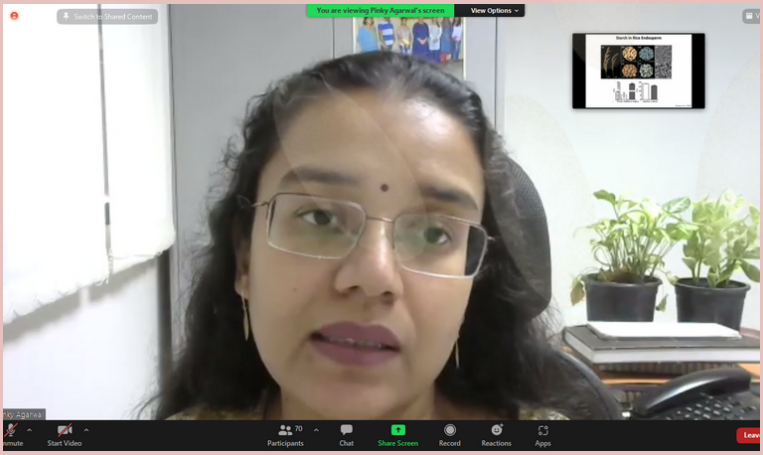
Antheia, The Botanical Society of Miranda House, in collaboration with The Internal Quality Assurance Cell, MH had organized a webinar on "Career counselling: Way Forward" on 19 July 2021, in which students were made knowledgeable of the eclectic career prospects that lie in the domain of Botany which they can opt to evolve directional.
Guest speakers Ms Poonam Dewan, Ms Neena Grewal and Dr Shruti Rai Bharadwaj shed light on various career options and efficient methodologies and strategies that will undoubtedly deliver desirable outcomes and accomplishments when followed.
Students were uplifted by the informative lecture delivered by the guests, and they were grateful to teachers for organizing such an indispensable lecture for Students of the Department of Botany.

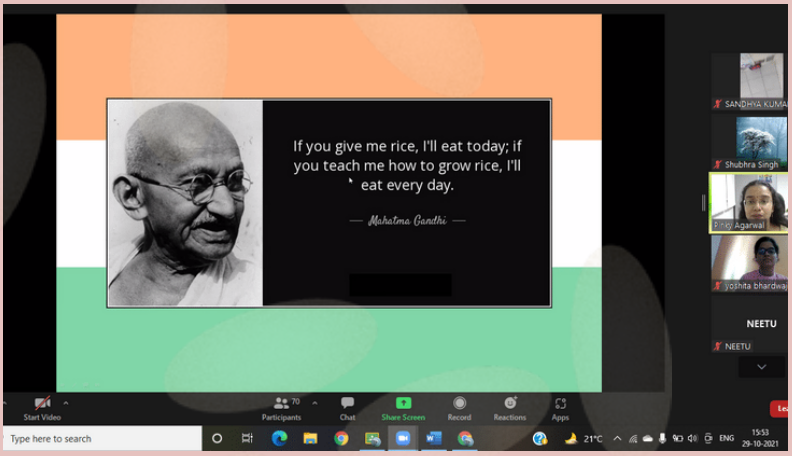


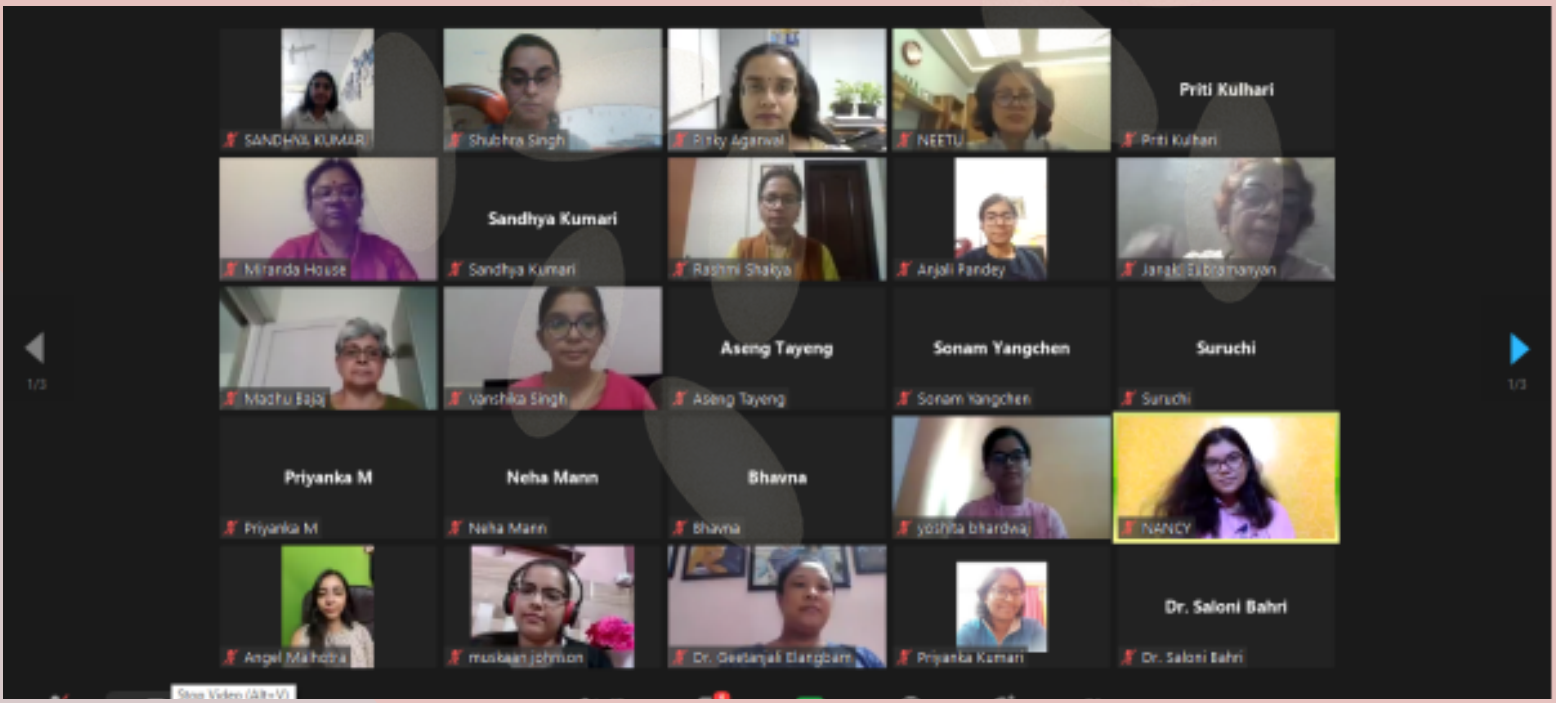
WEBINAR

Antheia, the Botanical Society of Miranda House, had organized a webinar entitled as Rice grain, a staple food for all delivered by Dr Pinky Aggarwal, a full time working scientist placed in the National Institute of Plant Genome Research, New Delhi, on 29 October 2021 via a Zoom platform. The lecture was corely based on the Genomic alternation taking place in India to improve the yield and nutrition content of existing varieties of Rice. Dr, Pinki Aggarwal has completed her thesis Titled "Transcriptome analysis during rice seed development in Indica rice and characterization of seed-preferential genes/promoters in transgenic systems". She has a very vivid range of publications and books or articles in her name. A total of 23 research publications in various categories and four books. She is an excellent academician, but her aura is of a diamond. Hence she also takes her creative insights to heights by the chairperson of the wall magazine committee.

People say do what you love, and you would achieve great heights; with this thought, Dr Pinky worked and achieved several laurels to herself. She received JRF/SRF - NET FELLOWSHIP UNDER CSIR/UGC in 2003. They were followed by INSA YOUNG SCIENTIST'S AWARD UNDER INSA (The Indian national science academy 2012). Antheian have a highly intellectual time with Ma'am learning about various fields and laboratories procedures going on existing rice varieties on a Genomic basis.



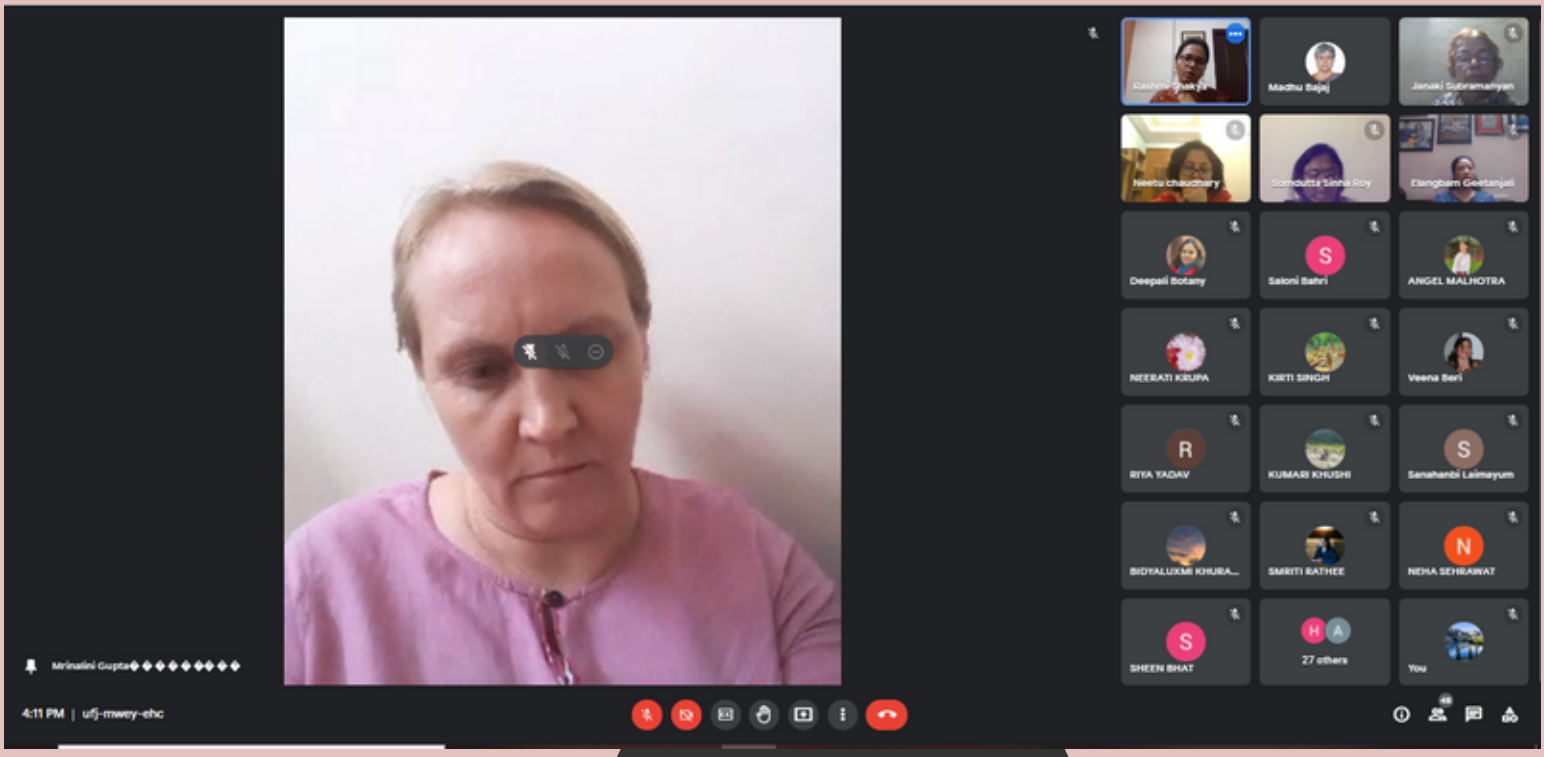


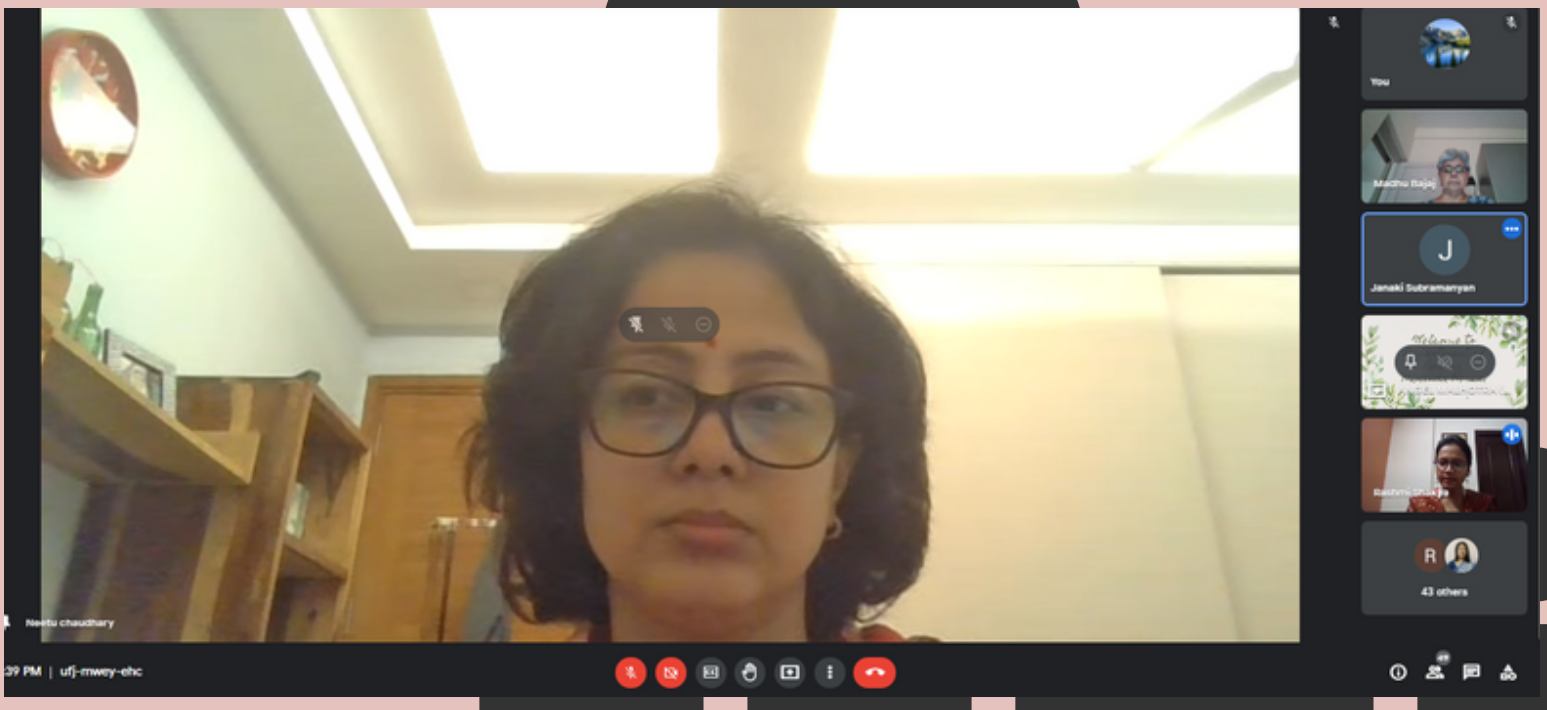


MEETING

P T M

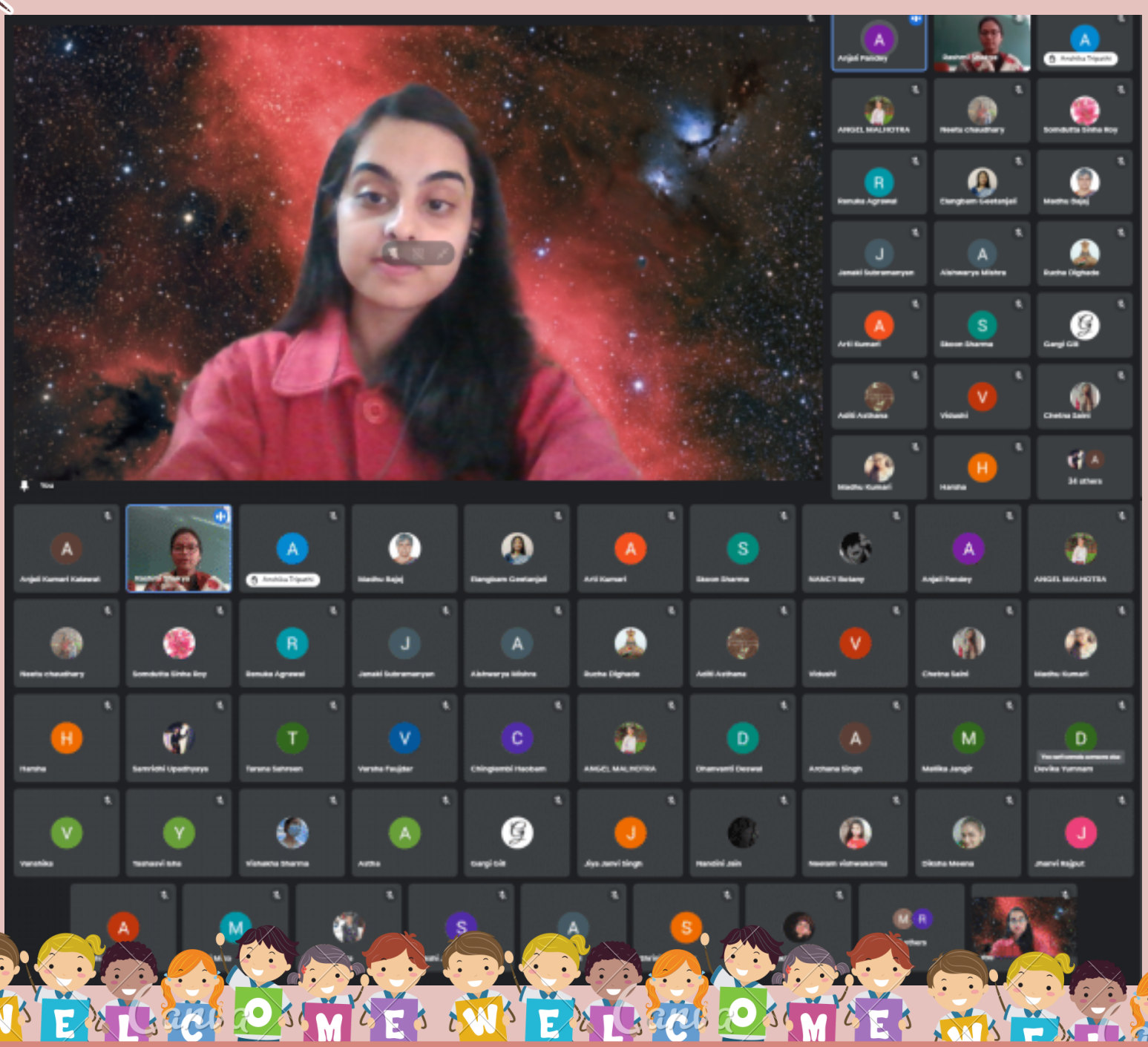
A virtual PTM of the Botany department was held on 8 October 2021 via the google meet platform. Teachers of the Botany department had discussions with parents on various problems students faced while attending online classes and gave detailed evaluations on a semester basis. The event was commenced by a Presentation given by Angel Malhotra, General secretory of Botany Department, to provide a gist to parents about college and department of Botany as a whole and it was concluded by Head of Department, Rashmi Shakya after clearing all the doubts and queries which parents had altogether.





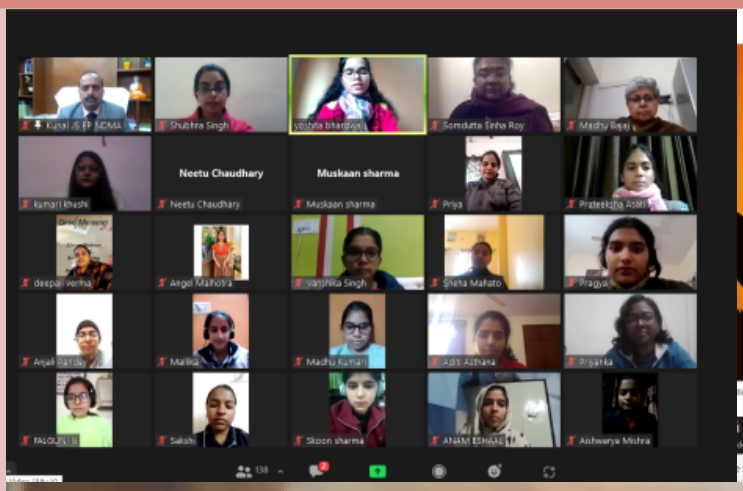
ORIENTATION

The new batch orientation was conducted virtually on 22nd November 2021 via the Google Meet Platform. It was attended by all the teachers, union members and First-year students. In this event, Shubhra Singh, President of the Botany department, gave a presentation comprising pictorial information about teachers, lab staff members, teaching laboratories, herbal and botanical gardens etc., which gave the fair idea to the First-year students about the structural Orientation of various sections of Department of Botany. Furthermore, Freshers were explained about different events and competitions organised by Antheia, the Botanical Society of Miranda House. Orientation was efficiently moderated by the Head of Department, Rashmi Shakya and Staff advisors, Somdutta Sinha Roy and Neetu Chaudhary. Teachers and union members gave a formal introduction and welcomed the new batch to Miranda house. The event was concluded with best wishes from teachers to first-year students.



INAUGURAL LECTURE

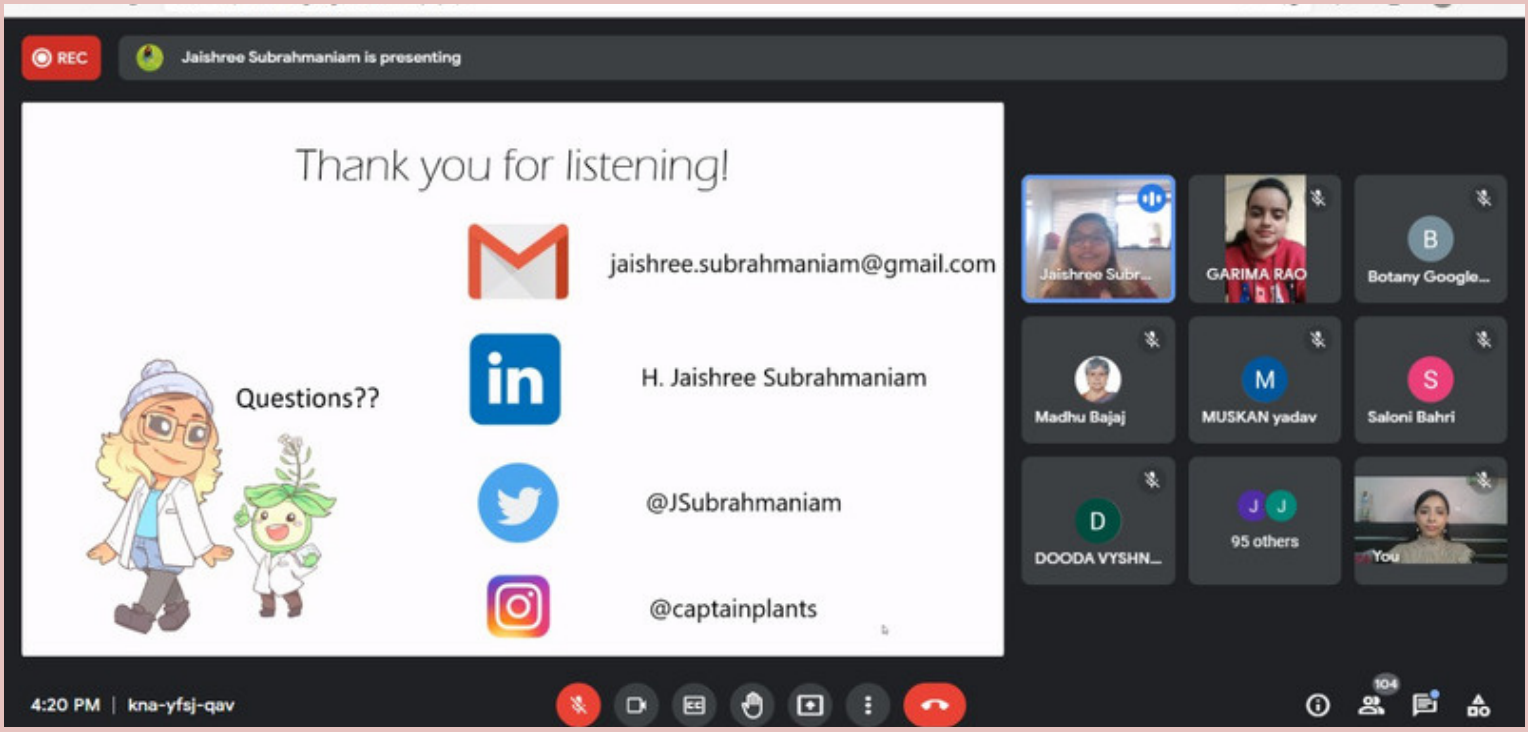
The Inaugural lecture of Antheia, the Botanical Society of Miranda House, was held on 19th January at 11 am via the Zoom platform. It was delivered by Kunal Satyarthi, an Indian forest service officer from the 1997 batch of Himachal Pradesh cadre. He pursued his M.Sc. and M.Phil in Botany from the University of Delhi. He further received his master's degree in public policy from Australian National University, Canberra. He is currently an Advisor, Joint Secretary in Policy & Plan, National Disaster Management Authority. The lecture delivered made students aware of the grave changes in the climate taking place worldwide. It provided practical steps that, when taken, can have astounding effects to tackle the crisis happening around the globe. The lecture examined and explored devastating facts about human activities that are causing enormous harm to the environment. The honourable speaker provided insights into the ground reality and statistics. The speaker cleared all the queries and questions students held throughout the lecture. The lecture was excellently hosted by Yoshita Bhardwaj and Kumari Khushi, second-year dept students. Of Botany, Miranda house.

