ZOOLOGIQUE

2022-24

PC: Pranati

From Principal's Desk

I feel proud to acknowledge the contribution of highly qualified, dynamic and multi- talented faculty, non-teaching staff and my students of Zoology department