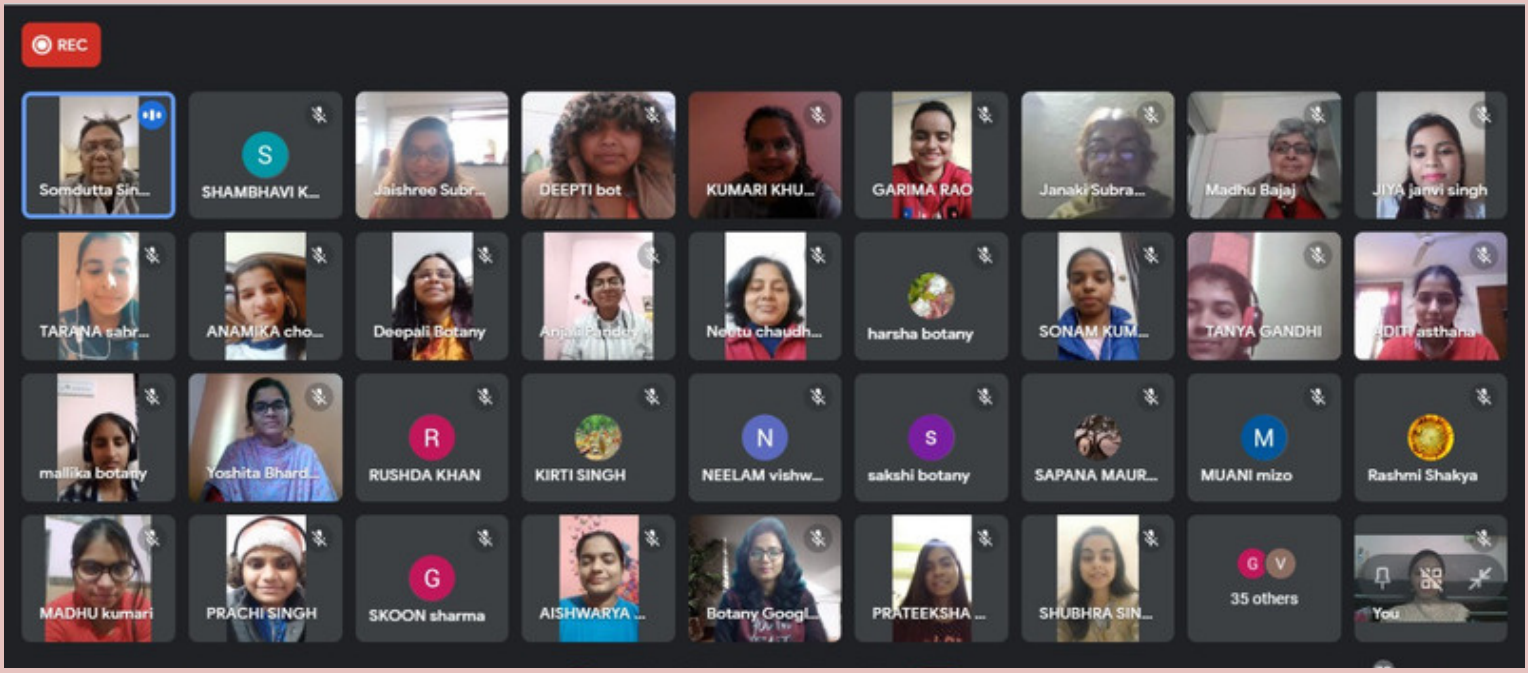


CAREER COUNSELLING SESSION

Antheia, the Botanical Society of Miranda house had organized its second career counselling session on 5th February 2022 via the google meet platform. The session was delivered by our alma- mater, Dr H. Jaishree Subrahmaniamof batch 2010-2015. She enlightened the students by sharing her experiences and insights related to various life incidents, starting from joining Miranda House to researching Plant sciences by receiving multiple grants and scholarships, which she obtained by achieving the highest marks and positions during her undergrad postgrad degrees.

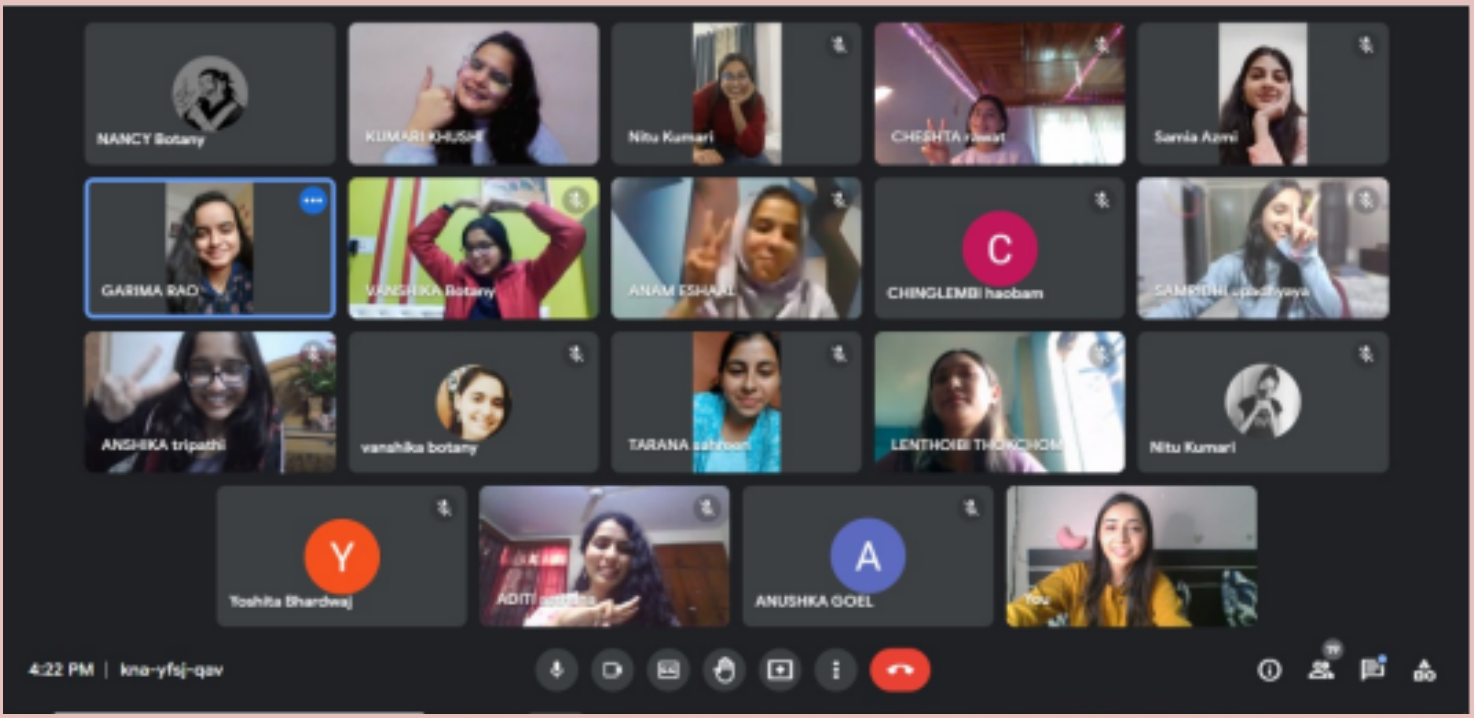
Her lectures taught students not to lose hope in adversity, take decisions wisely, and walk on the path they have drawn for themselves. The event was moderated smoothly by Angel Malhotra and Garima Rao of the Department of Botany, 2nd year.





FRESHERS

Antheia, the Botanical Society of MH, had organized its annual freshers on 8 February 2022 via a google meet platform. Students of the 2nd and 3rd year have videoed many meaningful and exquisite videos, and the event was smoothly moderated by Kumari Khushi and Nancy of the 2nd year. Various titles were presented to the students like miss diva was given to Shaheen, miss talented was granted Jointly to Lenthoibi and Chestha and miss Freshers to Chinglembi. Teachers and students had fun-filled interactive session thoroughly.



K O S H I K A

The Annual Botanical fest of Miranda House: Koshika, was conducted on 11th April 2022 in offline mode. It had a series of four competitions and one guest lecture by a prominent scientist in the field of microbiology

K O S H I K A

Judges: Dr. Saloni Bahri and Dr. Deepali

Winners:
First prize: Yoshita Bhardwaj, Sandhya Kumari & Aastha (B.Sc Botany (H), Miranda House)
Second Prize: Vanshika and Archana Singh (B.Sc Botany (H), Miranda House).

Prizes distributed: Certificates and social media shout- outs for winners and cash prize for first, second winners were ₹ 500 & ₹ 300 respectively.

Judges: Dr. Renuka Agrawal and Dr. Priyanka Rathore.

Winners
First prize: Priyanka Kumari (B.S c Botany (H), Miranda House).
Second Prize: Deepti (B.S c Botany (H), Miranda House).

Prizes distributed: Certificates and Social Media shout- outsfor winners and cash prize for first and second winners were ₹ 500 and ₹ 300 respectively.

K O S H I K A

Judges: Dr. Rashmi Shakya & Dr. Priti Giri.

Winners

First prize: Vikash Shrivas(B.S c Physics (H), Hindu College).

Second Prize: Rucha Dighade(B.S c Botany (H), Miranda House).

Prizes distributed: Certificates and Social Media shout- outsfor winners and cash prize for first and second winners were ₹ 500 and ₹ 300 respectively.

Judges: Dr. Somdutta Sinha Roy & Dr. Neetu Chaudhary.

Winners

First prize: Bhagyalakshmi, Niharika & Sindhu (Miranda House).

Second Prize: Rucha, Anshika & Samridhi (B.S c Botany (H), Miranda House).

Prizes distributed: Certificates and Social Media shout- outsfor winners and cash prize for first and second winners were ₹ 500 and ₹ 300 respectively.

COMPETITIONS HELD BY ANTHEIA

Name of the competition-
Saugandh Mujhe iss mitti ki(Botany under the shade of Tricolour)
Held on-15 August, 2021
Position holders- Anjali Narnolia MH, Chemistry Hons.,1st position

Name of the competition-
Save ozone, save the earth(poster making competition)
Held on-14 Sept. 2021
Position holders-
Tamanna Sharma Gargi College, Botany Hons. 1st Position
Prachi Swami Shraddhanand College, Life sciences, 2nd Position
Vanshita Khangarot Gargi College, Botany Hons. 3rd Position

Name of the competition-
World Heart day(quiz competition)
Held on-27 Sept. 2021
Position holders-
Bhavna MH, History Hons., 1st Position
Yoshita bhardwaj MH, Botany Hons., 2nd Position
Vineeta Singh MH, Botany Hons, 3rd Position

Name of the competition-
Rangoli Botany Wali(Rangoli making competition)
Held on- 30 Oct. 2021
Position Holders-
Ishita Sukhija MH, Life sciences, 1st Position
Vanshika MH, Botany Hons, 2nd Position
Arshiya Srivastava MH, computer science, 3rd Position

Name of the competition-
World wetland day(Article Writing competition)
Held on- 1 Feb. 2022
Position Holders-

ANTHEIA'S NEWSLETTER

September 2021

NEWSLETTER

ARBORETUM

Antheia

The Botanical Society , Miranda House , University of Delhi

Antheia - The Botanical Society of Miranda House presents to you the very first edition of 'ARBORETUM - our monthly newsletter'. Filled with highly informative and enlightening content which will provide you treasure trove of knowledge.
Experience the essence of sustainability, environmental issues, cool facts, exciting games and much more, through the Shapeshifters "Shimmer" and "Glimmer" who will be starring as "Beany" and "Coco" in this issue of our newsletter.
Celebrating 'Coconut Day', we present you the "Coconut Theme" of ARBORETUM

SHAPE SHIFTERS

will be starring as

COCONUT

So it is well said by BERTOTT BERCHT that' Love is like the COCONUT which is good while it is fresh, but you have to spit it out when the juice is gone. what is left just tastes bitter'

So, it is 2nd September and this day is celebrated as the world coconut day . it is probably the best occasion to know about this DRUPE fruit with enormous amount of valuable qualities.so first of all ,coconut tree (Cocos nucifera) is an individual from the palm tree family (Arecaceae) and the main living types of the variety Cocos. The expression "coconut" (or the ancient "cocoanut") can allude to the entire coconut palm, the seed, or the natural product, which organically is a drupe, not a nut.
A single coconut palm may yield 100 coconuts annually, and each fruit requires a year to fully ripen. Mature coconuts, ovoid or ellipsoid in shape, 300–450 mm (12–18 inches) in length and 150–200 mm (6–8 inches) in diameter, have a thick fibrous husk surrounding the familiar single-seeded nut of commerce. A hard shell encloses the insignificant embryo with its abundant endosperm, composed of both meat and liquid. Coconut fruits float readily and have been dispersed widely by ocean currents and by humans throughout the tropics.

Economic importance:

It is one of the most valuable trees on the planet, and is frequently alluded to as the "tree of life". It gives food, fuel, beautifying agents, people medication and building materials, among numerous different employments. The internal substance of the develop seed, just as the coconut milk separated from it, shapes an ordinary piece of the weight control plans of numerous individuals in the tropics and subtropics. Coconuts are particular from different natural products on the grounds that their endosperm contains an enormous amount of clear fluid, called coconut water or coconut juice. Develop, ready coconuts can be utilized as eatable seeds, or handled for oil and plant milk from the tissue, charcoal from the hard shell, and coir from the sinewy husk. Dried coconut substance is called copra, and the oil and milk got from it are ordinarily utilized in cooking – broiling specifically – just as in cleansers and beauty care products, as well as in soaps and cosmetics. Sweet coconut sap can be made into drinks or fermented into palm wine or coconut vinegar. The hard shells, fibrous husks and long pinnate leaves can be used as material to make a variety of products for furnishing and decoration.The hard shells, sinewy husks and long pinnate leaves can be utilized as material to make an assortment of items for outfitting and embellishment

Religious Values:

The coconut has cultural and religious significance in certain societies, particularly in the Western Pacific Austronesian cultures where it features in the mythologies, songs, and oral traditions. It also had ceremonial importance in pre-colonial animistic religions. It has also acquired religious significance in South Asian cultures, where it is used in Hindu rituals. It forms the basis of wedding and worship rituals in Tamil culture. It also plays a central role in the Coconut Religion of Vietnam. The falling nature of their mature fruit has led to preoccupation with death by coconut.

NEWSLETTER

ARBORETUM

ANTHEIA

The Botanical Society, Miranda House, University of Delhi

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Experience the essence of sustainability, environmental issues, cool facts, exciting games, and much more, through the Shapeshifters "Shimmer" and "Glimmer" who will be starring as "Latte" and "Mocha" in this issue of our newsletter.
Celebrating 'International Coffee Day', we present you the "Coffee Theme" of ARBORETUM.

Shape shifters

Shimmer

Glimmer

Episode 2

Will be starring as

LATTE

MOCHA

INTERNATIONAL COFFEE DAY

##OCTOBER 1 - INTERNATIONAL COFFEE DAY

When do you say what goes best with Coffee? I'd say another cup, maybe ;)

Now is the time to enjoy life's simplest pleasures. Whether you prefer Americanos or lattes, with milk or without milk, hot or iced, coffee is a drink of all occasions. So, in honour of the **INTERNATIONAL COFFEE DAY,** take a moment to indulge in the world's most famous beverage.

Coffea is a genus of flowering plants in the **family Rubiaceae**. *Coffea* species are shrubs or small trees native to tropical and southern Africa and tropical Asia. The seeds of some species, called coffee beans, are used to flavour various beverages and products. The fruits, like the seeds, contain a large amount of caffeine, have a distinctly sweet taste, and are often juiced. The plant ranks as one of the world's most valuable and widely traded commodity crops. It is an important export product of several countries, including Central and South America, the Caribbean, and Africa.

So the first question is, **IS COFFEE GOOD FOR YOU?** Yes. In moderation, Coffee seems suitable for most people — that's 3 to 5 cups daily or up to 400 milligrams of caffeine.

"The evidence is pretty consistent that coffee is associated with a lower risk of mortality". In addition, experts say some of the most potent protective effects may be with Type 2 diabetes, Parkinson's disease, and liver conditions such as cirrhosis, liver cancer, and chronic liver disease.

ARBORETUM

Monthly Newsletter

ANTHEIA

THE BOTANICAL SOCIETY , MIRANDA HOUSE , UNIVERSITY OF DELHI

November 2021

Volume 3

Inside this Issue :

FLORAL FIESTA

A dive into two floral festivals 'Bathukamma' and 'Phulera'

THE BLOOMING TALES OF CHERRY BLOSSOM

Genesis of winters with the beauty of blossoms

ORGANIC RANGOLI

Festivals are incomplete without spreading colors
Let's not let chemicals ruin it

GREEN CRACKERS

Enjoying the festive vibes while caring for nature

GREEN PURIFIERS

Plant a tree so that the next generation can get air for free

ARBORETUM

MONTHLY NEWSLETTER

ANTHEIA

THE BOTANICAL SOCIETY OF MIRANDA HOUSE

DECEMBER 2021

VOLUME 4

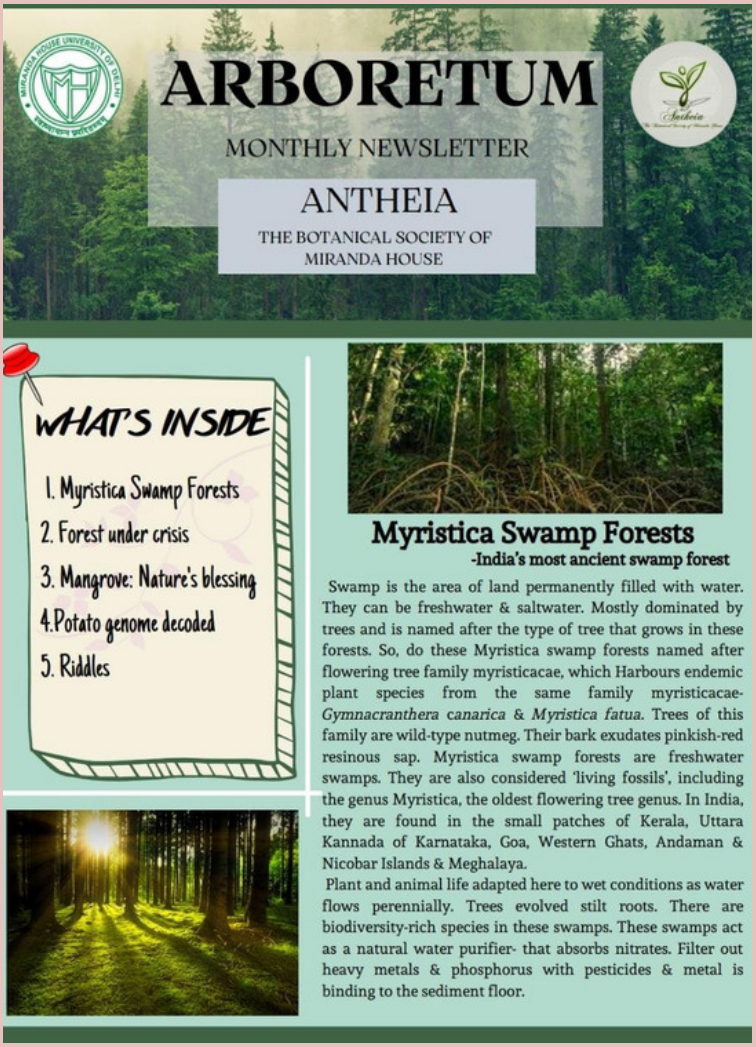
WHAT'S INSIDE

- INTERNATIONAL MOUNTAIN DAY
- BLOOMING BLOSSOMS: UNIQUE MOUNTAINOUS FLORAS
- THE SAVIOURS
- KISHAN DIWAS
- ANTHEIA'S RANGOLI COMPETITION
- THE TWO TALES OF CHRISTMAS
- TYPES OF CHRISTMAS TREES

International Mountain Day

#Mountainmatters

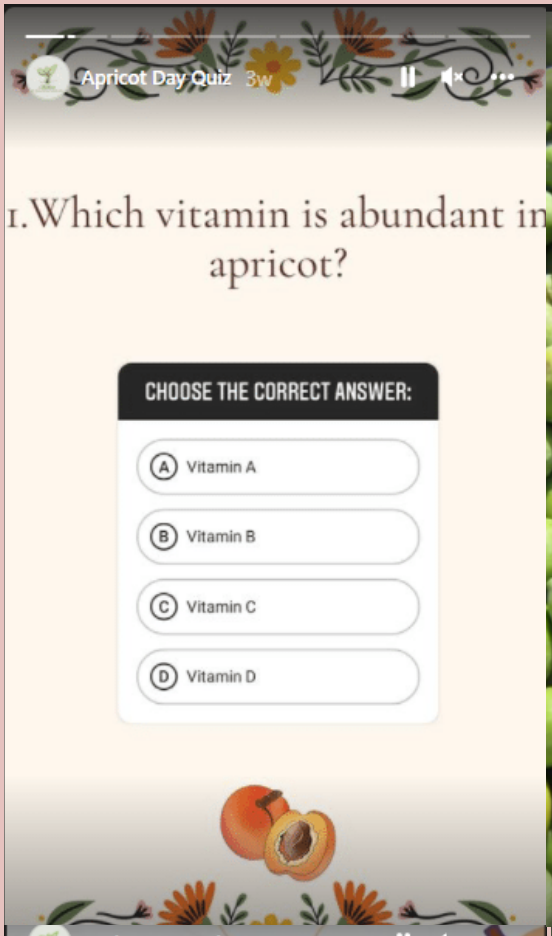
International Mountain Day is celebrated annually on **11th December** to **raise awareness** about the importance of mountains in our lives, highlight the opportunities and constraints in mountain development, and build alliances that will bring positive change to mountain people and environments around the world.

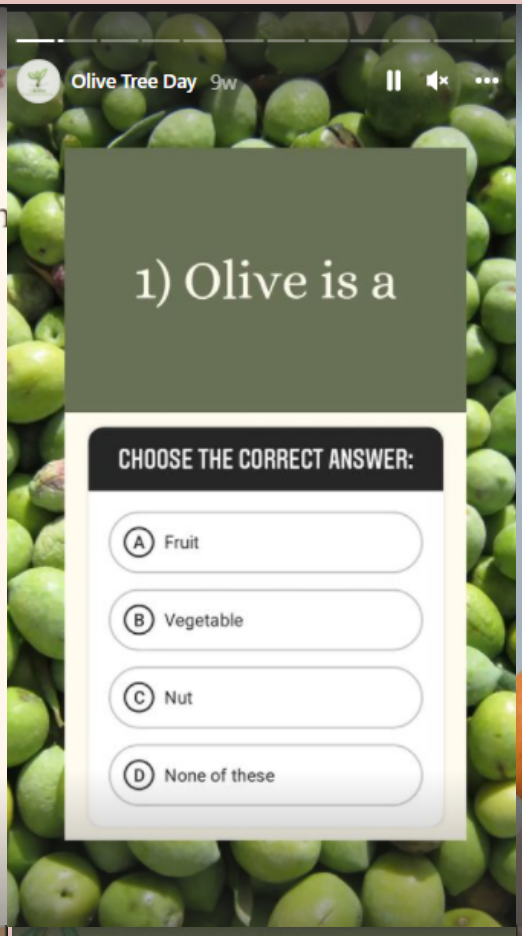


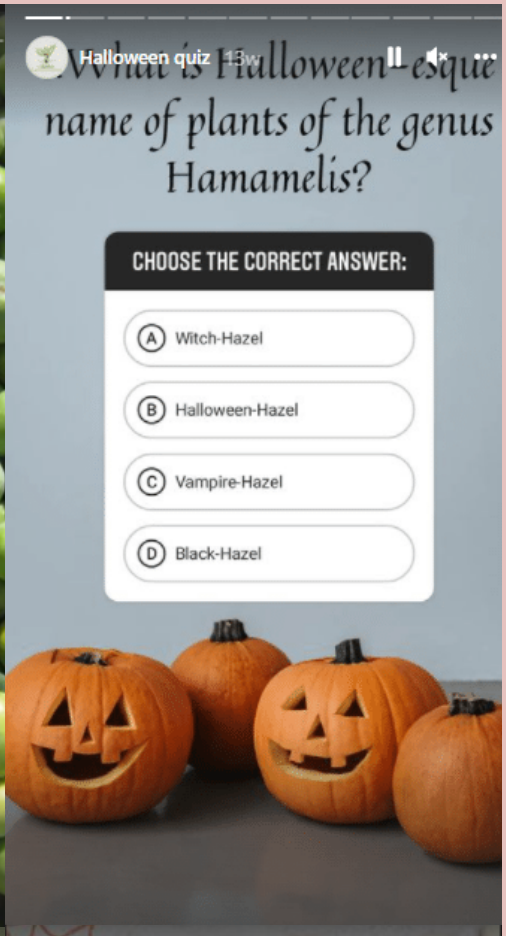
"The colour and shape of flowers are a precise record of what bees find attractive
"

— Frederick Turner

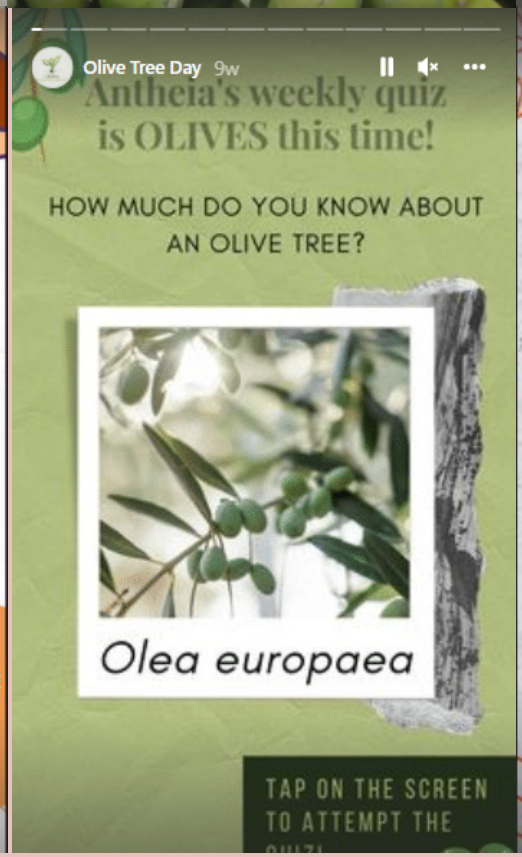
WEEKLY QUIZ


Apricot Day Quiz 3w
1.Which vitamin is abundant in apricot?
CHOOSE THE CORRECT ANSWER:
A Vitamin A
B Vitamin B
C Vitamin C
D Vitamin D


Olive Tree Day 9w
1) Olive is a
CHOOSE THE CORRECT ANSWER:
A Fruit
B Vegetable
C Nut
D None of these


Halloween quiz 13w
name of plants of the genus Hamamelis?
CHOOSE THE CORRECT ANSWER:
A Witch-Hazel
B Halloween-Hazel
C Vampire-Hazel
D Black-Hazel


Apricot Day Quiz 3w
Antheia's quiz is entirely about Apricots, this week!
SO, ARE YOU READY TO TEST YOUR KNOWLEDGE ABOUT APRICOTS
TAP ON THE SCREEN TO ATTEMPT THE QUIZ
Prunus armeniaca


Olive Tree Day 9w
Antheia's weekly quiz is OLIVES this time!
HOW MUCH DO YOU KNOW ABOUT AN OLIVE TREE?
Olea europaea
TAP ON THE SCREEN TO ATTEMPT THE


Halloween quiz 13w
Happy Howl-oween!
Antheia's
Weekly Quiz is all about spooky season this time
TIME TO GET SPOOKY!
Tap on the screen to attempt the quiz!
Shoutout to all the winners!

Archiever's Arena

INTRA-COLLEGE COMPETITIONS

NAME AND YEAR	EVENT	POSITION
Lenthoibi Thokchom 1st year	Comic Strip Making Competition, MH Vatavaran	1st position
	Izhar-e-adventure (Diary writing competition), Adventure Club.	1st position
	Ppt cum video making competition, Mh Vatavaran	2nd position

Archiever's Arena

INTRA-COLLEGE COMPETITIONS

NAME AND YEAR	EVENT	POSITION
Kumari Khushi	-Story telling of department of elementary education.	1st position
	-Scishot of ananta science society of indraprastha college for women.	4th position

YOSHITA BHARDWAJ from second year was awarded the BEST ACTRESS 2021 - 22 AWARD BY THEATRE CIRCUIT, UNIVERSITY OF DELHI AND ALSO SHE BEING A PART OF ANUKIRTI - THE HINDI DRAMATIC SOCIETY BAGGED FIRST POSITION IN STAGE PLAY

Archiever's Arena

INTER-COLLEGE COMPETITIONS

NAME AND YEAR	EVENT	POSITION
YOSHITA BHARDWAJ	-REPRESENTED MIRANDA HOUSE AT THE NATIONAL YOUTH PARLIAMENT 2022 IN FEBRUARY 2022	FIRST POSITION
	-SLOGAN WRITING COMPETITION BY NSS KHALSA COLLEGE	SECOND POSITION
	-IPR QUIZ BY HANS RAJ COLLEGE	
	-FOLK DANCE COMPETITION BY UMEEDxZHDC	FIRST POSITION IN SOLO CATEGORY
	-BEST OUT OF WASTE HELD BY NSS VENKETWESKAR COLLEGE	FIRST POSITION
	-POSTER MAKING COMPETITION BY KIRORI MAL COLLEGE, LIFE SCIENCES DEPARTMENT	THIRD POSITION
	-TREASURE HUNT BIOMINATI HELD BY KHALSA COLLEGE	FIRST POSITION

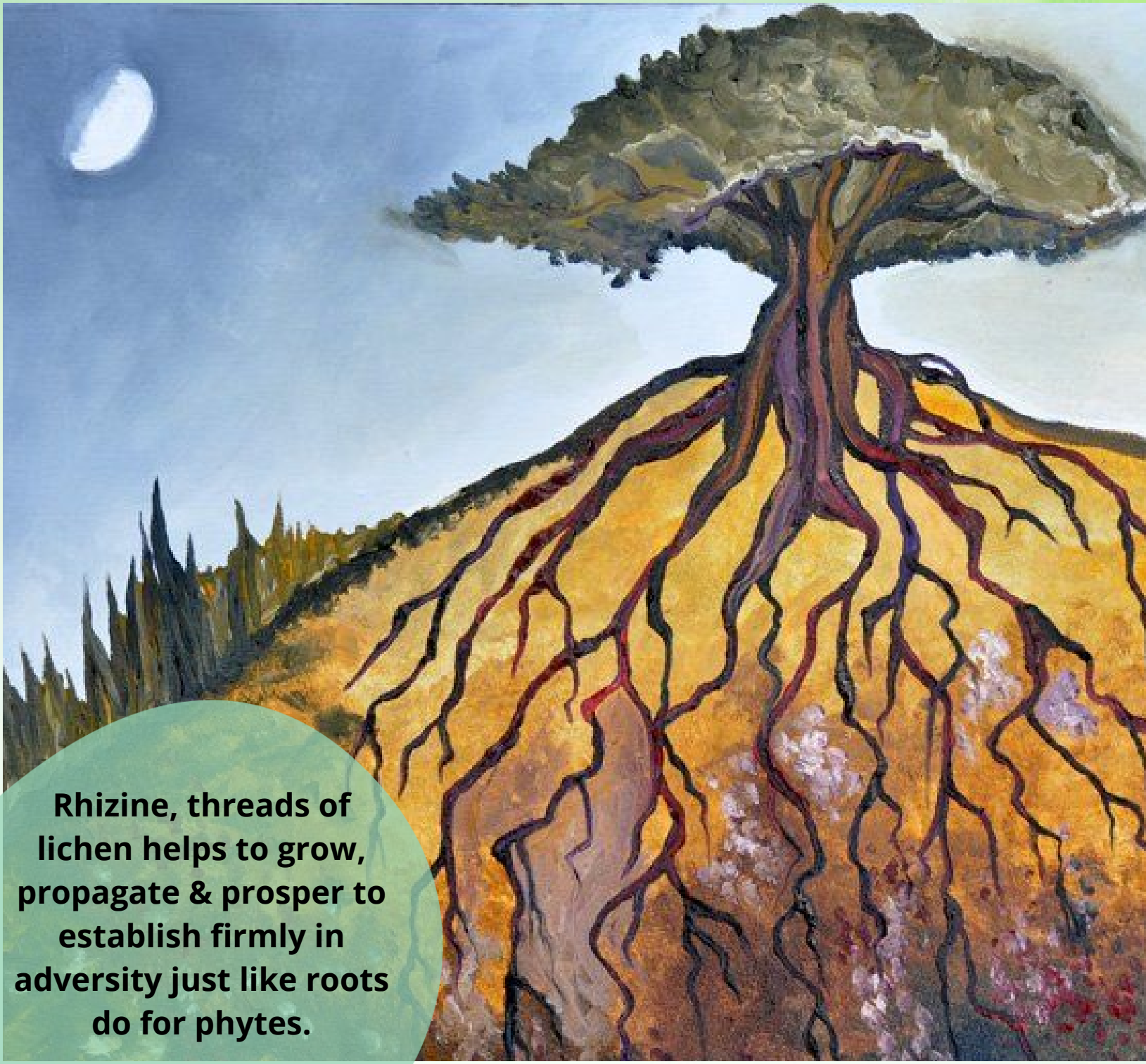
Archiever's Arena

INTER-COLLEGE COMPETITIONS

NAME AND YEAR	EVENT	POSITION
KUMARI KHUSHI	-ONE MINUTE COMPETITION OF ADVENTURE CLUB	SECOND POSITION
	-COMIC STRIP MAKING COMPETITION OF MH VATAVARAN	SECOND POSITION
YOSHITA BHARDWAJ	-Poster making competition By Gandhi Study Circle.	2nd Position
	-World Heart day quiz	2nd Position
	-Travelogue the Safarnama Competition In Globe 2022.	1st Position

RHIZINE

THE BOTANICAL ARTICLES SECTION



Rhizine, threads of lichen helps to grow, propagate & prosper to establish firmly in adversity just like roots do for phytes.

Trojan Horse: Safe Killer

Researchers have successfully tested a new drug that can kill cancer cells without damaging nearby healthy tissue - removing the need for chemotherapy. Scientists at the University of Edinburgh combined the tiny cancer-killing molecule called SeNBD with a chemical food to trick the harmful cells into ingesting it. Cancerous cells are 'greedy' and need to consume high amounts of food for energy and they typically ingest more than healthy cells, the experts said. By coupling SeNBD with a chemical food compound it becomes the 'ideal prey for harmful cells' which ingest it 'without being alerted to its toxic nature'. The drug was invented by University of Edinburgh researchers who compared it to a 'Trojan Horse', and its effects to a 'metabolic warhead'. The experimental study was carried out on zebrafish and human cells, but researchers say more studies are needed to confirm if it is a safe and swift method of treating early-stage cancer and drug-resistant bacteria.

Scientists hope the treatment will boost survival rates among cancer patients and spare many from damaging chemotherapy.So far, it has only been used on glioblastoma, the most common brain cancer.

SeNBD is also a light-activated photosensitiser, meaning it kills cells only after it is turned on by visible light. This means a surgeon can precisely decide when they want to activate the drug, reducing the chances of it destroying healthy tissues and avoiding side-effects like hair loss caused by other anti-cancer agents, said the university.

The findings are published in the journal Nature.

SeNBD is one of the smallest photosensitisers ever made and its use as a "Trojan horse" opens many new opportunities in interventional medicine for killing harmful cancerous cells without affecting surrounding healthy tissue.

By-Vanshika, 1st year

GINGKO BILOBA:THE LIVING FOSSIL TREE

The Gingko biloba is known as a living "fossil tree". It's a mysterious tree and an ancient old species.

The Ginkgo tree's genetic line spans the Mesozoic Era back to the Triassic period closely related species are thought to exist for over 200 million years.

Ancient Chinese records are surprisingly complete and describe the tree as yo- chio- tree, meaning a tree with leaves like duck's feet.

Every autumn thus ginkgo biloba tree sheds an ocean of golden leaves.

High up in the Chinese zhongnan mountains, in the Buddhist Temple of Gu Guanyin, there is an ancient tree with leaves as yellow as the summer sun.

Every autumn, thousands of people flock to this 1400-year-old Ginkgo biloba to watch it shed its golden gown and transform the ground around it into a sea of colour.

When days get shorter and the weather cools in fall, plants prepare for winter by shutting off supplies of chlorophyll to their leaves. These background substances include xanthophyll, a pigment that makes things yellow such as egg yolks and the leaves of ginkgo trees in fall.

By- Harsha, 1st year

PLASTIC EATING BACTERIA

European researches identified a new bacterium that feeds on polyurethane, a kind of plastic that is difficult to recycle

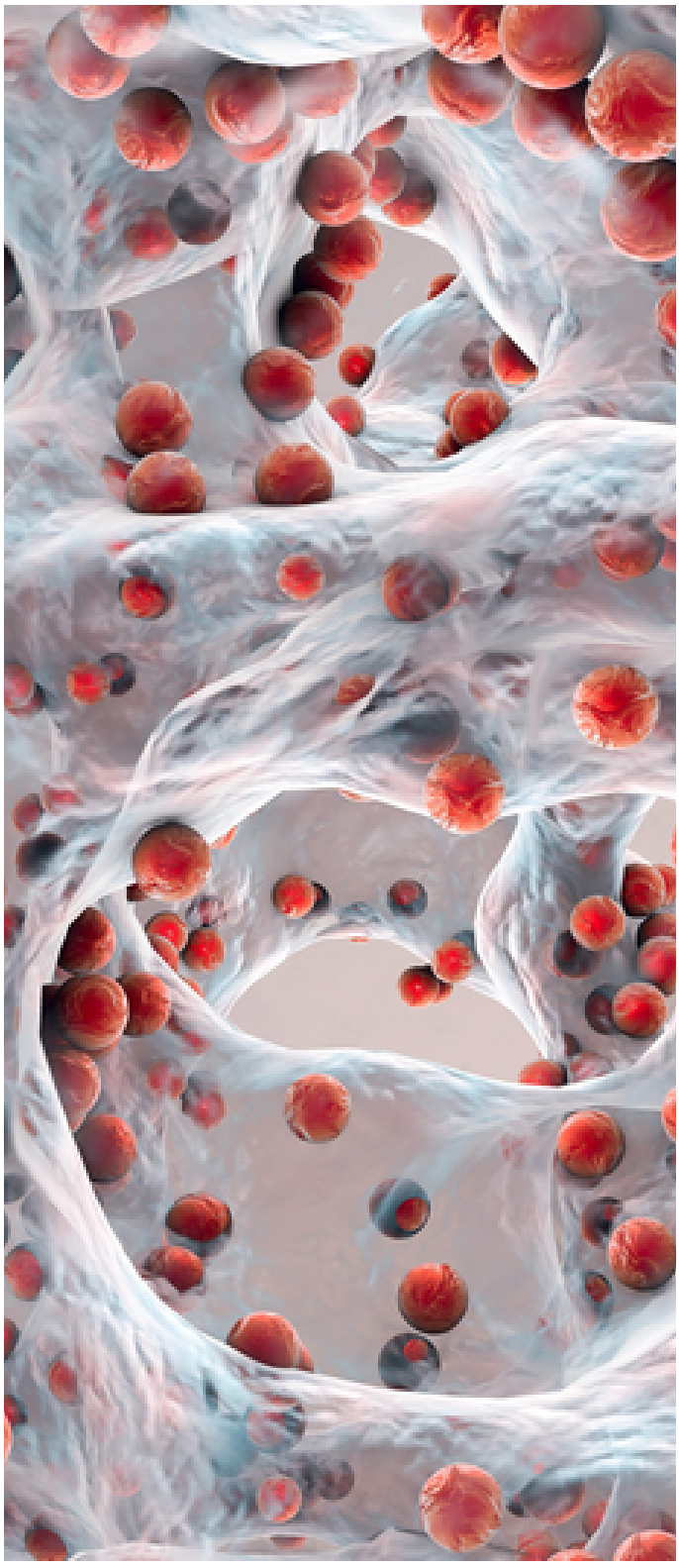
or destroy.

* The team from Germany's Helmholtz Centre for Environmental Research, said the discovery could help to reduce a flood of plastics which are hard to recycle, filling up the world's land fills and polluting oceans.

* Many polyurethane-based products can release dangerous chemicals into the environment.But the researchers found that the bacterium can produce enzymes to break down the material.

* The discovery of plastic eating bacteria happened by accident. Scientists working in Japan collected sludge from the outside of a bottle factory in Osaka and found that it contained bacteria that had evolved to 'eat' plastic.

* Named Ideonella Sakaiensis, the bacteria was able to decompose PET, a type of plastic used to make the majority of our drink bottles.



By- Madhu Kumari, 1st year

TOMATOES POSSES A NERVOUS SYSTEM

We all know, that human nervous systems have specialized cells called neurons to stand electrical signals between different parts of the body. Since plants lack neurons, they have long thin tubes called xylem and phloem for moving sap between their roots, leaves and fruits. Charged ions flowing in and out of these tubes can propagate electrical signals around different parts of the plant in a way similar to neurons. Although much knowledge has not been gained about the process that occurs in plants but during a study, it was found that tomatoes that are eaten by insects use electrical signals to send an alert to the rest of the plant, similar to the way our nervous systems warns off damage. Previous work found that leaves that are physically damaged sent electrical signals to other leaves. In a new study, Gabriela Niemeyer Reissig and her colleagues, at the Federal University of Pelotas in Brazil investigated if this could happen with the fruits as well. It was found that the messages seem to help the plant muster defences such as releasing hydrogen peroxide, a reactive chemical that combats microbial infections of damaged tissues.

We all know, that human nervous systems have specialized cells called neurons to stand electrical signals between different parts of the body. Since They studied small Cherry tomato plants by placing them inside Faraday cages, which block external electric fields, and confined caterpillars of the moth Helicoverpa armigera on the surface of fruit within plastic bags. It was discovered that electrodes placed in the fruit stalks showed patterns of electrical activity change during and after the caterpillars started eating. These patterns also varied depending on whether the fruits were ripe or green. A distinct pattern in the electrical activity was found when an insect attacked. There was also a rise in levels of hydrogen peroxide produced by untouched fruit and leaves all over an attacked plant. This was probably to avoid microbial infections of damaged plant tissue or could be a strategy to cause cell death in the affected region thus preventing the spread of pathogens.

By-Anshika Tripathi, 1st year

THE TREE OF 40 FRUITS IS EXACTLY AS AWESOME AS IT SOUNDS

A New York-based artist and associate professor at Syracuse University Sam van Aken realized this problem when he was doing the groundwork for one of his sculptures. He has been producing artwork involving hybridized vegetables and wanted to produce a sculpture that was a hybrid tree. In order to do so, he had to find varieties of fruits of the same family, but he realized that there weren't many growers who had the variety that he was after. The New York State Agricultural Experiment Station in Geneva, New York was one place that he found which had hundreds of varieties of stoned fruits. Stoned fruits are fruits that have a "stone" surrounded by a fleshy covering e.g. peaches, apricots, nectarines, almonds. He also found out that the orchard in Geneva was about to be closed down due to a lack of funding. He bought over the orchard and with the variety of fruit that was now available to him, he started work on his tree of forty fruits. It takes many patient winters to get a tree to produce 40 different types of fruit. He carefully grafts the different varieties onto a root structure. The process of grafting is like transplant surgery. The plant may reject the new branch, and the plant might get infections at the site of the graft. It probably helped van Aken that he grew up on a farm and had an idea of what he was doing. He has researched and come up with the first timeline of when all these different fruit trees blossom relative to each other. Using this he places branches of fruit onto the root structure to create his sculpture. What initially drew me to this work is that this amazing tree is an orchard in a tree, but as I kept reading more and more about it I was repeatedly astounded at the journey the tree and its creator have gone through. What started off as an art project ended up being a conservation effort and a research project. He has now created many trees of forty fruits and they have been placed in various places around America.

By- Harsha, 1st year

EFFECT OF AIR POLLUTION ON POLLINATION

Common air pollutants from both urban and rural environments may be reducing the pollinating abilities of insects by preventing them from sniffing out the crops and wildflowers that depend on them, new research has shown Scientists from the University of Reading, the UK Centre for Ecology & Hydrology, and the University of Birmingham found that there were up to 70% fewer pollinators, up to 90% fewer flower visits and an overall pollination reduction of up to 31% in test plants when common ground-level air pollutants, including diesel exhaust pollutants and ozone, were present. The study, published in the journal Environmental Pollution, is the first to observe a negative impact of common air pollutants on pollination in the natural environment. The theory is that the pollutants react with and change the scents of flowers, making them harder to find Scientists from the University of Reading, the UK Centre for Ecology & Hydrology, and the University of Birmingham found that there were up to 70% fewer pollinators, up to 90% fewer flower visits and an overall pollination reduction of up to 31% in test plants when common ground-level air pollutants, including diesel exhaust pollutants and ozone, were present. The impact this phenomenon has in nature, where insects provide pollination of important food crops and native wildflowers is less well understood, so this new study aimed to gather evidence to investigate how air pollution affects different pollinating insect species, some of which rely on scent more than others. The study, funded by the Natural Environment Research Council, used a purpose-built fumigation facility to regulate levels of nitrogen oxides (NOx) -- present in diesel exhaust fumes -- and ozone in an open field environment. They then observed the effects these pollutants had on the pollination of black mustard plants by free-flying, locally-occurring pollinating insects over the course of two summer field seasons.

They used pollution concentrations well below maximum average levels -- equating to 40-50% of the limits currently defined by US law as safe for the environment " Dr Robbie Girling, Associate Professor in Agroecology at the University of Reading, who led the project, said: "We knew from our previous lab studies that diesel exhaust can have negative effects on insect pollinators, but the impacts we found in the field were much more dramatic than we had expected. The findings are worrying because these pollutants are commonly found in the air many of us breathe every day. We know that these pollutants are bad for our health, and the significant reductions we saw in pollinator numbers and activity shows that there are also clear implications for the natural ecosystems we depend on."Previous laboratory studies by members of the Reading team have shown that diesel fumes can alter floral odours. This work suggested that pollution could contribute to the ongoing declines in pollinating insects, by making it harder for them to locate their food -- pollen and nectar. The impact this phenomenon has in nature, where insects provide pollination of important food crops and native wildflowers is less well understood, so this new study aimed to gather evidence to investigate how air pollution affects different pollinating insect species, some of which rely on scent more than others. The study, funded by the Natural Environment Research Council, used a purpose-built fumigation facility to regulate levels of nitrogen oxides (NOx) -- present in diesel exhaust fumes -- and ozone in an open field environment. They then observed the effects these pollutants had on the pollination of black mustard plants by free-flying, locally-occurring pollinating insects over the course of two summer field seasons. They used pollution concentrations well below maximum average levels -- equating to 40-50% of the limits currently defined by US law as safe for the environment. Observations revealed there were 62-70% fewer pollinator visits to the plants located in polluted air. This reduction was seen in seven pollinator groups, particularly bees, moths, hoverflies and butterflies. Such findings could have wide ranging implications because insect pollination delivers hundreds of billions of pounds worth of economic value every year. It supports around 8% of the total value of agricultural food production worldwide, and 70% of all crop species, including apples, strawberries and cocoa, rely on it. Dr Christian Pfrang, Reader in Atmospheric Science at the University of Birmingham and a co-author on the study, said: "This truly cross-disciplinary work demonstrated very clearly how atmospheric pollutants negatively impact on pollination with direct consequences for food production as well as the resilience of our natural environment."

By- Tarana Shahreen, 1st year

VACCINES - OUR SAVIORS

The development of the Covid-19 vaccines is actually part of the science news of 2020, but it is in 2021 where a major breakthrough was achieved. The Pfizer and Moderna Covid-19 vaccines were rolled out for emergency use for adults in record time last December, followed by Johnson & Johnson's single-shot vaccine in February 2021. And then, The Covid-19 vaccine has now become available for children as young as five.The fastest vaccine development-to-deployment period before this was the Mumps vaccine in the 1960s and that took four years.

Secondly, the Malaria vaccine for kids. Malaria is still one of the most dangerous diseases on the planet that kills around half a million people annually. Over half of those are children under the age of five.The new vaccine fights the deadliest of five malaria pathogens and is delivered in a series of four injections. This science breakthrough could prevent around 5.3 million malaria cases every year. And hence, from the first drop of polio to vaccines we take, they protect our lives from the tiny dot like killers

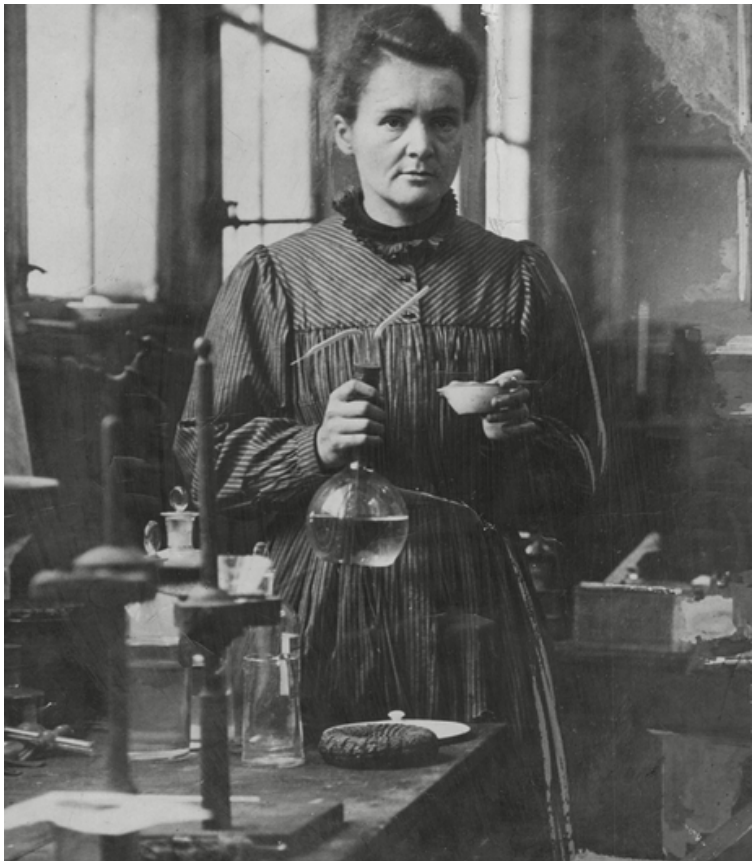
By- Madhukumari, 1st year

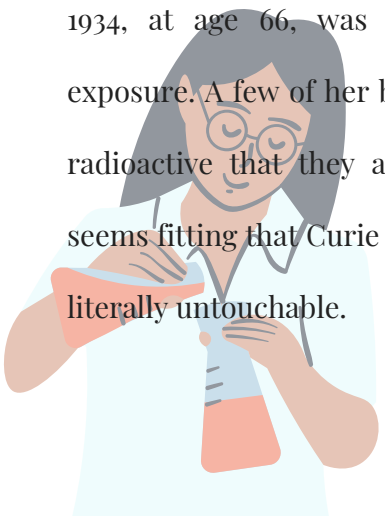
WOMEN IN STEM

“In my younger days, when I was pained by half-educated, loose and inaccurate ways which we all had, I used to say, ‘How much women need exact science’. But since I have known some workers in science who were not always true to the teachings of nature, who have loved self-more than science I have said, ‘How much science needs women!’ ” These words spoken by astronomer Maria Mitchell have been relatable to many women who try to pursue STEM major for their higher studies. We have often seen discrepancies in research and biases in the field of sciences for women not by science but by the ‘flagbearers’ of it. But there have been many women who have not only made science their playground but also won the championships. Some women that continue to inspire generations are mentioned.

Marie Salomea Skłodowska Curie, the great Nobel laureate’s relentless resolve and insatiable curiosity made her an icon in the world of modern science. Indefatigable despite a career of physically demanding and ultimately fatal work, she discovered polonium and radium, championed the use of radiation, and fundamentally changed our understanding of radioactivity. For her research in “radiation phenomena,”

Curie became, in 1903, the first woman to receive a Nobel Prize. French academics originally proposed only her husband and Henri Becquerel, but Pierre Curie insisted that his wife share the honour. Both Curies were constantly ill from radiation sickness, and Marie Curie’s death from aplastic anaemia in 1934, at age 66, was likely caused by radiation exposure. A few of her books and papers are still so radioactive that they are stored in lead boxes. It seems fitting that Curie left a scientific legacy that is literally untouchable.





Janaki Ammal Edathil Kakkat was an Indian botanist who conducted scientific research in cytogenetics and phytogeography. Her most notable work involves those on sugarcane and the eggplant. She has collected various valuable plants of medicinal and economic value from the rain forests of Kerala. Her work included cytogenetic analysis of Saccharum spontaneum as well as the generation of several intergeneric crosses such as Saccharum x Zea, Saccharum x Sorghum. Her work at the Institute on the cytogenetics of Saccharum officinarum (sugarcane) and interspecific and intergeneric hybrids involving sugarcane and related grass species and genera such as Bamboo (Bambusa) was epochal. She is best remembered for co-authoring the monumental work, "Chromosome Atlas of Cultivated Plants" along with C. D. Darlington. Her memory is preserved in the delicate white magnolias named after her, and a newly developed, yellow-petaled rose hybrid that now blooms in her name. In her later years, she became a forceful advocate for the value and preservation of India's native plants, earning recognition as a pioneer of indigenous approaches to the environment.

Jennifer Doudna and Emmanuelle Charpentier developed a methodology for high-precision changes to genes. They used the immune defences of bacteria, which disable viruses by cutting their DNA up with a type of genetic scissors. By extracting and simplifying the gene scissors' molecular components, they were able to make a tool that could be used to cut any DNA molecule at a predetermined site. The CRISPR/Cas9 gene scissors can lead to new scientific discoveries, better crops, and new weapons in the fight against cancer and genetic diseases. They both have been awarded the 2020 Nobel Prize in Chemistry for their work on CRISPR-Cas9.

There are many more women who have changed the world by their inventions like computer algorithm by Ada Lovelace, Medical syringe by Letitia Geer, world's first word processor by Evelyn Berezin and discoveries like Francium Marguerite Perey, sex chromosomes by Nettie Maria Stevens, Rosalind Franklin was a molecular biologist who was instrumental in the discovery of the structure of deoxyribonucleic acid (DNA). These women not only inspire our generation but will continue to inspire the scientists of future generations, which hopefully will help us to create a more diverse community in the STEM field which will be less biased and more inclusive.

By- Aditi Asthana, 1st year

INDIAN WILD AYURVEDIC PLANTS

Plants are always used in herbal medicines and plenty of chemicals and extracts in them are found to develop the immune system. Therefore, a consciously maintained diet consisting of plant-based immunity boosters is the need of the hour. Plants are known to supply many chemicals, natural therapeutics and vitamins which naturally enhance our system. The Indian Traditional System of medication is one of the oldest systems of practice within the world and has played an important role in providing health care service to human civilization, right from its inception. India has the exclusive distinction of its own recognized traditional medicine; Ayurveda, Yoga, Unani, Siddha, and Homoeopathy (AYUSH).

PUSKARAMULA

Botanical name: ***Inula racemose***

Pharmacological principle: Antipyretic, Antifungal, Antimicrobial, Bacteriostatic, Fungistatic, anti-inflammatory, Antihistaminic, effective against bronchospasm, Antianginal, hypolipidemic.

Parts used: Root

Therapeutic Uses: Cough, dyspnoea, bronchospasm, pulmonary infections, blotted abdomen, anaemia, cardiac ailments

Dosage: Powder 1–3 gm

KATUKI

Botanical name: ***Pichrorhiza kurroa***

Pharmacological principle: Antipyretic, anti-inflammatory, Antibacterial, Reduce frequency of asthmatic attacks, Hydro choleretic.

Parts used: Root, underground stem.

Therapeutic Uses Fever, intermittent fever, dyspnoea, cough, skin diseases, diabetes.

Dosage: Powder 0.5–1 gm; 3- 6 gm (purgative)

VANA TULSI

Botanical name: ***Ocimum basilicum***

Pharmacological principle: Antiviral, Antimicrobial, Antioxidant, anti-inflammatory, Health-promoting activities. Inhibitory activity in HIV – 1, fungistatic, Anti-allergenic, Cytotoxic, Antispasmodic

Parts used: Leaf, flower

Therapeutic Uses Feverish illness (cold and influenza), lung complaints, poor digestion, nausea, insomnia, migraines, intestinal parasites.

Dosage: Juice 3-5 ml; Seed powder 3-6 gm

VASA

Botanical name: ***Justicia adhatoda***

Pharmacological principle Bronchodilator activity, Haemostatic, advantages in attenuating the critical inflammatory stages of Covid 19

Parts used: Leaf, root, flower.

Therapeutic Uses Fever, cough, dyspnoea, consumption, anaemia, bleeding disorder, diarrhoea, skin diseases.

Dosage: Leaf juice 10-20 ml

By - kumari Khushi, 2nd year

STARNISE

Botanical name: ***llicium verum***

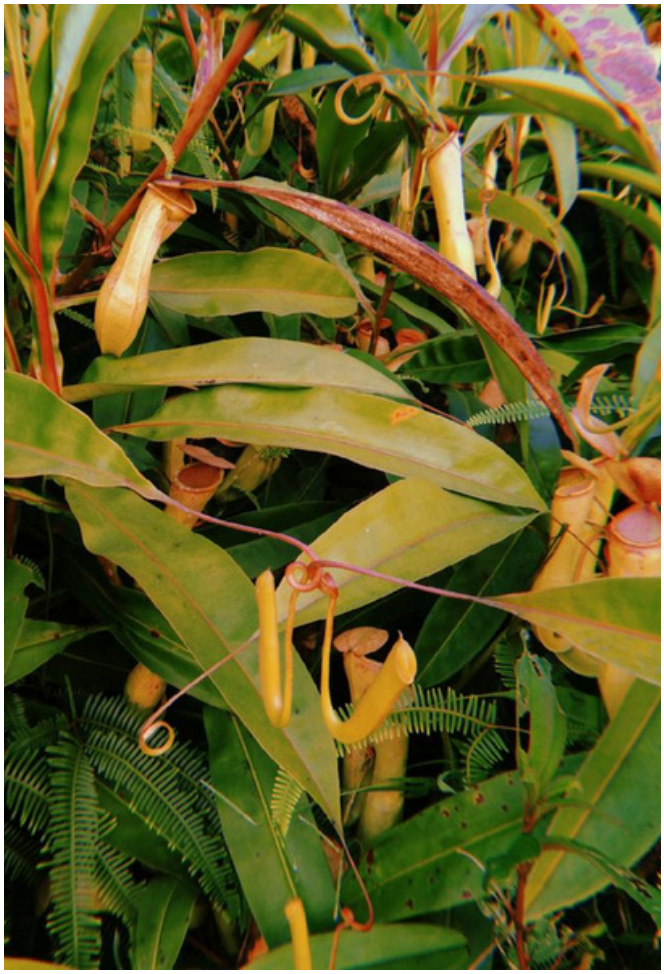
Pharmacological Principle: Antiviral, Antimicrobial, Antifungal, Antioxidant, anti-bacterial, expectorant, analgesic, spasmolytic, carminative

Parts used: Fruit

Therapeutic Uses: abdominal pain, digestive disturbances, cough diuretic, influenza

Dosage: Powder 3gm

THE DEVIL



In the far corner of the enchanted hills of Meghalaya, I reside on the sunny side of Baghmara, Garo hills, with my family and relatives. I know from the tales told by my parents who heard it from their parents that I also have relatives in the Jarain region of Jaintia Hills who does what we do, eat what we eat and are just as well-known as my family and I are. However, it is physically impractical for my family and me to visit them. My species is endemic and native only to this beautiful state of Meghalaya and I cannot be grateful enough for the tremendous work the humans out here are doing to protect my family and me.

I represent a community that is known for being heartless and dexterous when it comes to our feeding method. Presumably, the way I attract the tiny insects to my rather bewitching mouth, the slick coating of which makes it impossible for the poor little preys that I trap to become free and swallowing them into my pouch-like belly must have petrified the humans that the locals out here call me “Memang-koksi” or “the basket of the devil” whilst they call my relatives of far end of khasi hills as “tiew-rakot” or “demon flower.” So basically, wherever you go they regard my kind as “the devil.” I am ***Nepenthes khasiana.***

By- Aichea Victoria a Sangma, 2nd year

JOY OF MOUNTAINS

Oregano is a perennial herb that is used extensively as food seasoning agent. This well-known pizza herb has strong aroma and a bold earthy flavor which imparts “Italian taste” to Mediterranean cuisine and Mexican dishes. Oregano name is given to variety of plants consisting of approximately 61 species and 17 genera of 6 different botanical families. All the plants that confers the particular robust flavor of this herb are known as Oregano. The name Origanum is derived from Greek word meaning “Joy of Mountains”. Origanum vulgare which belongs to Lamiaceae family is native to Greece and thrives in high altitude Mediterranean climate. Mexican variety of oregano is prepared from Lippia species which belongs to Verbenaceae family .

Oregano is extensively used in cooking and folk remedies. This herb is endowed with several medicinal properties. Oregano oil has a variety of antimicrobial properties due to the presence of an essential compound called “Carvacrol” and "Thymol". Thymol is widely used in perfumes and mouthwashes. Along with this, oregano is also known to have anti-inflammatory, antioxidant, anti-diabetic and antiproliferative properties. It also contains iron, vitamins, calcium, copper, niacin, magnesium and thiamine and is a rich source of vitamin K. It is a great cold and flu remedy and aids in the treatment of indigestion, bloating, flatulence, and menstrual symptoms. Due to its large applications in health science it is often referred to as “wonder herb “

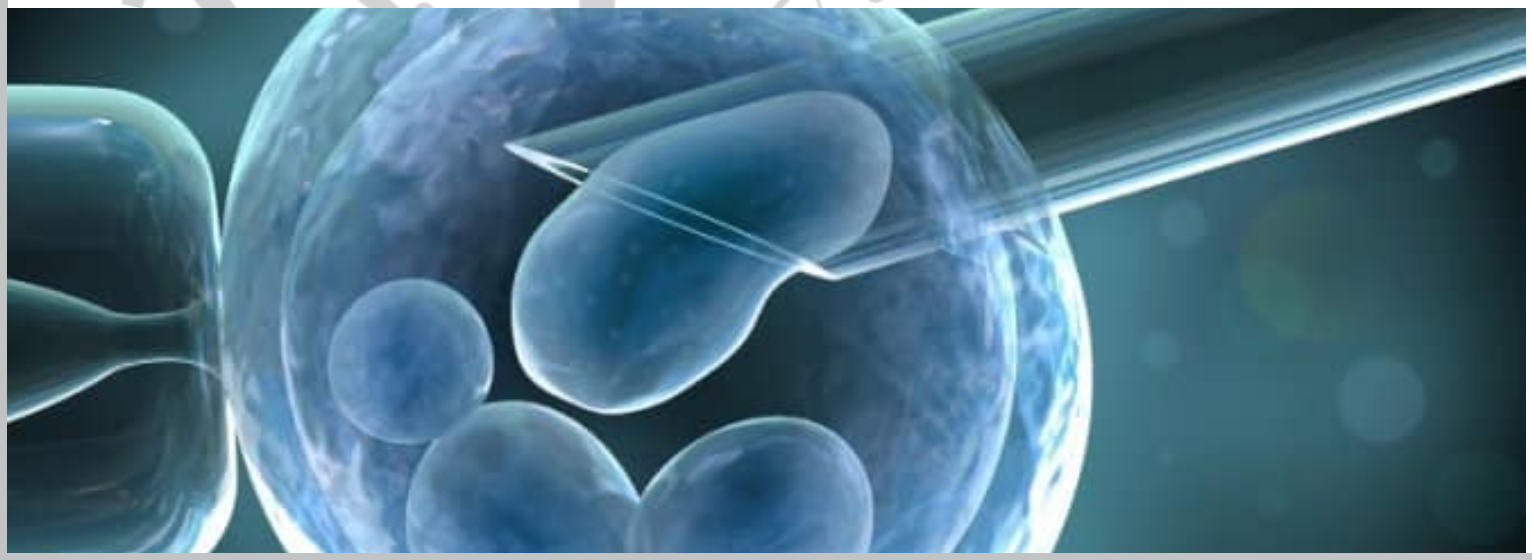
By-Sapana Maurya, 2nd year

FUTURE OF STEM CELLS

The goal of the intense research on stem cells is for human application. Recently, knowledge of stem cells has progressed rapidly and experimental therapies are already in clinical trials. However, for more far-reaching applications and successful therapy much more remains to be learned about stem cells. There are more questions than answers. What are stem cells? How many different kinds are there? Can they be obtained and manipulated? How can immune rejections of transplanted cells be avoided or prevented? What role, if any, does the fusion of stem cells play in tissue regeneration?

The stem cell is the origin of life. Rudolf Virchow (1855) first explained that cells divide and new cells are formed from pre-existing cells (Omnis cellula-e cellula). It is a single cell that can give rise to progeny that differentiates into any of the specialized cells of embryonic or adult tissues; that is, it is totipotent. Although stem cells are highly unlikely to contribute to human fantasies of immortality and eternal youth, tremendous progress has been made in the past few years in the potential use of these cells as therapeutic agents, which may lead to prolonged life with less suffering and higher quality.

Stem cells may be the key to replacing cells lost in many devastating diseases such as Parkinson's disease, diabetes, chronic heart disease, muscular dystrophy, end-stage kidney disease, liver failure, and normal cells lost due to cancer. Current challenges include the control of the differentiation process of stem cells such as ES cells into specialized cell populations and of their development and proliferation once they have been implanted into patients. Another important aspect of stem cell-based therapies will be the necessity of preventing the rejection of the donated cells by the immune system. Much basic research lies ahead before the application of stem cell therapy to patients in a rigorous therapeutic manner is realized. However, mankind will surely benefit enormously by conducting research in this important area. Reference: Stem cells handbook, edited by Stewart Sell, MD



CALCIUM HOMEISTASIS DURING POLLEN FORMATION

The development of pollen in the anther in angiosperms depends on the complex cellular interactions associated with the production of gametophytic and sporophytic genes that control important processes during microsporogenesis/gametogenesis, such as exocytosis/endocytosis, migration of intracellular reactions, signaling cell division. Most of this depends on the concentration of calcium ions (Ca2 +). Work from the laboratory and others provides evidence that calreticulin (CRT), a prominent Ca2 +-binding protein in the endoplasmic reticulum (ER) of eukaryotic cells, is involved in pollen formation and function. Using northern hybridization, western blot analysis, fluorescent in situ hybridization (FISH), immunocytochemistry, and potassium antimonate rainfall, PhCRT1 is reported to be highly expressed in anther and local CRT protein sites. associated with Ca2 + freely bound (alternating) by successive stages of microsporogenesis/gametogenesis. Ensures the permanent presence of both CRT and Ca2 + mutants in germline and tapetal cells, where these specially selected local features in the ER are known as the most active Ca2+ store that works in eukaryotic cells. In addition, immunoblots have shown a gradual increase in CRT levels from the microsporocyte stage through meiosis and high CRT levels in the microspore stage, where both microspores and tapetal cells exhibit very high secretory activity associated with -biogenesis of sporoderm. Maintaining control of Ca2 + homeostasis during the formation of pollen grains. This Ca2 + -buffering chaperone is important for pollen maturation and maturation as a high degree of protein synthesis and protein coagulation within the ER and intracellular Ca2 + homeostasis is strongly required during the multi-stage pollen development process.

By- Yoshita Bhardwaj, 2nd year

KEW BOTANICAL GARDEN

Kew Gardens is a botanical garden in Richmond on the outskirts of London. It has the most distinctly fascinating diverse botanical and mycological collections globally. It has an extraordinary diversity of plants, and it houses more than 50,000 species of plants. It is spread over 300 acres and is set within a vast and beautiful landscape with history and heritage. Kew Gardens was designated a UNESCO World Heritage site in the year 2003

History-

In 1299 Edward I moved his court to a manor house in Richmond. Henry VII built Richmond Palace in 1501. Privately owned gardens at Kew date back to the 16th century. It was acquired from the Capel family in 1731 by Frederick Louis, Prince of Wales. The exotic garden at Kew Park was founded by Henry Capel and extended by Augusta, Dowager Princess of Wales in 1759.

The origin of Kew Gardens is traced back to 1772 when the merging of the royal estates of Richmond and Kew took place. William Chambers built numerous structures at Gardens and the Great Pagoda in 1761 which still exists. By 1769 gardens had more than 3,400 plant species. George III, William Aiton and Sir Joseph Banks enriched the gardens. The gardens became renowned under the charge of Sir Joseph Banks (1772–1819), and the flock grew to include specimens from all over the world. The adjoining "Dutch House" was purchased by George III as a nursery for the royal children in 1781. The old Kew Park / the White House was demolished in 1802.It was in 1840 that Kew gardens were adopted as a national botanical garden because of the efforts of the Royal Horticultural Society and its president William Cavendish.

TOP ATTRACTIONS AT KEW GARDENS

1. Kew's Old Lions

Five trees survive from 1762, that is, the establishment of the gardens. Collectively called the 'Five Lions', they are: a ginkgo or maiden hair (Ginkgo biloba), an oriental plane (Platanus orientalis), a pagoda tree/ scholar tree (Styphnolobium japonicum), a black locust or false acacia (Robinia pseudoacacia), and Caucasian elm or zelkova (Zelkova carpinifolia).

2. Kew Palace

It is here that the original botanic gardens at Kew began. It is the smallest of all the British royal palaces. It was built by Samuel Fortrey, a dutch merchant in 1631 and was later purchased by George III.

3. The Pagoda

Inspired from Chinese culture the great pagoda stands tall since 1762 in southeast corner s of Kew Gardens. It is 164ft tall and has 10 octagonal storeys. It was originally covered with ceramic tiles and adorned with large dragons. It has in its center a staircase of 253 steps.

4. Waterlily house

Waterlily house is the hottest and most humid amongst the houses at Kew and contains a large pond with varieties of water lily. It closes during the winter months. It was built to house Victoria amazonica, the largest water lily . This plant in whole was transported to Kew in Feb 1849, only after several attempts of seeds and roots transport failed. Although many members of Nymphaeaceae grew well, the house did not suit the Victoria, mainly due to poor ventilation system, and this specimen was moved to another house.

5. The Marianne North Gallery

It was built in the 1880s to house the paintings of Marianne North, an MP's daughter who travelled solo to North and South America, South Africa, and many parts of Asia, in order to paint plants that captivated her. She challenged the Victorian flower painting tradition and chose to paint plants in nature instead. After 13 years of travel, North decided to exhibit the paintings in Gardens where her passion began. Now the gallery has 832 remarkable paintings. It is a vivid collection of 19th-century botanical art. This gallery is the only permanent exhibition in Great Britain dedicated to the work of one woman and was opened in 1882.

6. The Arboretum

It is a living library of trees, every tree has a story and holds within a wealth of knowledge and information. It consists of about 14,000 trees and is a unique landscape shaped by various seasons. The 14,000 trees represent about 2000 species, some of which are rare and ancient varieties. The Arboretum stretches across two-thirds of the garden's area and surrounds all the glasshouses. It has Heritage trees like the Japanese pagoda tree (Styphnolobium japonicum), the Lucombe oak and the black locust tree (Robinia pseudoacacia); Giant redwoods (Sequoia sempervirens) and Mighty Oaks.

7. Princess of Wales Conservatory

Designed by Gordon Wilson, inaugurated in 1987 by Diana, Princess of Wales in commemoration of her predecessor Augusta. It has an area of 4,499 square metres and replaced 26 smaller buildings. It houses ten computer-controlled micro-climatic zones and harbours Dry Tropics and Wet Tropics plants. One can feel the changing environment from desert to rainforest. Numerous orchids, water lilies, cacti, carnivorous plants and bromeliads are housed in the various zones. It has a cactus collection too that extends outside the conservatory. The glass roof was built in a distinctive way to give unique look to the conservatory and to maximize the use of the sun's energy. During its construction, a time capsule was buried which contains the seeds of basic crops and endangered plant species.

8-Davies Alpine house

Davies Alpine House opened the third version of an alpine house in march 2006. the apex of the 16m roof arch extends to a height of 10 metres to aid in ventilation needed for the plants to be housed. The automatically operated blinds prevent it from overheating when the sun is too hot for the plants. The main design aims to allow maximum light transmission. The house is designed in order to not allow the maximum temperature to exceed 20 °C. The collection of Alpine plants extends to about 7000, the Alpine House can only house around 200 at a time so plants are regularly rotated.

9. The Treetop Walkway

It was opened in 2008 and takes visitors on a 200 metres walk about 18 metres above the ground, through the top of the canopies in the woodland. It was designed by David Marks. One can walk through branches of magnificent trees like chestnut (Castanea sativa), horse chestnut (Aesculus hippocastanum), beech(Fagus sylvatica) and different oak(Quercus) species. It gives opportunity to experience a whole lot of different smells and sounds and one can get a bird's eye view right across the gardens.

10. The Palm House

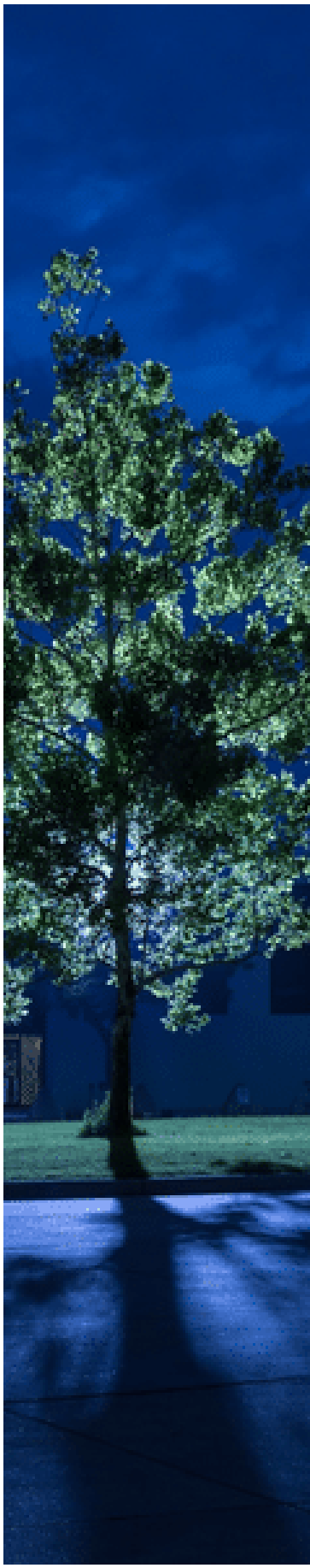
The Palm house was the first glasshouse to be built. It was constructed in 1844 by Richard Turner in accordance to the designs of Decimus Burton.

The space frame of iron arches is held together by horizontal tubular structures containing long cables that supports glass panes which were tinted green with copper oxide for reducing heating effect. It resembles upturned hull of a ship.

It has oldest pot plant in the world- the disease-fighting periwinkle, the rubber tree, African oil palm and the Cocoa tree. Kew scientists depend on Palm House collections for research in medicine and sustainable cropping methods.

By- Smriti Rathee, 3rd year

STUART ROOSA AND HIS MOON TREES



"Space changes nobody. You bring back from space what you bring into space".

This statement is not mere philosophy. Col. Stuart Roosa, former smokejumper, air force pilot and astronaut atop Apollo 14 realised his fondness for forests in a unique way and proved this. Roosa was the man in the moon's orbit (and not the man on the moon). While Alan Shepherd and Edgar Mitchell played golf on the Fra Mauro region of earth's only satellite, the third member of the Apollo 14 crew chose solitude atop the spacecraft, orbiting the moon 34 times in his maiden and single extraterrestrial tour. However, whatever Stuart Roosa thought or did back then was deeply influenced by his past experiences and occupations. Born in Colorado, Roosa spent his childhood in various parts of the forested American west. Clearly, love for forests and nature had been instilled in him since the beginning. He went on to obtain a degree in Aeronautical Engineering before joining the U.S. Forest Service as a Smokejumper. Roosa participated in rescue work in at least 4 active forest fires in about a single

year. The U.S. Air force was Roosa's next destination in his military service which paved the way for to him get selected in the 1966 class of astronauts. Roosa's love and curiosity for forests were reflected in the Apollo 14 mission (1971) as about 500 seeds of different trees journeyed the moon's orbit along with him. These seeds were of common west American forest origin like Loblolly Pine, Redwood, Douglas Fir, Sycamore and Sweet Gum, much in compliance with Roosa's childhood."Moon Trees" as those seeds now exist as are trees grown from the seeds Roosa took around the moon with him. Careful observation of the habit of seeds was carried out inside Apollo 14 by the former smokejumper. Of the 500 seeds which circled the moon, more than 420 germinated and are planted across various locations in the U.S. besides normal seeds used as control samples. Surprisingly, Moon Trees and their earth counterparts cannot be differentiated at all. This was the first tryst of the botanical world with space and it paved the way to further plant biology research in extraterrestrial environments. Clearly, space might impact deeply but it changes nobody. At least not seeds, the carriers ofnew life.

By- Prachi Chaudhary, 3rd year

Immortal Snippets

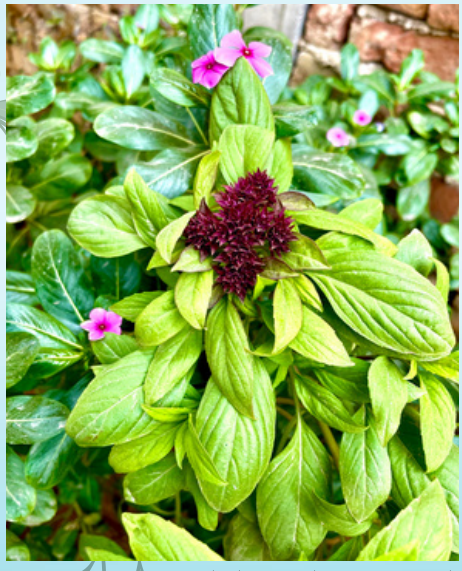
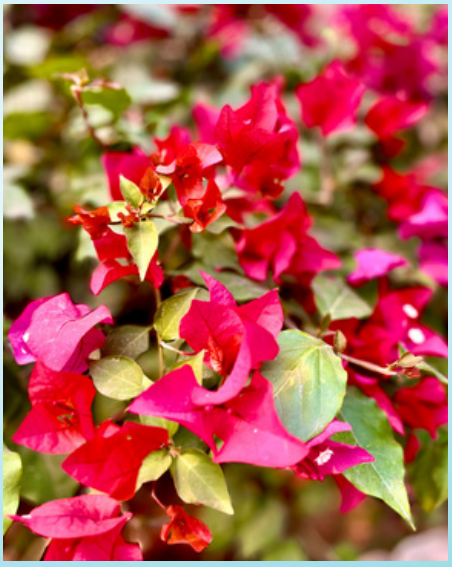
The photography section



By -Devika Yumnam, 1st year



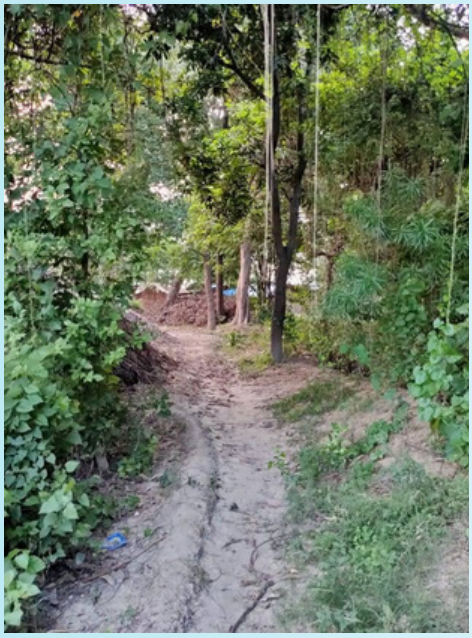
By -Madhu Kumari, 1st year

By- Kumari khushi, 2nd year



By- Ilma Moin, 1st year

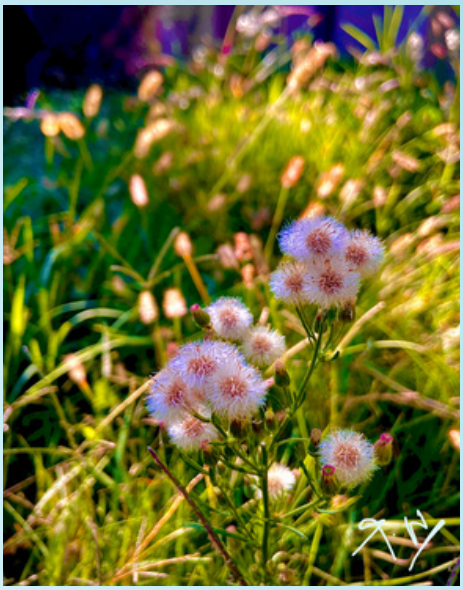


By -Yoshita Bhardwaj, 2nd year



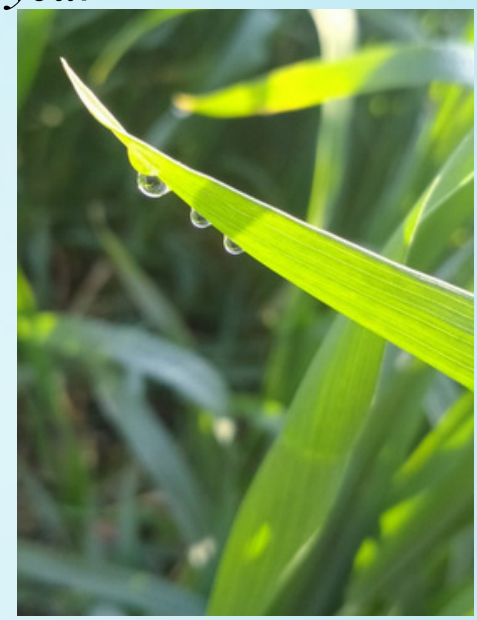
By-Shailza Bhati, 2nd year





By -Tanzeela Nazir, 3rd year





By- Anuradha, 2nd year

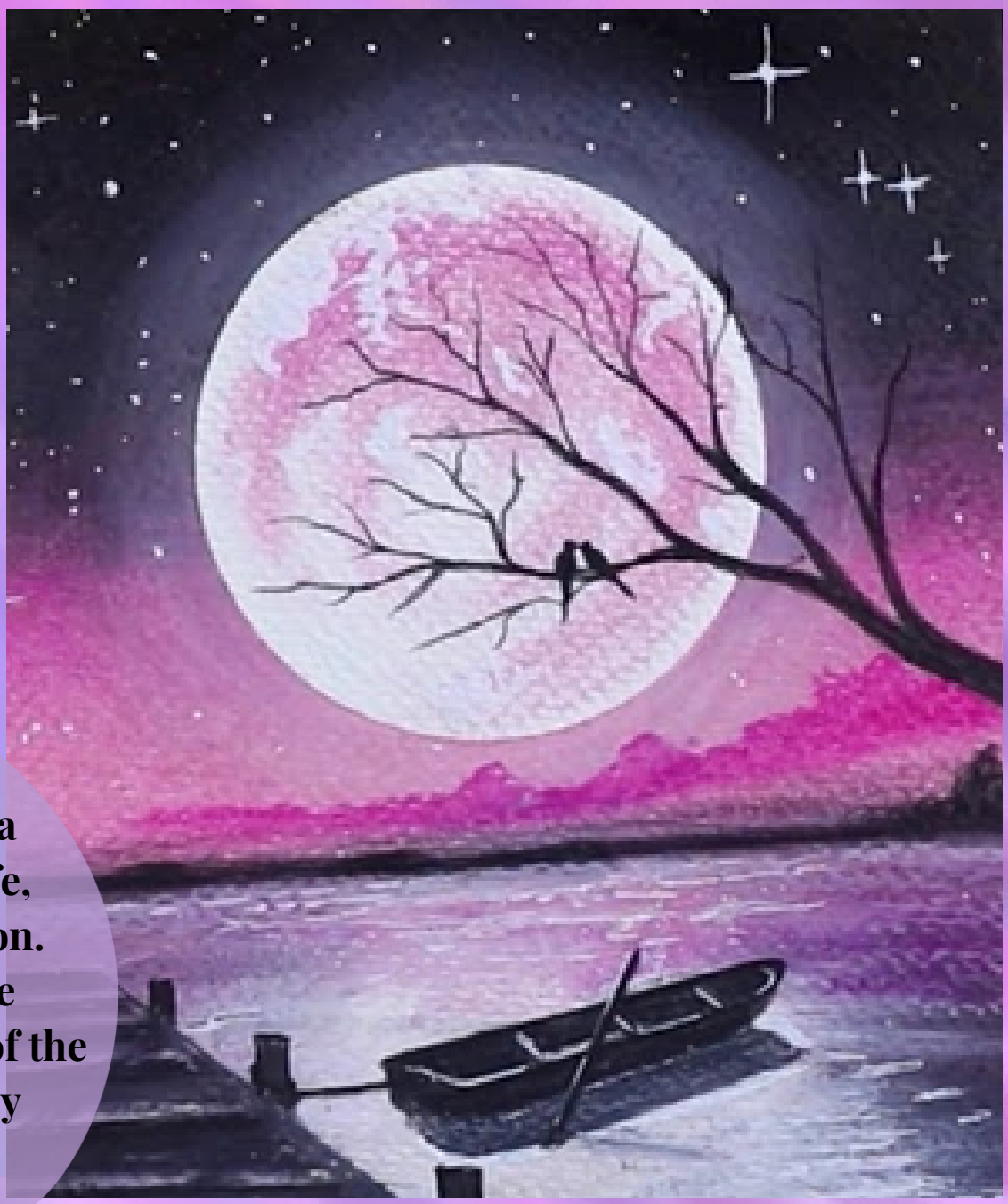


By -Sneha Mahato, 2nd year

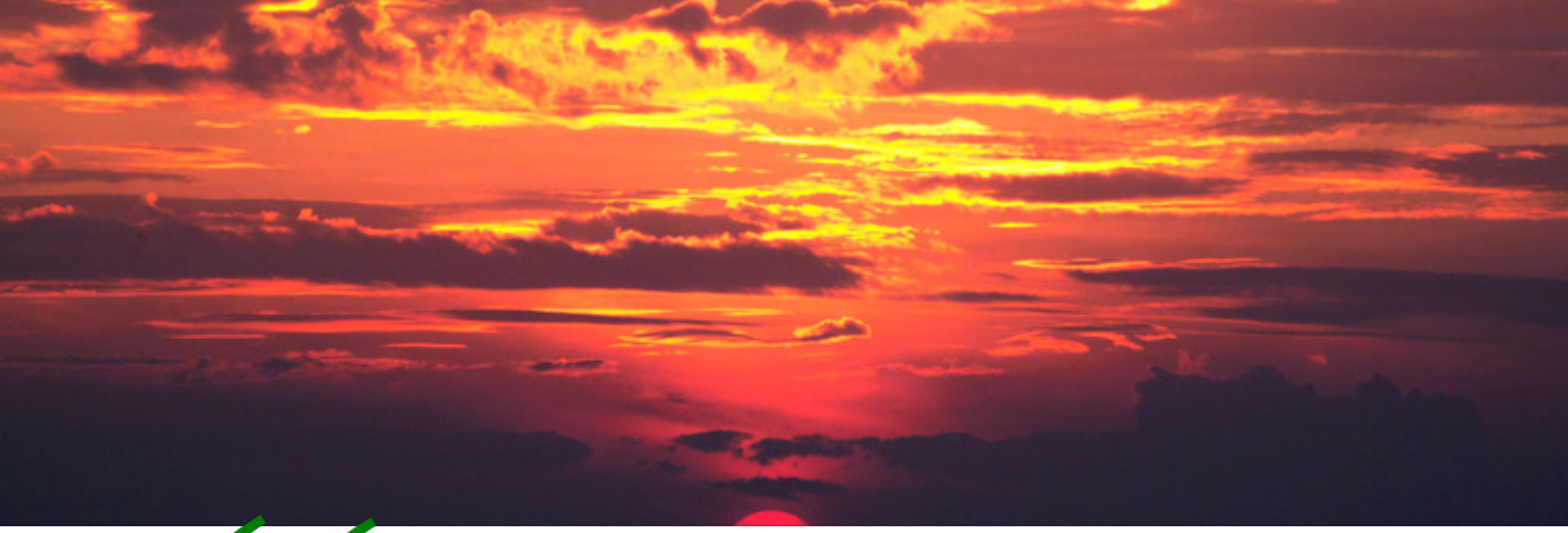
By- cheshta Rawat, 1st year

CALANTHE

THE ENGLISH POETRY SECTION



Calanthe primarily a flower, signifies Life, Beauty. and Ambition. Here, we present the Harmonious voice of the flower, A calanthe by Antheia



THE ARDOUR BENEATH THE HORIZON

The ever wondering eyes rolled to glassy,
Resentment blurred the intimate vision lazy-
The melted pearls dripped one by one,
And to console them there was none.

The leaves of the branches stood still,
The distant birds soared slowly on the sky so ill,
The river forgot to tide over bearing the strong heat-
The avenue got deserted and a unknown air blew over it.

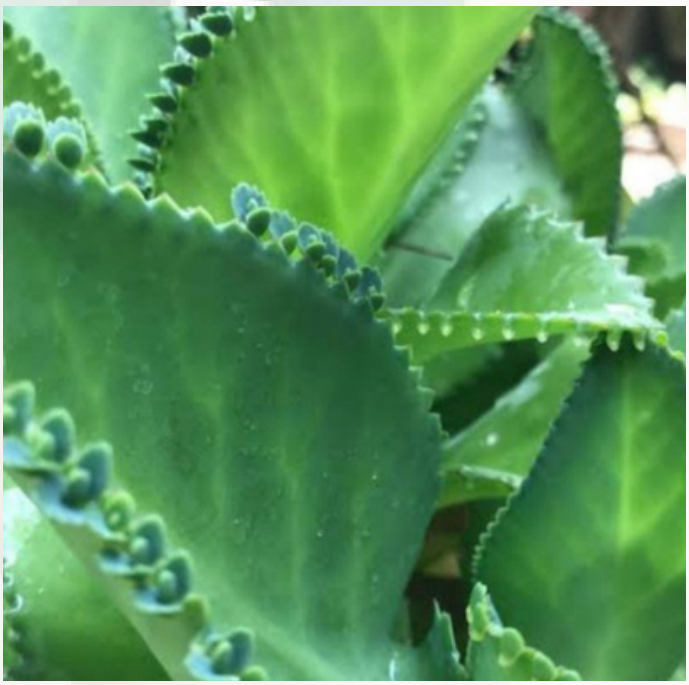
The memory recollected the events one after one,
That were too wet to get dried up even by the sun.
Too heavy to bear-
And too hard to believe when you hear.

Yes, those did occur to prevail-
A soft heart which doesn't even know to bite the nail,
Standing against the stormy demolishing gloom,
Still sustained the will to shape the lotus bud sown by destiny, to bloom.

By - Oindrila Bhowmik, First year

BRYOPHYLLA UPON BRYOPHYLLUM

Leaves upon leaves,
Bryophylla upon Bryophyllum.
The crassulaceae family gave birth
to a plantae,the Pinnatum!
Lovingly and scientifically,
they call her Bryophyllum pinnatum!
From Madagascar to many more
cities and towns, they moved!
Yes, for Pinnatum they moved!
She would become a great doctor
in future,they presumed!



Pinnatum grew up.
Yes! She grew up.
She became a doctor;
like hiw she's supposed to.
She had to be a Doctor:
that was her fate.
Pinnatum cured her patients;
diabetes, diuresis and many more.
Cancer too visited at times!
Pinnatum treated them all!
She treated them all;
like how she was supposed to,
that was her fate to begin with.
Bryophylla upon Bryophyllum.

By- Lenthoibi Thokchom. First Year

THE HEART OF THE TREE

What does he plant who plants a tree?
He plants a friend of sun and sky
He plants the flag of brezzes free
The shaft of beauty, towering high
He plants a home to heaven anight
For song and mother - croon of bird
In hushed and happy twilight heard
The treble of Heaven's harmony
These things he plant who plants a tree
What does he plant who plants a tree?
He plants cool shade and tender rain
And seed and bud of days to be,
And years that fade and flush again
He plants the glory of the plain
He plants the Forest's heritage
The harvest of a coming age
The joy that unborn eyes shall see
These things he plant who plants a tree
What does he plant who plants a tree?
He plants, in sap and leaf and wood,
In love of home and loyalty
And far-cast thought of civic good
His blessings on the neighborhood,
Who in the hollow of his hand
Holds all the growth of all our land
A nation's growth from sea to sea
Stirs in his heart who plants a tree.

By - Daminee Bhardwaj, First Year

CRYING LEAVES

Hello Humen,
Please don't pluck me,
When you plucked me,
I feel pain in my whole body ,
I also have my own family like you.
Don't want to get separated from them,

We give you oxygen for your survival,
You can't live without us.
So, please don't pluck me,

I feel pain,I feel pain.
Please don't pluck me .

By Devika Yumnam, First Year

FLOWER OR FIRE

Some follow a road of flowers
others follow a road of fire.
Some say fire is history,
others say flowers are history.
Some follow a road of cries,
others follow a road of song.

For you, what is the true life, flower or fire?
What is a true way of love, flower or fire?
Fire lights the darkness of night,
but flowers light the darkness of day.
Fire melts the blood-stained sword,
but flowers clean the blood-stained sword.

Some follow the road of flowers
others follow the road of fire.

Some follow the road of cries,
others follow the road of song.
Some follow both roads of cries and song,
while others follow both roads of flower and fire

By - Chinglembi Haobam, First year

IMMORTAL UNTIL WHEN

Never to the green world I landed
Never to the blue sky in the dawn,
The sun burned evenings
With dark sketched wings at the infinity
of my mind....I stared
I was walled in between two souls
A soul to suck
And a soul that sucked

"Let the dead reality get its life
Let the purest wandering souls bite your lips.....
Close your eyes from this solitude"
His eyes murmured with strain
But never in acts....

Lasted so long....
For the resin like lips,
Fouled nose,
Lifeless eyes
for a smile
But it ended up being fake

By - Sethulakshmi k, First year

UNION OF DIVERSITY

The creation of life on Earth is a masterpiece of Biology so sweet,
Every being's entry is greeted with wonderful welcome heat;
Toddlers start stepping with their exploring little feet,
Meanwhile we figure out we are on the World's seat.

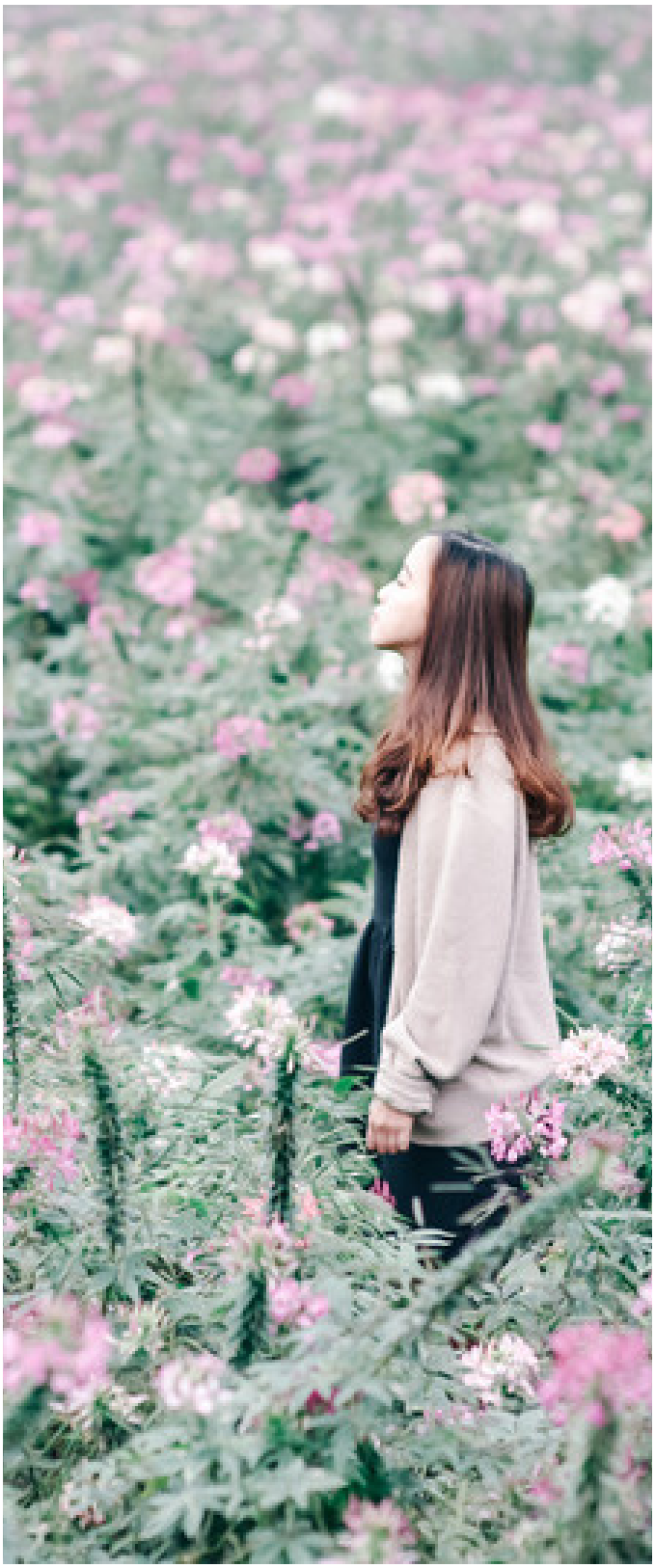
Adjustment with the circumstances is a Physics a lot,
Immersed in the ocean of joy of our amazing childhood plot;
Reverberating advices directs us to complete the tasks we got-
And we realize, we got to shine bright hitting the Jackpot.

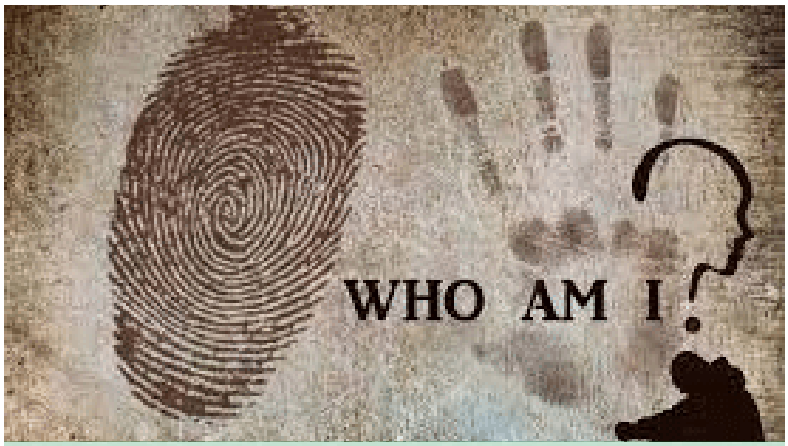
Managing the emotions and desires is the Chemistry too tough,
That often reduces the stability and confidence directly to half;
Dilemma in navigating the Geography of dreams is equally rough,
Meantime we forget our enthusiasm and our habit to laugh.

Checking the Accountancy of our living adventures-
We realize the Economics of the ups and downs in the venture;
Instead, Mathematics says, integrating all the happy moments always smile like honey,
And Philosophy concludes, Life is all about collecting beautiful and multifarious memories throughout the journey..

By - Oindrila Bhowmik, First year

W H O A M I ?





The world runs along never resting once
I try to follow,I try to run
But hurdles creep up my thighs
I try not to fall,I try not to cry
But somehow I lag behind
Can I get back up and run?

What's this I see???
Hands reaching out to me?
Parents,guardians,teachers,friends
How loudly they cheer for me

Yes I can get right up!!!
Why?? I am STRONG,ain't I?
Who am I?
A girl of 18
Undeniably a proud daughter

Strong and confident
Patient and kind
The world can try all it wants
It ain't shake me down
I'd hold on no matter what
Let Newton wait all he wants!!!

By- Chinglembi Haobam, First year

WHERE WERE YOU?

Where were you?
When she was shunned by society since her birth.
Where were you?
When she was molested after a few days she arrived on this earth.
Where were you?
When she was told not to speak up and be silent.
Where were you?
When a so-called ‘man’ was getting violent.
Where were you?
When she said she deserves a chance.
Where were you?
When she was begging for freedom to dance.
Where were you?
When society was making faces because of her ‘masculinity’.
Where were you?
When no one had shown her an ounce of humanity.
Where were you?
When she was walking alone at night.
Where were you?
When she achieved her glory finally.
Oh yes! There you are,
Taking credit for her victory, as her mum watches from afar.
you have ignored her every scar,
or her glorious fight in the war.
Claiming that you helped her,
and showering her praises on Twitter.
So kindly stay where you were,
stand by the lanes, and now watch her conquer.

By - Aditi Asthana, First year

VELVET LIFE

Standing up
Or standing out
That's what life
Is all about

Passions grow
From single seeds
And welling up
With inner needs

Flowers grow in sunshine
When weeding gives them space
Blooming in the sunlight
And warmth of Nature's grace

Winds do sway in motion
Through solitary hours
Such is the price of beauty
Of the velvet life!

By - Yoshita Bhardwaj, second year

MEMORIES

Memories are heart beat
Beating through the year
Echoes never failing
Of our smile and tears

Memories are images that linger
Deep within the mind
They are roses that bloom evermore
Full of fragnance never known before

Life must have a reason
for which we strive,
Memories are lights that burn
heart alive

By - Sapana Maurya, Second year

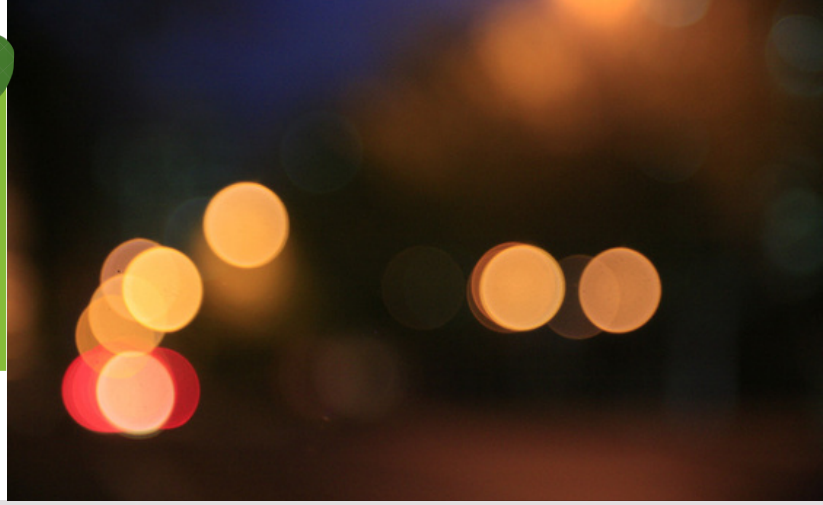
AN ODE TO ...THE GIRL I USED TO KNOW.

Not the very person one needed but,
she was innocent, an injured gaze,
never tamed her wild beliefs rather
looked into the mirror naming a thousand things
she loved about herself.
A gentle rebellion, just like a focal
point, people called her a histrionic as she stood there
like a lighthouse that shone through the dark.
I look up to her, she resides in my note pads filled with scribbles.
You don't see her anymore, she refused to live
here, far more than reluctant to give me an explanation.
However, I breathe to see her one day
and ask her to reconcile this dead soul of mine with hers.

.

By - Lobsang Tsekey, Second Year

NORTHERN LIGHTS



The mirror was always there; dusty and foggy with the clouds of pride, and therefore the reflection was a faded reality. A reality that I believed and idolised. or maybe I knew everything after a whole and was too anxious to look into the well; afraid of my clear reflection what if I fall?

And when I fell into the heart of glass; at the first in the middle; also clear and everything shines.Shining star in northern lights. In the dark I saw home also I felt. So I ran towards the moon and the stars exhausted angry, and tired. On the way I was Bleeding because of the shattered glass yet I followed my heart.

Pause! realisation; it was all a mirage total internal reflection. The air was heavy so was my heart. I couldn't be there anymore and it's too cold. oh! those new delights I should've known.

Finally,I met the end of the glass doom, it was already broken, thought- what is the harm if I break it more? so, jumped from one reality to another. Now all I know is nothing was real but the Mirror was clearer.

By - Khushi, Second year

O C T O B E R

Oh October! If this possible, I wish to tell if u existed as human
That how much I adore u , my love for month October is enigmatic
You are most favourite season of mine
The dusk & dawn are so chilly sweet
Breezes are in synchrony with my heartbeat
Ooo beautiful! Sunsets & sunrise
They are like a hope in my disguise

It Marks the fall, what a beautiful event
That I place it, in my heart without rent

Yes, the fall , its has its beautiful significance
Let me once more embrace

All year round, what I found
nature doing it's best
And u all know the rest....
Branches blooming flowers
Laying out roots stems
Ahem! At last they beautifully fall
And that's all

Humans , should glorify fall
October, through u I fancy the perspective
To give new opinion in their respective

How! Falls are graceful & calm , like you
With chilly sunrise and sunsets
That these event reside in my heart without rent

Fall , is not equal to failure
Its just fall
Everyone who, perpetuated like the trees
Should let appear some breeze
To fall their leaves of worries
And take things at ease
Let the moment seize
Take some rest, to do further best.

By - Shailza Bhati, Second year

THE SOUND OF SILENCE

This sound that engulfs me
This noise that I hear
This atmosphere that surrounds me
Is nothing but mere silence I fear

This silence that stays with me
Be it times of trouble in life
Or when tears fall beneath my eyes
Whether rain falls or thunders rage
This silence that haunts me
Is the one that always stays

I hear it, a lot
I hear the sound of silence which doesn't
Appeal a lot
Huh! Ironical ain't it?
It's not the muted sounds you don't hear
Rather the sounds you don't want to hear

When my fingers press the keys of piano
That I adore,
It's not the lovely timber of its strings,
Rather the thumping of the keys when it sings.

By - Yoshita Bhardwaj, Second year

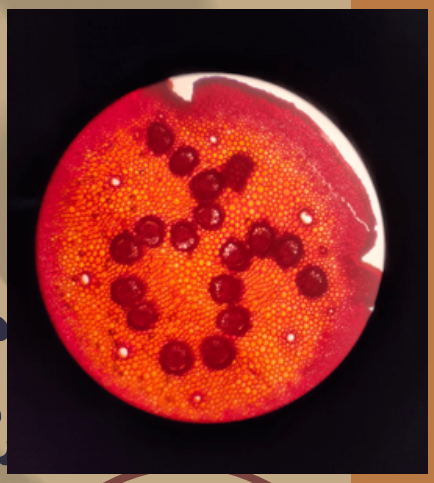
THE NIGHTCRAWLER

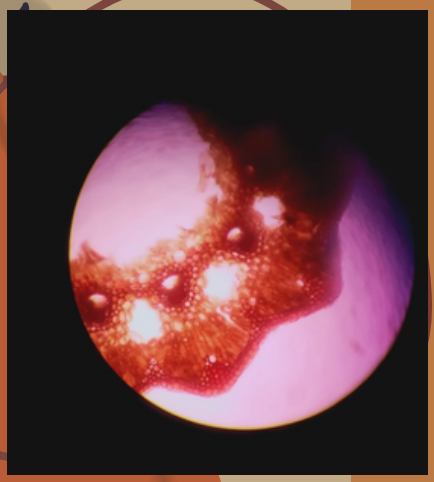
The Nightcrawler, Earthworm
Am reddish brown
Stay deep inside being warm
My feast on the soil
Is how I toil
Living together in compost
Has made people resourced
Bristles on my segments
Help me gripping my movements
Neither I have ears nor eyes
But still can sense vibration and light fears
My poop is the nutrient availability
Which turns out to be farmers productivity
I have both internal and external segmentation
Am the kind who help in soil fertilization
I may be slimy worm
But with no harm
I respect the farmers who grow paddy
And always applause the nature which give us toddy.

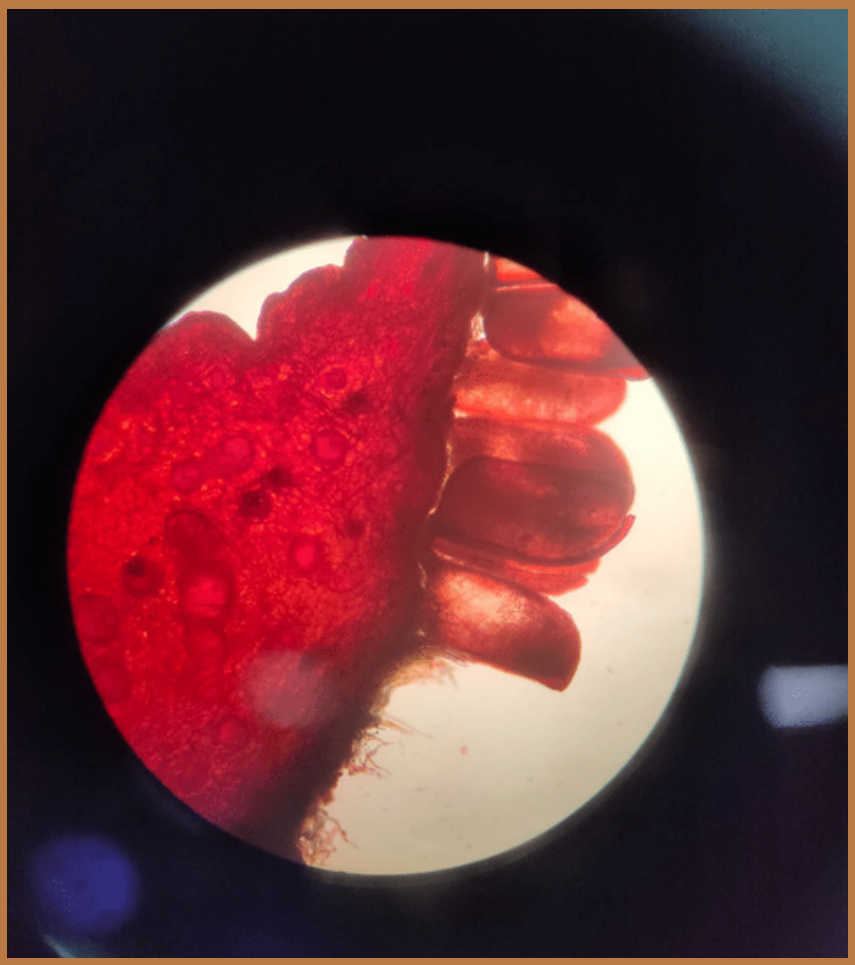
By -M. Supriya, Third Year

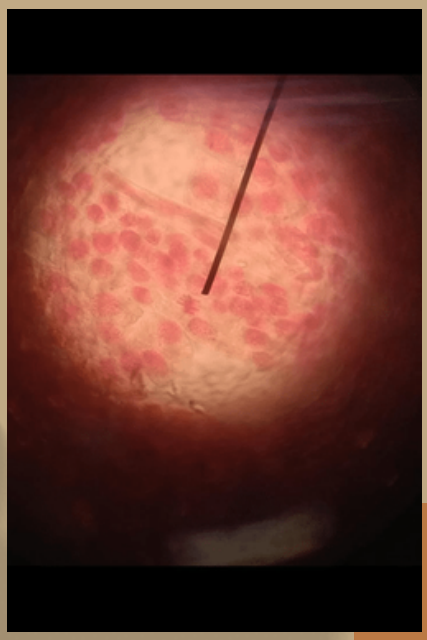
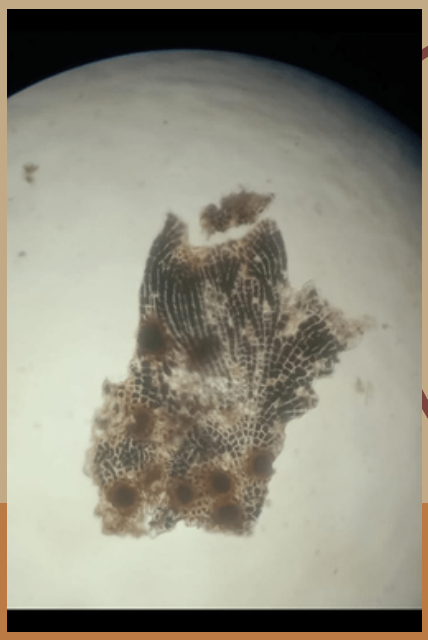
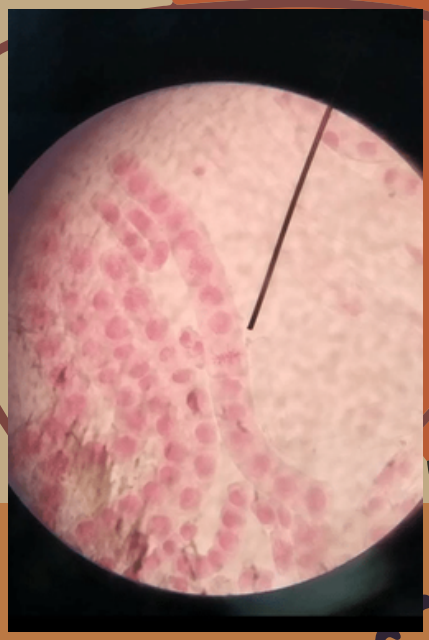
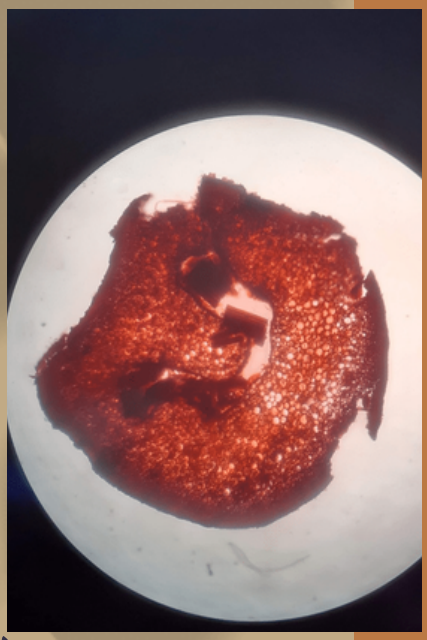
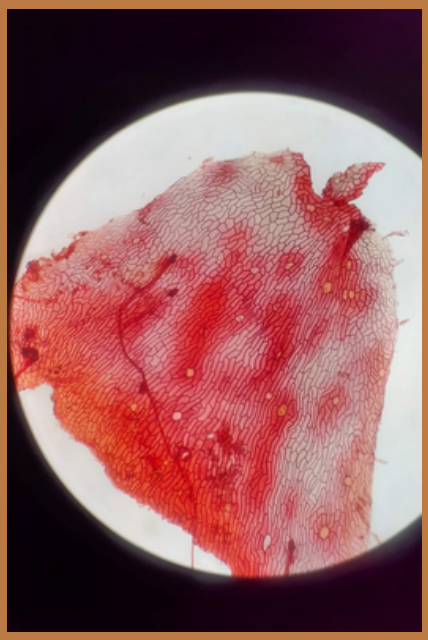
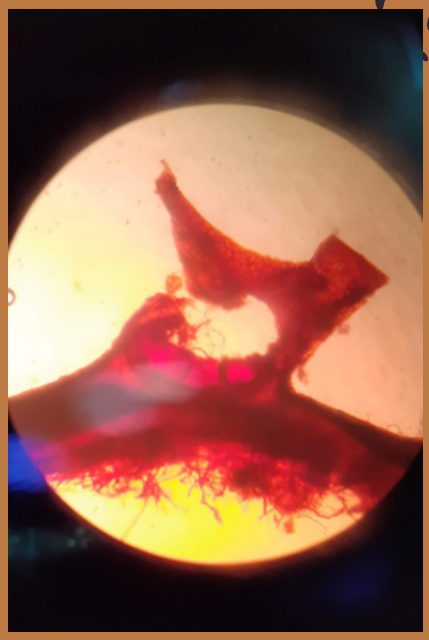
Botanists' Quest

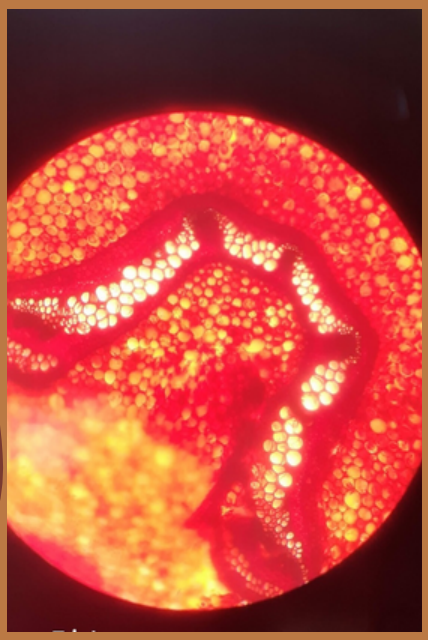
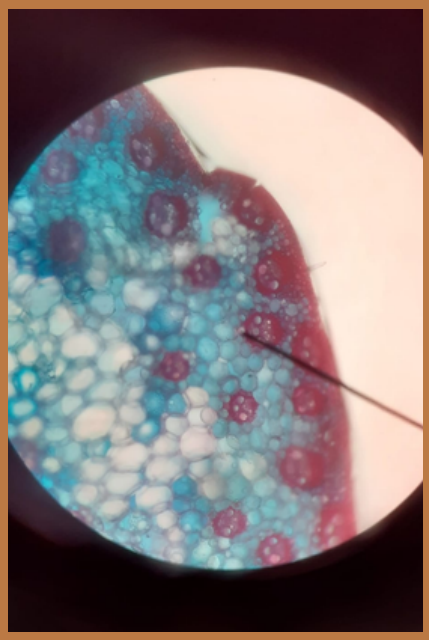
Section showcasing budding botanists at work - The slide preparation is one integral part of botany and here we present the third years with their hands on slides

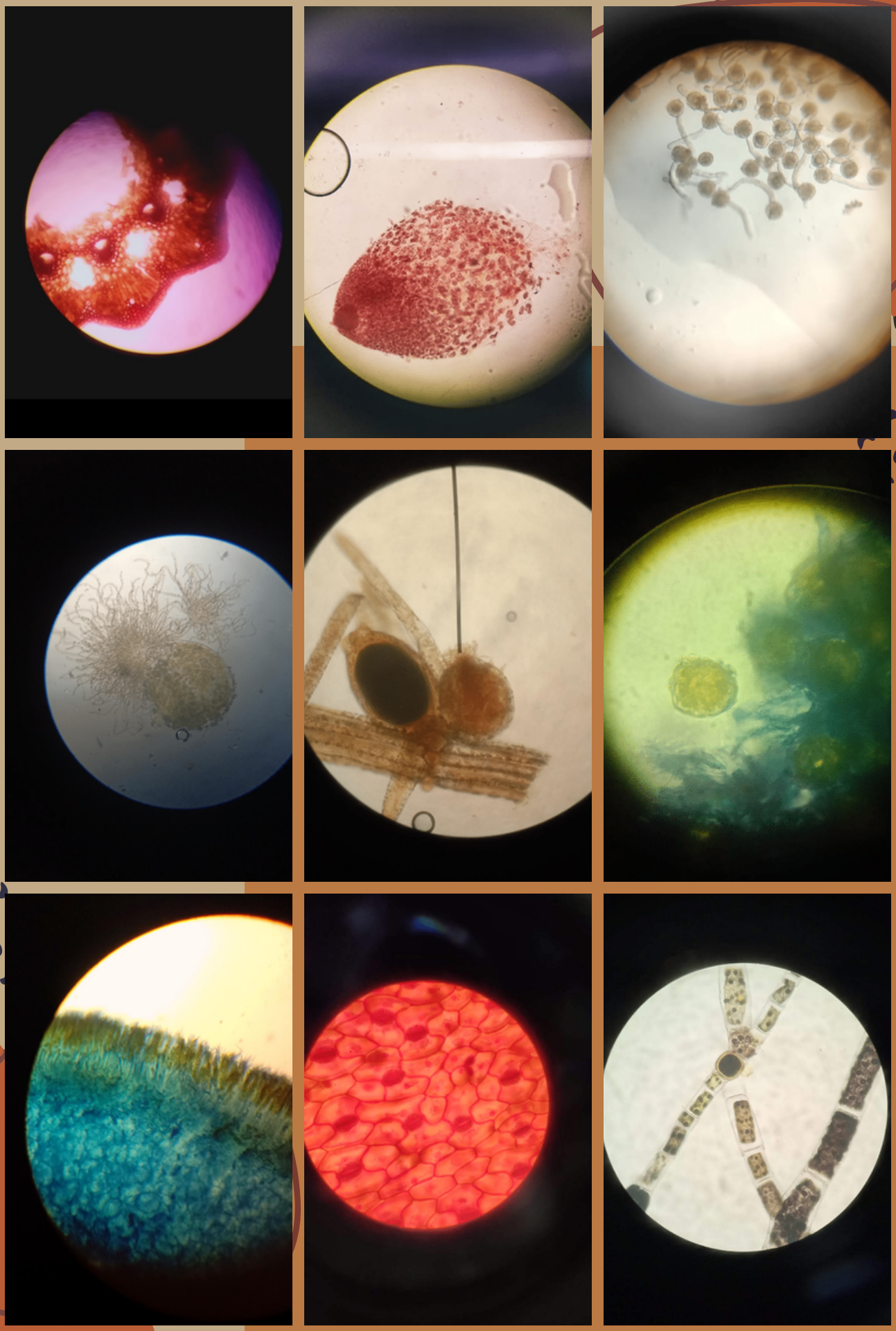


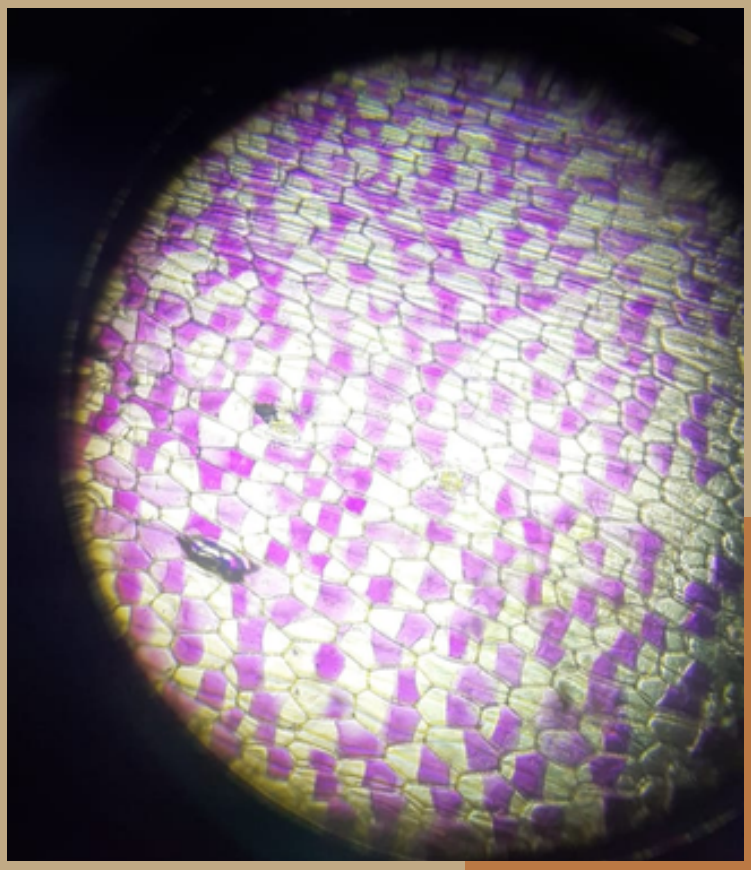




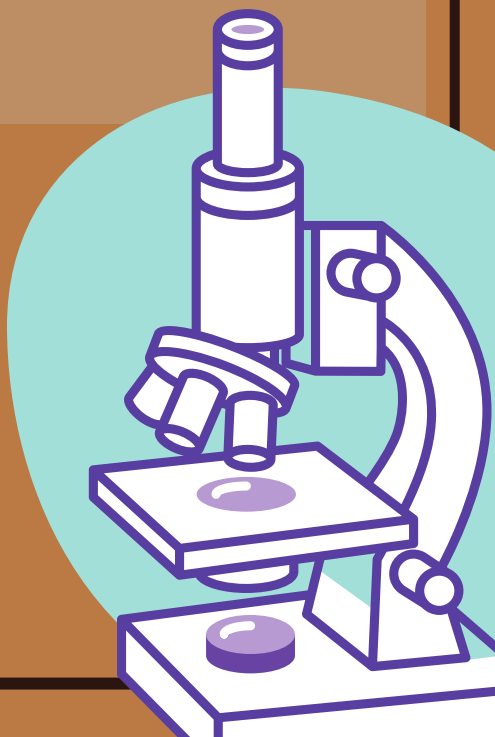







Slide Preparation by students of third year

Shubhra Singh, Kanika Singh, Muskan Tyagi, Rushda Khan, Prerna

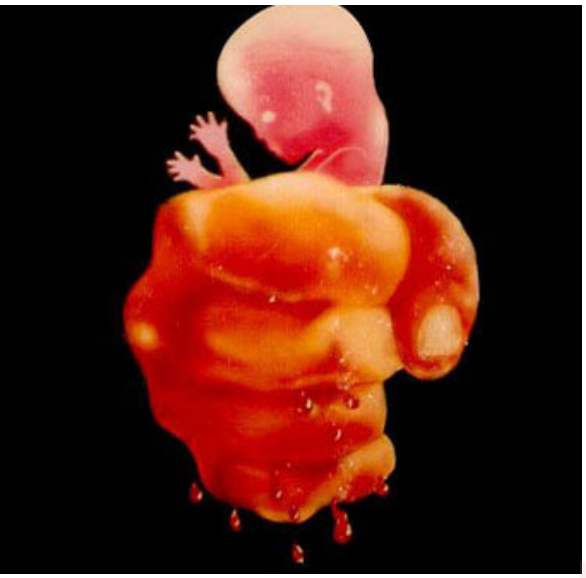


स्मृति

THE HINDI POETRY SECTION

लड़की और समाज

साक्षी
प्रथम वर्ष



कैसे लिखूं , कैसे बयां करूं, मैं मेरे अलफाज!
लड़की का न तो भूत था,न ही भविष्य है,न ही आज।
गर्भ में थी तभी चलने लगी थी, समाज के दिमाग में साजिशे!
कैसे बचाऊं, कैसे जन्म दूं इस बीज को मां झेल रही थी कसम- कशें।
छोड़ समाज को पीछे,मां बढ़ी अपनी बेटी को लेकर आगे!
लेकिन कहां पीछा छोड़ने वाले थे,ये समाज के लोग, थे खड़े आगे।
बेटा चाहिए बेटा,बेटी नहीं, लेकिन इस कलयुग मे श्रवण कुमार कहां!
था बेटी ने ही संभाला जब धक्के खा रहे थे यहाँ वहां।
नोंच के एक बेटी को, अजीब सी राक्षसी हंसी लेकर सम्मान पाता ये राक्षस यहां!
अपनी नजरों को साम लो, बेटियां अपने आप ढक जायेगी, खिल जायेगा पूरा जहां।
पड़ी थी जंगल में बेहोश,न पता था उस मां को इसके बारे मे!
पता चला तो उसकी मां पर दोष, लेकिन सोच रही थी अपनी बेटी की पीड़ा के बारे में ।
कोई ना आगे आया उनको संभालने, बेचारी दोनो खा रही थी पत्थरों की चोटें!
इस समाज ने पनाह न दी, दोनो खा रही थी दर दर की ठोंकरे।
समाज कहता लड़की है, पर्दा करती तीन साल की बच्ची कैसे पहनती साड़ी!
लेकिन किस्मत को था कुछ और ही मंजूर,अब है वो आपने पैरो पर खड़ी।
कहते हैं भगवान हर जगह नहीं पहुंच सकते तो मां को भेजा!
मां ने अपना कर्तव्य निभाया, है शिखरों पर बेटी को भेजा।
लेकिन मां को भी हो गई देर,इस बेरहमी बाप को चाहिए था बेटा!
राक्षस बाप ने डाल फांसी का फंदा, इस नवजात बेटी को नहर में फेंका।
उस बेचारी को कहां पता था, कि यह कातिल तेरा ही बाप है!
मां को कुलक्षिणी,बेटी को कहा कुल पर कलंकी, यही तो तेरा पाप है।
हे प्रभु! कहां रह गए आप, ऐसी खुबसूरत, भोली सूरत को बचाते!
ऐसी भी क्या कुकर्मों की सजा,जो न देख सकी दुनिया यही अलख हम जगाते।
चलो ले शपथ! सिखाए इस कटाक्षी समाज को सबक ,करेंगे इस समाज को अनदेखा!
बेटों ने कोनसा पहाड़ तोड़ दिया,इस नाजुक कली को लाएं आगे, कहे मैंने भी संसार देखा।
बेटी को भी दे अवसर आगे बढ़ने का ताकि हम भी दिखाए अपनी ताकत!
बेटों को छोड़कर पीछे, अपनी मां का करें सर ऊंचा बढ़ाए अपनी मां की भीताकत।
जय हिन्द, जय भारत!

वो लड़की

मल्लिका
प्रथम वर्ष

वो लडकी क्यो रो रही थी
क्यो कोई मूकबधिर सडक पर तडप रही थी
क्यों कोई निर्भया जल रही थीं
क्यों कोई लड़की बाहर सड़क पर चलते वक्त हिचकिचा रहीं थी

क्यों उन दरिंदो के चेहरों पर विजई मुस्कान है
क्यों हर कोई जानकर भी अंजान है
क्यों नहीं लड़की की अपनी कोई पहचान है
क्यों नहीं कोई देता इस सब पर ध्यान है

लड़का लड़की भागे, लड़की का दोष
लड़की का हरण हुआ कपड़ों का दोष
औरत के साथ हुई हिंसा तो मां बाप के संस्कारो का दोष
क्यों नहीं कोई कहता की है इस पापी समाज का दोष

क्यों लड़की को ही समझाऊं मै
क्यों उसे ही सहना सिखाऊ मैं
हद तो तब होती हैं जब तीन साल की बच्ची का बलात्कार होता है
क्या अब उसे भी साड़ी पहना ऊ मै

लड़का लड़की समान है
कहती ह ये शासन प्रणाली
किसी दुखिया को न्याय नहीं
कैसी है ये शासन प्रणाली
उस पीड़िता के माता पिता के आंसू ना पूछ पाए
तो किस योग्य है ये शासन प्रणाली

लड़का लड़की समान है
कहती ह ये शासन प्रणाली
किसी दुखिया को न्याय नहीं
कैसी है ये शासन प्रणाली
उस पीड़िता के माता पिता के आंसू ना पूछ पाए
तो किस योग्य है ये शासन प्रणाली

लड़का लड़की समान है
लेकिन लड़की के प्रगति करने पर
क्यों उठता यही सवाल है
कि इसकी जिंदगी ही ससुराल है
क्यों लड़की के आगे बढ़ने पर
इस पुरुष का हाल होता बेहाल है

चाहे कितनी उचाईया छूले तू
लेकिन तू लड़की है
चाहे कितनी पहचान बनाले तू
लेकिन तू लड़की है
तेरा कुसूर भी इतना है
की तू लड़की है

सबके दु:ख बांटती है वो
अपना सुख त्यागती है वो
हर पीड़ा सहती है वो
लेकिन फिर भी क्यों खुद दुखी है वो

किसी की बेटी , किसी के लिए लक्ष्मी माता है
कहीं सरस्वती तो कहीं जननी माता है
क्या किसी से नहीं राखी का नाता है
और क्यों उसे ही भ्रूण में मारा जाता है

यही है वो लड़की.....

इंसानियत

योशिता भारद्वाज
द्वितीय वर्ष

सिर्फ अपनी सांसे सबको प्यारी हो गयी
इंसानियत के मरने की पूरी तैयारी हो गयी

क्या हासिल करोगे जीत कर दूसरों से
जब अपनों से ही मात करारी हो गयी

ताजी हवा परेशान करती है जिस्म को
सबकुछ जीवन में अब तो चारदिवारी हो गयी

मौत ही असल हकीकत है जीवन की
क्यों सबको इतनी जानकारी हो गयी

माँ बाप भाई बहन सब मतलब के रिश्ते हैं
शायद जानवरो सी नस्ल हमारी हो गयी

मजा आता नही अब तो किसी भी बात पर
गुम कहीं वो बच्चों की किलकारी हो गयी

मंदिर मस्जिद क्या आम क्या खास सब कुछ
बेदर्द दौलत की दीवानी दुनिया सारी हो गयी

ज्यादा कमाने की अंधी हवस में प्यारों
खुद की कीमती सांसे ही हम पर भारी हो गयी

हर एक साँस को जन्म देने वाली देवी
इज्जत को मोहताज बेचारी नारी हो गयी

इश्क करना इश्क फैलाना आदत है मेरी
क्यूँ तुझको अ नीरज ये अजब बीमारी हो गयी

पतझड़

सपना मौर्य
द्वितीय वर्ष

पतझड़ आया है
मन मे उल्लास छाया है

मौसम ने करवट ली है
सर्दी हवाओं ने दस्तक दी है
दिन छोटा-सा प्रतीत होता है
और रात लम्बी-सी लगती है

एक तरफ नीले अम्बर के तले,
पीले पत्तों की चादरें हैं
वहीं दूसरी तरफ खुले आकाश
से सर्दियों की ख्वाइशें हैं

त्योहारों के आगमन का
यहीं से तो प्रारंभ होता है
मिठाइयों की खुशबूँ से
पूरा वातावरण महक हो उठता है

प्रकृति कुछ नारंगी, कुछ लाल,
कुछ पीली-सी जान पड़ती है
ना जानें क्यूँ ये ऋतु सबको
अपनी-अपनी सी जान पड़ती है

जीवन पतझड़ की प्रतिछाया है,
जहाँ कभी खुशी तो,
कभी ठहराव का साया है

ये ऋतु स्थिरता को दर्शाती है
जो मन को कभी शांति
तो कभी स्वतः ही आगे
बढ़ने की प्रेरणा देती है

देखो देखो,
पतझड़ आया है
मन में उल्लास छाया है।

वनो का महत्व

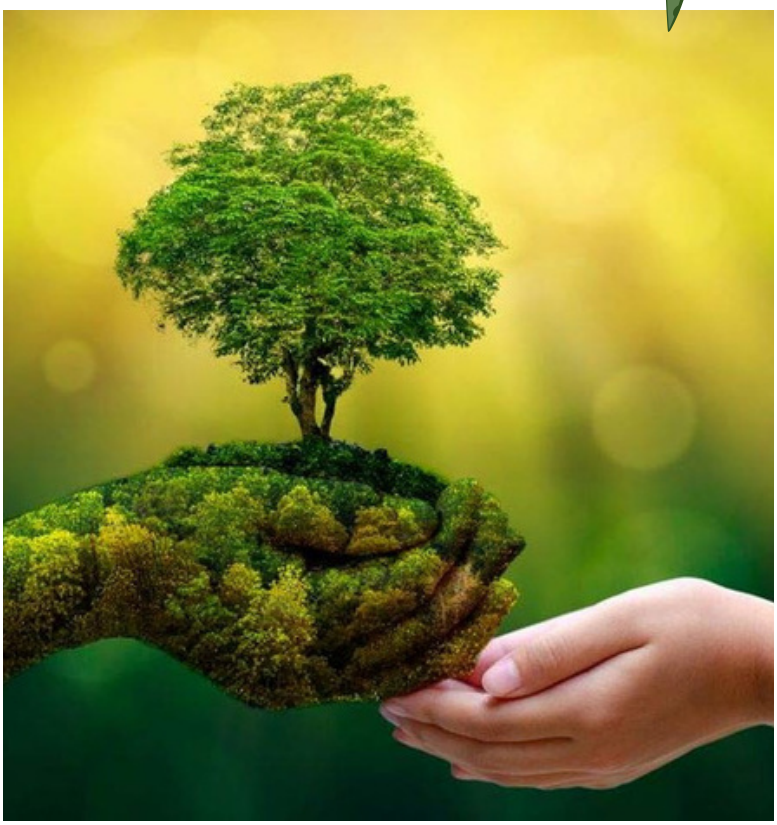
पलक
द्वितीय वर्ष

वन बचाओ,वन बचाओ
अपना जीवन बचाओ ।
ईश्वर का वरदान है वन,
जिस पर निर्भर हम आजीवन ।
वन बचाओ , वन बचाओ
अपना जीवन बचाओ ।।

वन हमें है देते ऑक्सीजन,
स्वयं लेते कार्बन डाइऑक्साइड है वन ।
जीव जंतुओं का घर है वन,
जहां जीते वो अपना जीवन ।
वन बचाओ,वन बचाओ
अपना जीवन बचाओ ।।

वनों में खिलते लाखों फूल,
जिसका समझना हमें है मूल ।
वनों से मिलते हमें है फल,
जिसे खा खुश हो जाते हम हर पल ।
वन बचाओ,वन बचाओ
अपना जीवन बचाओ ।।

वनों से मिलती हमें है लकड़ी,
जिससे बनती हमारी झोपड़ी ।
वन हमें हैं देते छाव,
रोकते हैं थकते पाव ।
वन बचाओ,वन बचाओ
अपना जीवन बचाओ ।।



वनों के कारण बच जाते हैं हम,
सुखा,मृदा अपरदन,बाढ़ जैसी समस्याओं से हम ।
वन करते हैं जल चक्र का विनियमन,
जिसके सहारे हमारा जीवन ।
वन बचाओ,वन बचाओ
अपना जीवन बचाओ ।।

अधिक से अधिक वृक्षारोपण करो,
दूर करो प्रदूषण ।
वनों का समझे जो महत्व,
बढ़ाए वो अपना गौरव ।
वन बचाओ,वन बचाओ
अपना जीवन बचाओ ।।

सीडीएस बिपिन रावत

योशिता भारद्वाज
द्वितीय वर्ष

भारत माँ के लाल तूने फ़र्ज़ अपना अदा किया
जान हथेली पर लेकर दुश्मन का चीर सीना दिया ।
देश को ये कर्ज़ देकर गहरी नींद सो गए
फिर से वीर भारत माँ के शहीद हो गए ।

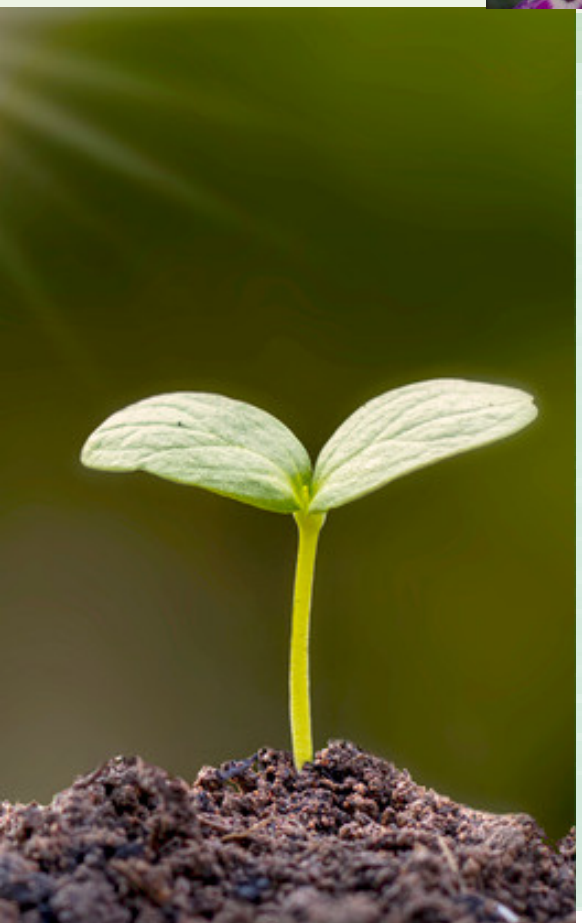
बलिदान तुम्हारा ये देश कभी न भूल पायेगा
याद करेगा तुमको और वंदे मातरम् गायेगा ।
देश में तुम एक नई ऊर्जा का बीज बो गए
फिर से वीर भारत माँ के शहीद हो गए ।

आंखे अभी भी दरवाजे पर राह तक रही होगी
वो माँ बेटे की प्रतीक्षा में राते जग रही होगी
उस माँ को अब ये कौन जाकर समझायेगा
तू सो जा माँ तेरा लाल लौट कर नही आएगा ।

एक नया इतिहास लिखकर सन्नाटे में खो गए
फिर से वीर भारत माँ के शहीद हो गए ।

क्या पौधे भी हम जैसे होते हैं?

संध्या कुमारी
द्वितीय वर्ष



क्या पौधे भी हम जैसे होते हैं?
जो हवा के साथ ,अपने आप को जाने देते हैं,
जिसे शांति से देखे तो वह भी हमारी तरफ देख कर कुछ बोलने की कोशिश करते हैं|

धूप की चाहत तो उन्हें भी होती है,
जो ठण्ड में हमें अलग ही सुकून देती है|

कभी बड़े बड़े पेड़ों को देख कर डर लगा है,मानो अपने विशाल कद से हमें डरा रहे हो,मनो ये बता रहे हो,की मैं हूँ तुमसे बड़ा,और करो मेरा आदर |

मेरी ही छाया ताले हुए हो तुम बड़े,
और अब बारी है तुम्हारी भी,
तो कर लो अपनी जड़ों को मजबूत,
और बढ़ाओ आसमान की तरफ,
पर भूल न जाना उन बूढ़े पेड़ों को,
जिन्होने बचाया है तुम्हें वक्त बरिश से,
मौसम की मार से,गर्मी के अत्याचार से,
भूल न जाना आबाद रखना |

एक विचार...

अंजलि पांडे
तृतीय वर्ष

मुश्किलो के लश्कर में मुस्कराइये
जमीं नम है तो आंखों में लहू लाइये

तबियत क्या है नासाज़ या साज़
ये सब छोड़िये घर लौट आइये

गिरफ्त राम की हो या रहीम की
जिसके घर में कैद हो वहां की खाइये

मुश्किल है कि रूह भी बिक जाए
तस्व्वुर की आंखों में आराम फरमाइये

संजीदा चेहरा हो या आंखे
अपने हाथों से न अपनी तस्वीर बनाइये

सुखन की बांसुरी बांस की हो सकती है
इश्क किये हैं तो खाक की जलेबी खाइये

रत्नाकर हरगिज़ ये हौसला रखो
हिम्मते टूटे तो फिर से आज़माइए

रफू चक्करो का काम है शहर ए गम
आप खुद्दार हैं तो अपने पसीने से नहाइये l

चुपचाप खड़ा

गीतांजलि शर्मा
तृतीय वर्ष

चुपचाप खड़ा मैं दुनिया को जीवन बांट रहा और बदली में इंसान मुझे ही काट रहा,
धरती को लहराया मैंने,सागर को बरसाया
धूप आई तो छांव बना मैं, हर एक जीवन का सार बना मैं।
यूं तो मेरे कटने पर विरोध की कोई आवाज नहीं
और किताबों में बसता मैं हर कहीं
सिखाया सबको जाता है – पेड़ लगाओ, धरती बचाओ, धरती हमारी माता है।
सीखा सबने सबकुछ है,
लेकिन इंसानियत ना जाने कहां गुम है
ऐ इंसान तेरा खेल भी निराला है
कहीं पूजा मेरी होती,
तो कही कोसकर मारा जाता है।।

न जाने कौन सो गया...

अंजलि पांडे
तृतीय वर्ष

चलो सोते हुए कब्रो को गुदगुदी करें
देखें कौन मुस्करा के सो गया था

सब बराबर में है लेटे इस जमीं के बल
रुक्सार पर तो खाक ही आके सो गया था

कभी हिन्दू कभी मुस्लिम कभी कुछ और
जब सोया तो बराबर में आके सो गया था

बहुत रोयी रहीं आंखे संग दिल ए नायाब
पलकें उठायी तो जहर खा के सो गया था

हरपल तफ्तीश आईने के सामने
ये कौन बेईमान यहाँ आके सो गया था

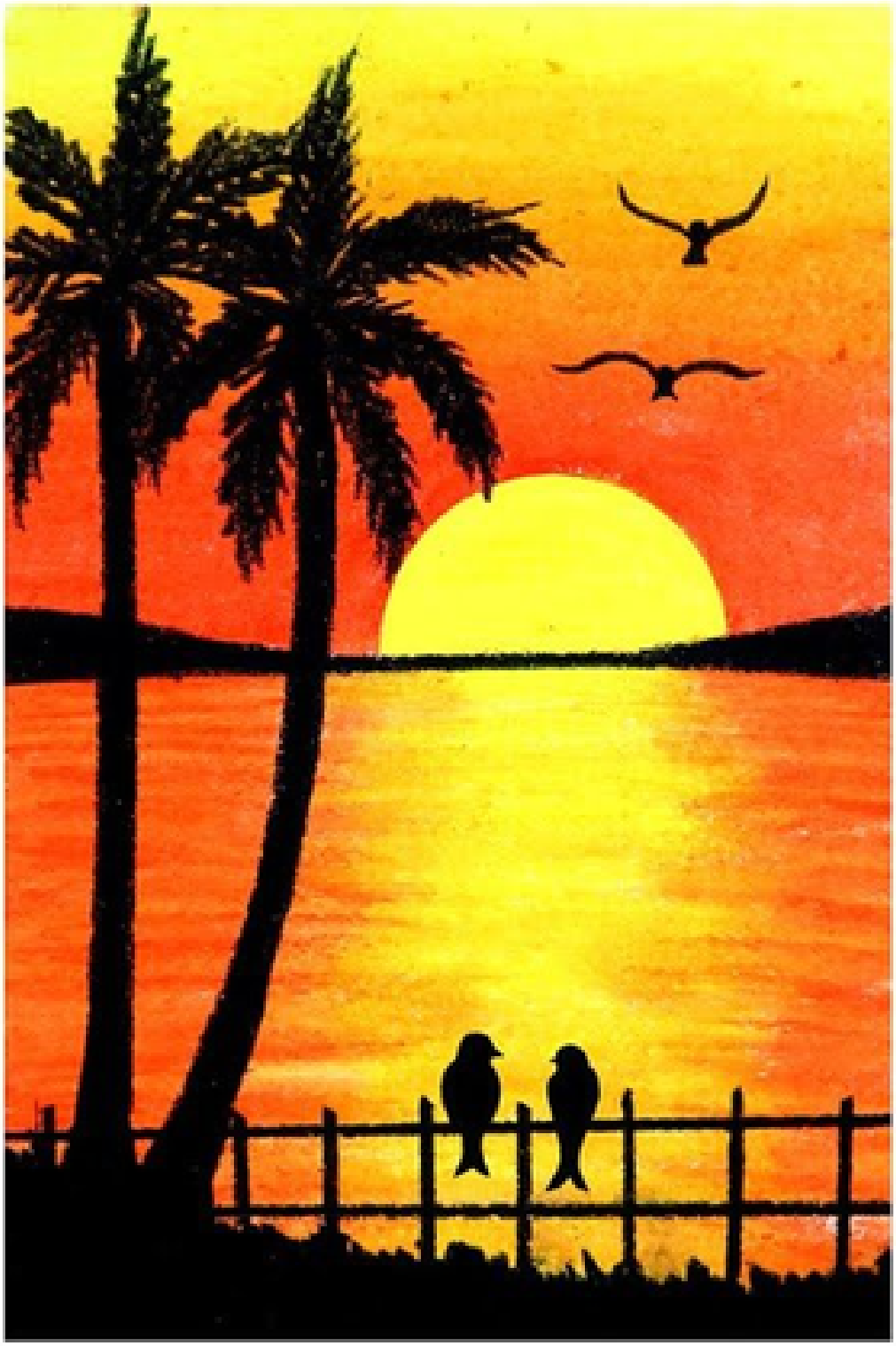
मुंतज़िर ही नहीं हो रहे श्मशान के मालिक
वरना बता देते कि यहां कौन सो गया था

मैंने रोते हुए बच्चों के आंसू पिये
फिर जान पाया कि बगल में कौन सो गया था

इस बात को इस तरह भी कह सकते हैं
कोई था जो मेरे साथ मे आके सो गया था

चलो रत्नाकर कहीं और चले सब
अंजुमन में न जाने कौन कौन सो गया था

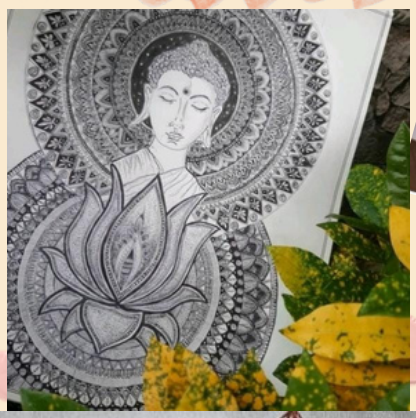
Felicia

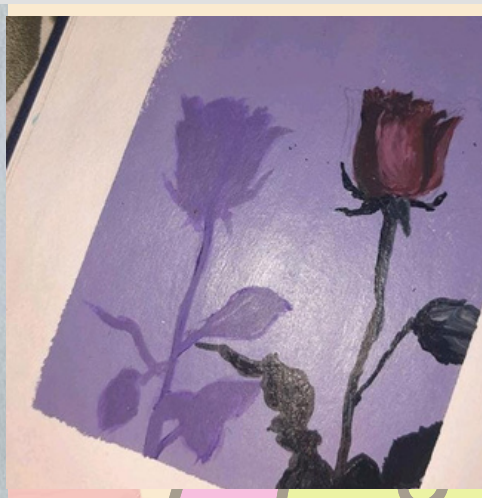


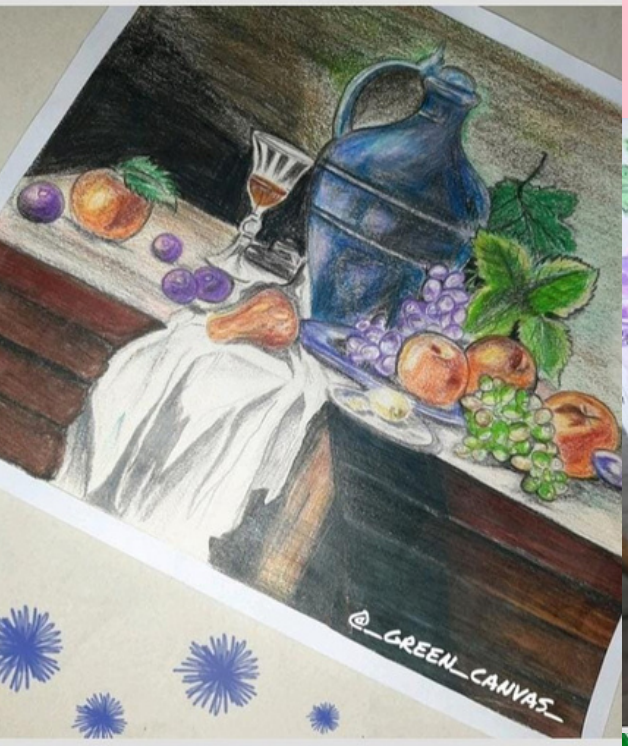
Felicia means a felix, it potrays Happy things done in Art. Here, we present the creative drawings, paintings of our department.

Chinglembi Haobam
First Year

Rucha Shubhash
First year





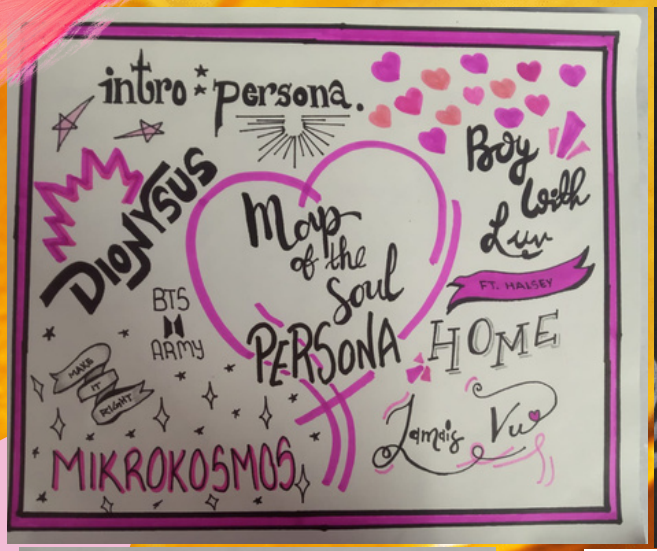


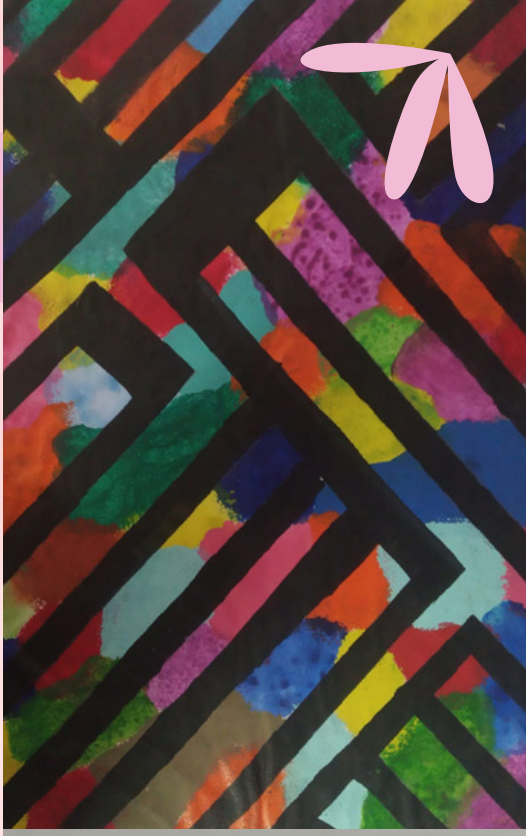
Rucha Shubhash
1st year

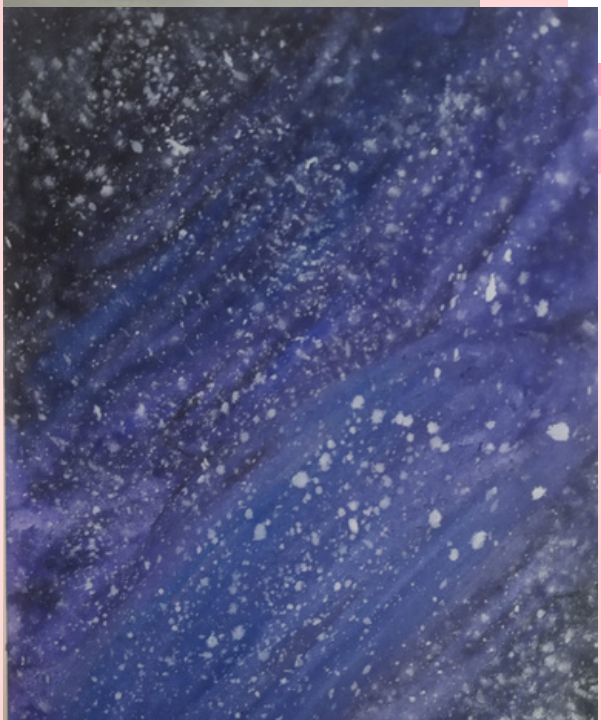
Priyanka Kumari
Second year

Poonam Suwasiai
First year

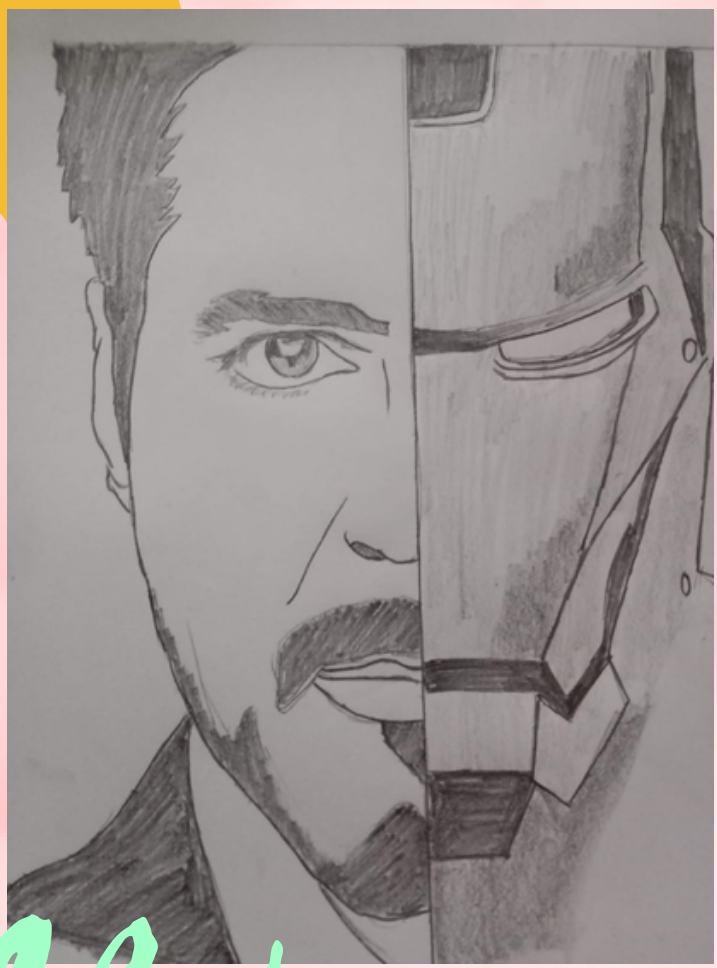
Neelam
Vishwakarma
First year

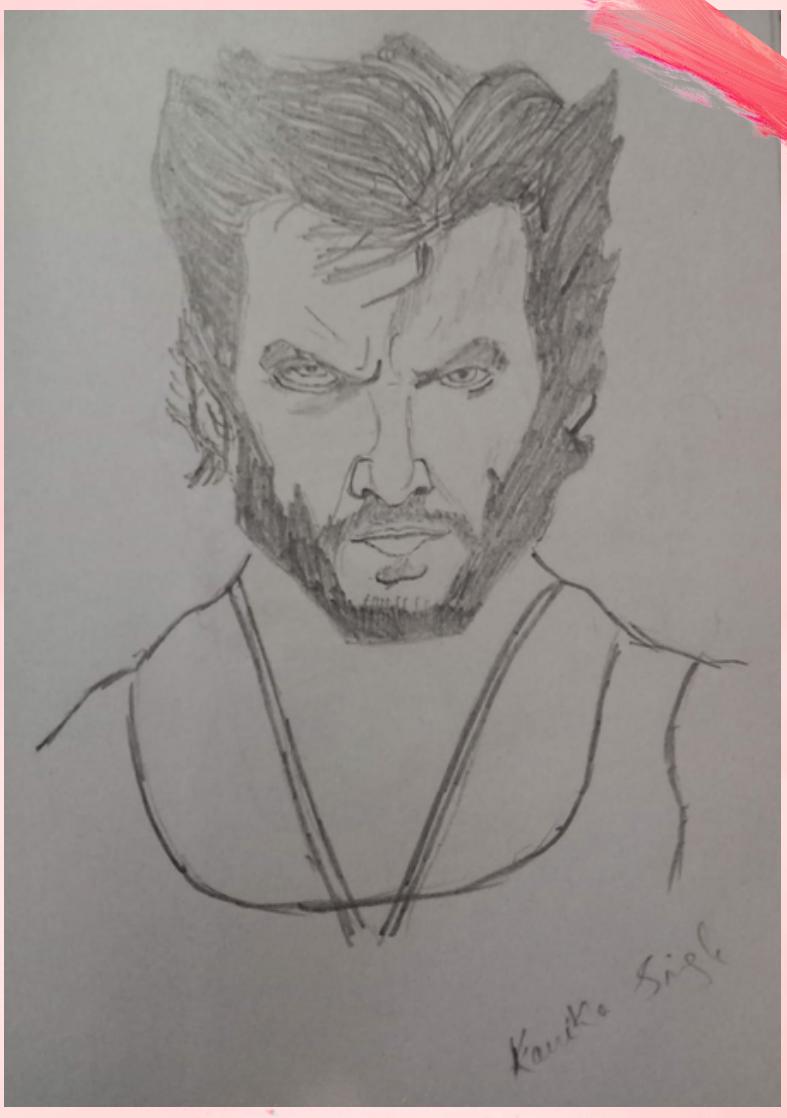


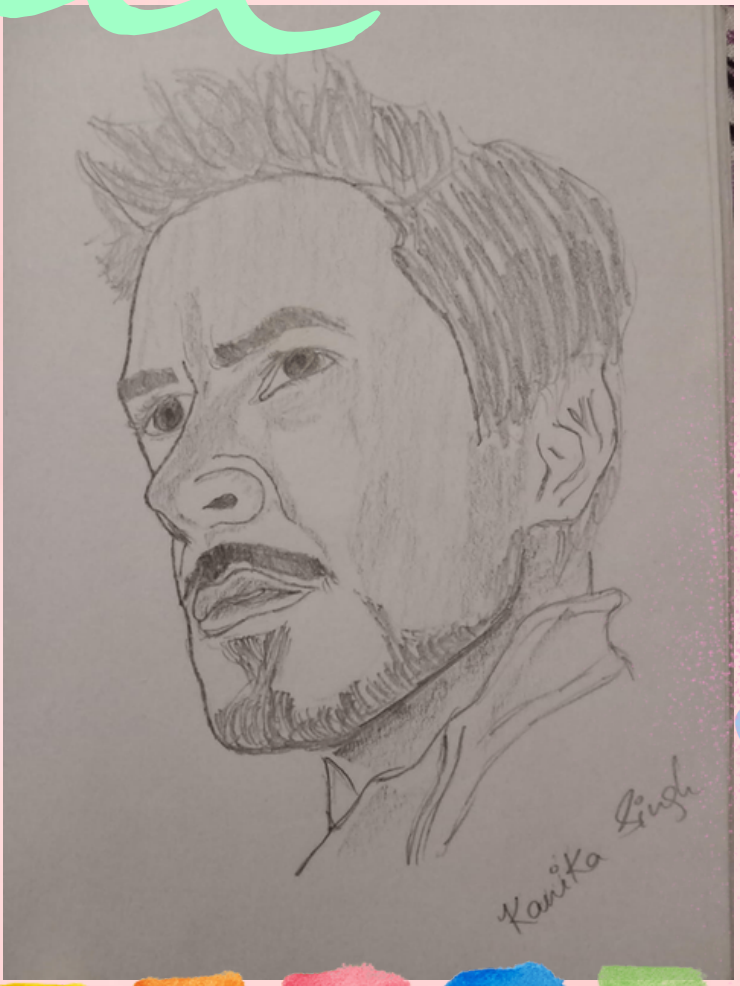




Yoshita Bhardwaj
Second Year







Kanika Bhadauriya
Third Year

Izhar-e-miranda

-The Photostory Section.

BYE! & HI!

I said "Bye" to the old memories and my old friends for the time being.
❤✨

I'm welcoming my new friends & the new Beginnings with a bright, sincere "Hi".

By- Lenthoibi, 1st year

First visit to MH

Hello😊 Myself Chinglembi Haobam,a fresher doing Bsc Hons in Botany .The above pictures are from November when I visited the college for the first time.I met Maam Sundari and Maam Rashmi 😊 and Maam Sundari showed me around the college.Our college looked soo cooI with the sunset that day .And I was supposed to meet my closest friend whom I have talked to online as she was also coming to visit college with her fam her name is Chestha Rawat😊 I was soo excited but due to jam and road blocks that day I couldnt meet her as I couldnt reach college on time and she had to go back to Uttarakhand that same day

By- Chinglembi Haobam, 1st year

MH DIARIES - COLLEGE VISITS

Precious college visits amid the pandemic.....

We went to college to issue some books.

Met all the teachers present there & also my batchmates.

By- Mrinalini Gupta, 2nd year

S O L I T U D E

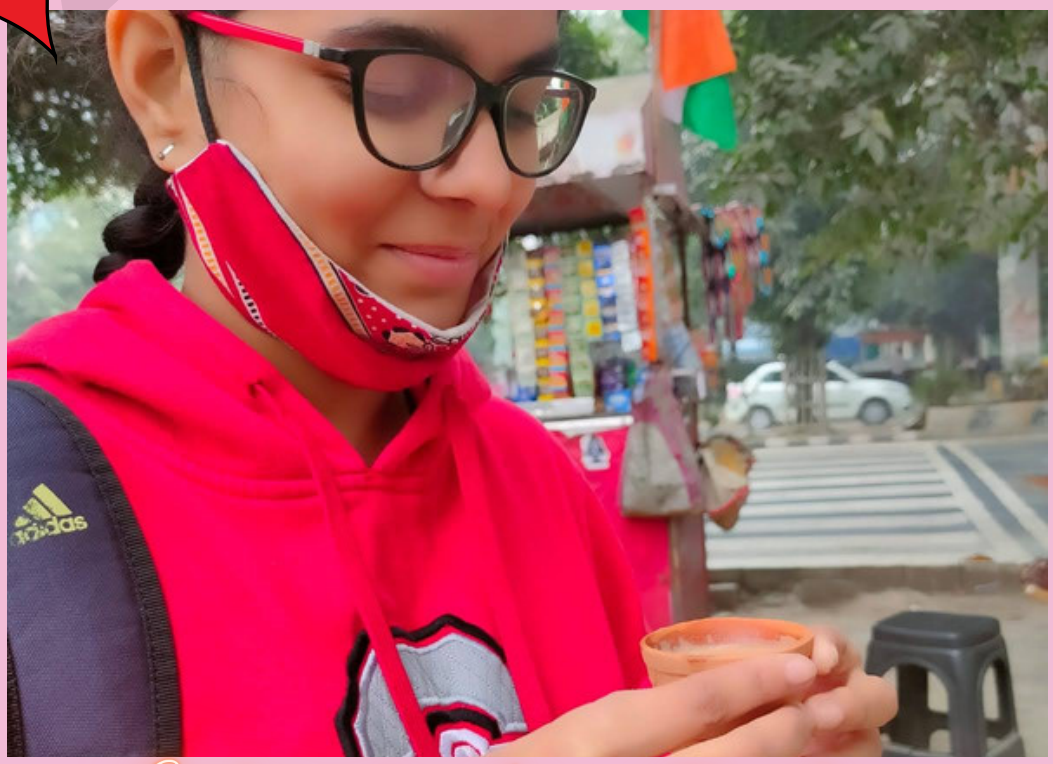
WHAT DOES PEACE MEAN TO YOU ? IT DOES NOT MEAN TO BE IN A PLACE WHERE THERE IS NO NOICE. IT MEANS TO BE IN THE MINDSET OF THOSE THINGS AND STILL BE CALM. THIS PICTURE SHOWS THAT MOMENT WHEN YOU ARE IN BETWEEN THOSE HUNDREDS OF VOICES BUT WHAT YOU HEAR IS YOUR INNER VOICE. THIS PICTURE WAS TAKEN IN MUMBAI IN BETWEEN THE SEA IN A BOAT WITH OTHER SO MANY BOATS IN SURROUNDING & A LOT OF CHAOTIC VOICES. BUT AT THIS MOMENT, NOTHING WAS HEARD BECAUSE OF THAT MESMERSING SUNSET AND THOSE BIRDS FLYING SHOWS THAT THERE IS A FREEDOM WAITING FOR YOU, ON THE BREEZES OF THE SKY, AND YOU ASK “WHAT IF I FALL?” OH! BUT, WHAT IF YOU FLY? YOU WILL SPREAD YOUR WINGS AND LEARN TO FLY YOU WILL DO WHAT IT TAKES TILL, YOU TOUCH THE SKY

By- kumari khushi, ,2nd year

FOOD, FRIENDS N LOVE

Food is love and Love is Food. The two pictures describe me trying out chinese and the overhyped sudama ki chai....

Some people meet you accidently but turn to be your blessing. The pictures describes me and two beauties who make my days great. And it is also funny as I saw my teacher Somma maam and me being afraind of people was running here and there with these crazy souls. P.S :-) Sorry maam



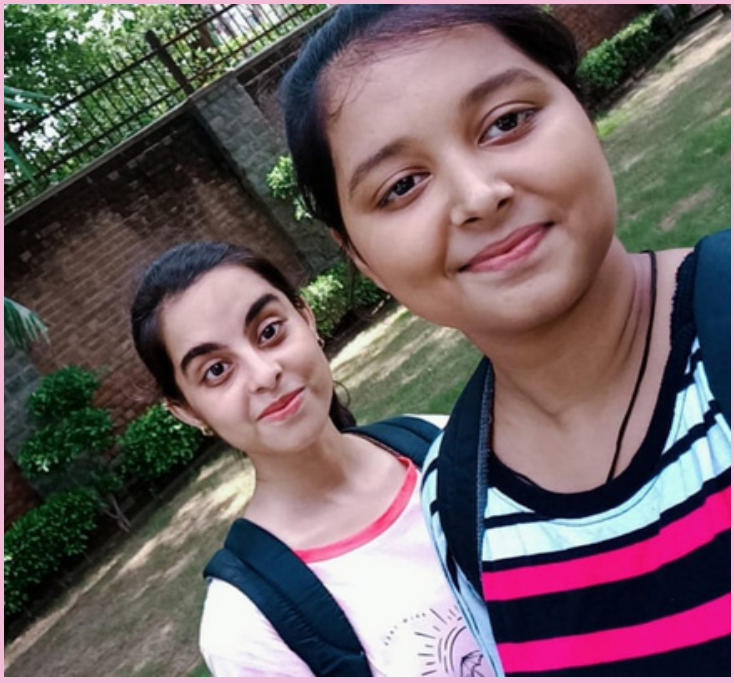
Sudama ki chai + Freinds = Memories

By -Yoshita Bhardwaj, 2ndy year

TWO "FIRSTS"

Hello everyone,

My name is Shubhra Singh. I am in 3rd year, and i sharing my two "firsts" with all of you. so, the first picture is of me and Anjali Pandey, one of my closest. We clicked this picture when we were attending some society annual fest(don't remember exactly which one) in 2020, and it was our first time when we were having something for free in MH. m talking about these drinks. I and Anjali shared a lot of firsts together.



The second picture is of me and Kanika Bhadauriya, my first college buddy and this is my first college picture with anyone in MH. We also had good time together.

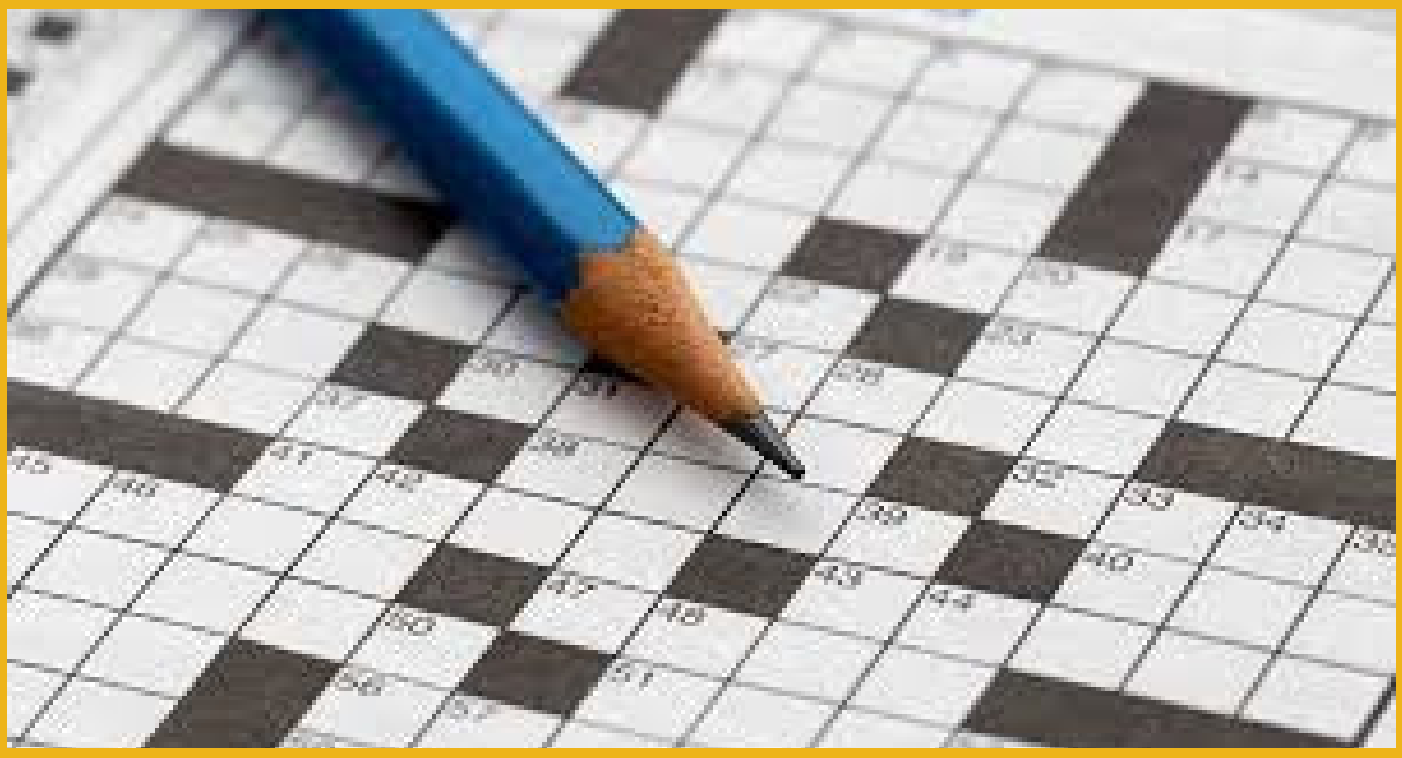
By- Shubhra Singh, 3rd year

TO ALL THE FRIENDSHIPS OUT THERE

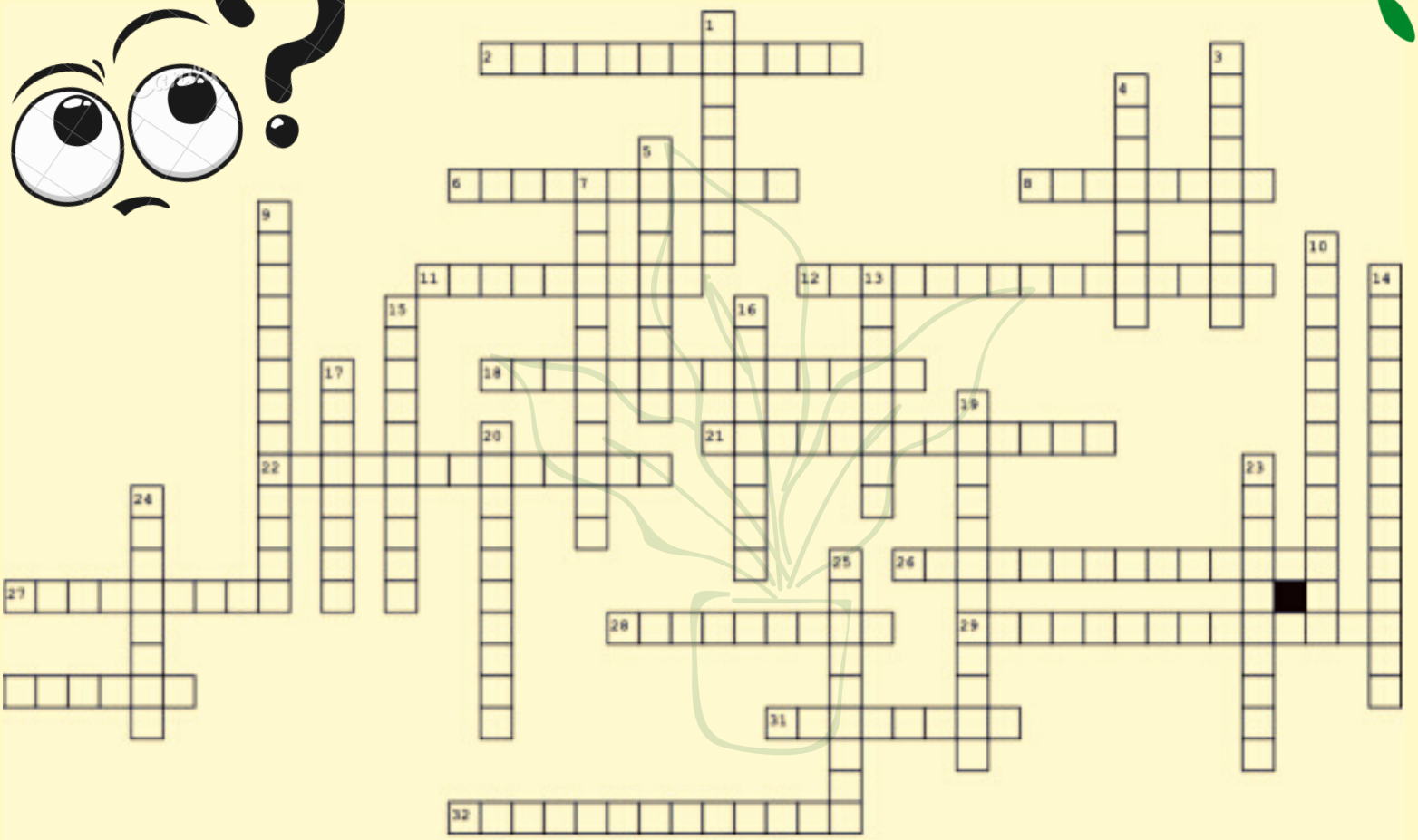
We all know that the world turns a level more beautiful when you know that the most perfect and precious humans are by your side. Above, we just woke up and boom, next, we were there dancing n jumping in Delhi's Purana Qila, turning it into one of the most reminiscent day of our friendship.

By-Garima Dubey, 3rd year

Crossword & facts



GUESS THE FAMILY



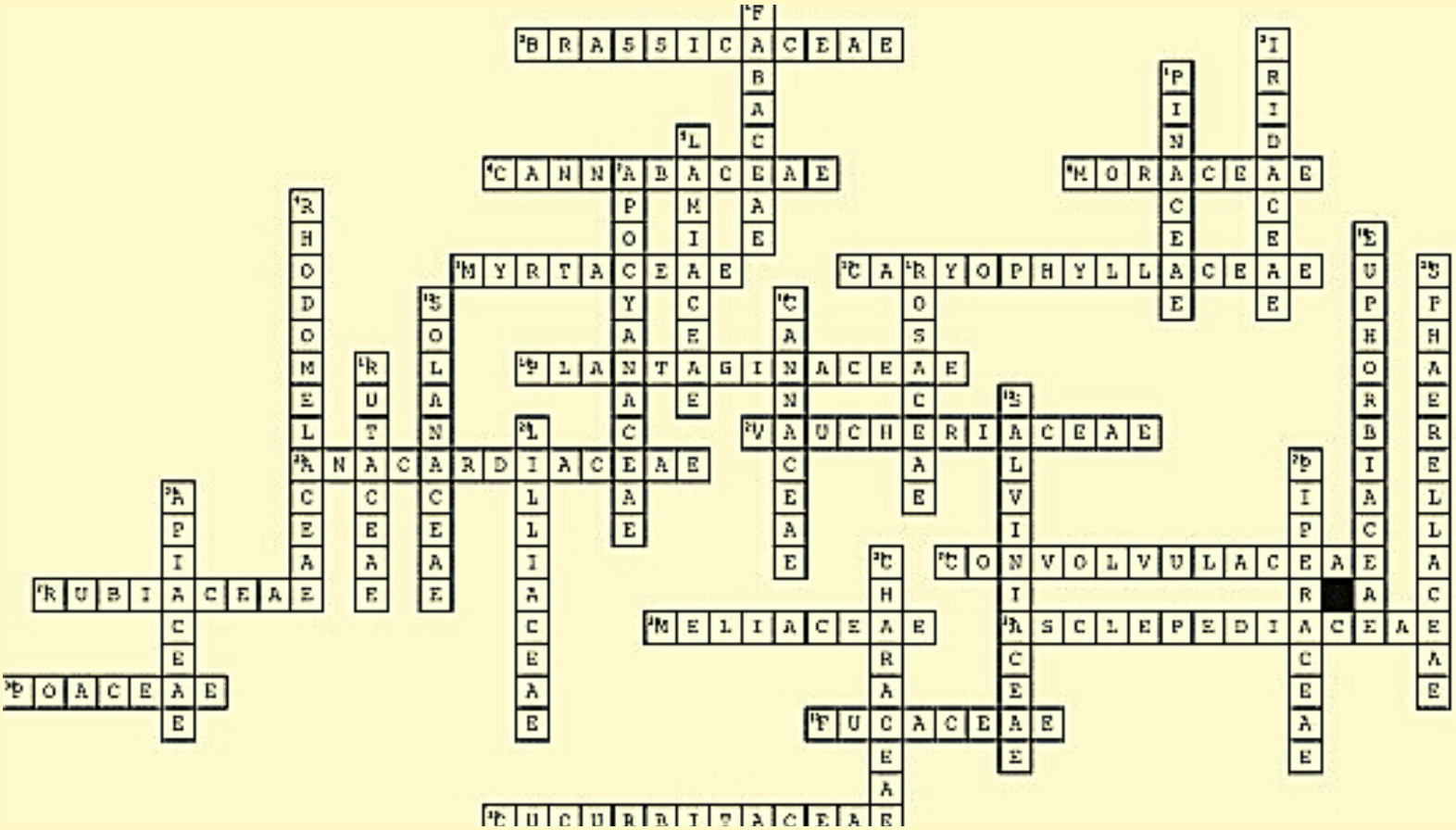
Down
1. Glycine max
3. Crocus sativus
4. Pinus sylvestris
5. Ocimum tenuiflorum
7. Vinca rosea
9. Polysiphonia
10. Jatropha integerrima
13. Prunus persica
14. Volvox
15. Solanum nigrum
16. Canna indica
17. Citrus limon
19. Azolla caroliniana
20. Allium cepa
23. Piper nigrum
24. Coriandrum sativum
25. Chara

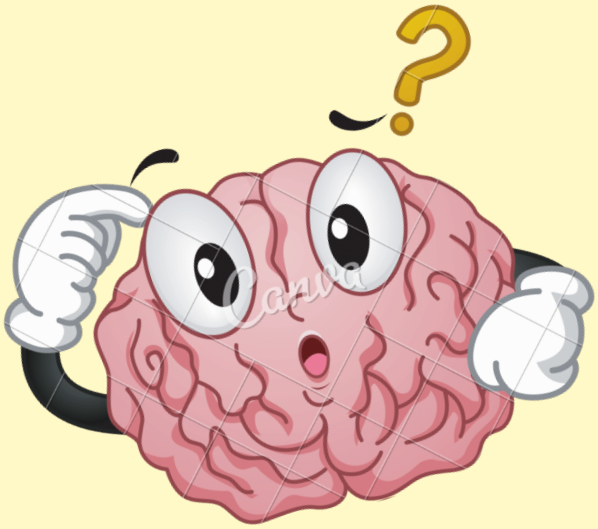
Across
2. Brassica campestris
6. Cannabis sativa
8. Morus indica
11. Eucalyptus obliqua
12. Dianthus caryophyllus
18. Digitalis purpurea
21. Vaucheria
22. Mangifera indica
26. Ipomoea purpurea
27. Cinchona officinalis
28. Azadirachta indica
29. Calotropis procera
30. Triticum aestivum
31. Fucus
32. Cucurbita people

By Sneha Mahato 2nd year

.

“GUESS THE FAMILY: ANSWERS





INTERESTING FACTS OF BOTANY

- Dwarf Willow is the tiniest tree in the world which is about two inches. Its scientific name is Salix herbacea.
- Banana is actually Arabic word for fingers.
- A plant called Hemlock Water-Dropwort plant is so poisonous that it induces facial paralysis in people and force their facial muscles into a smile after they die.
- A plant named “Selaginella lepidophylla” or “Dinosaur Plant” has an amazing ability to survive in dry weather. It curls up in a ball and later can be restored with a little water.
- A plant called “Mother-in-Law’s Tongue”, or “Dumb Cane”, has sap that is so toxic, it can paralyze your vocal chords.
- There is a plant in Australia known as the “Suicide Plant”. The effect of its sting can last for years, and its pain is so unbearable that people have killed themselves after touching it.

- The smell of freshly cut grass is actually a chemical “distress call" used by plants to beg nearby animals to save them from attack.
- Fungi are genetically more closely related to animals than to plants.

INTERESTING FACTS OF BOTANY

- There is a flower that looks like a set of women's lips and is therefore called 'Hooker's Lips'
- The mushroom in Mario games are based on a real species called 'Amanita Muscaria' which when eaten, makes people feel like they're growing.
- The leaves of a plant called 'Electrical Daisy' can make you salivate uncontrollably.
- Horticulturists in Britain have developed a new “grafted” plant that can produce both tomatoes and potatoes simultaneously. This plant is called “Ketchup ‘n’ Fries” plant or “TomTato”.
- There’s a plant in Australia that will make you vomit in pure agony just by touching it.
- Plants can remember what happens to them for up to a month.

Skeleton flowers have such delicate petals that they become transparent when it rains.

By- Yashasvi, 1st year

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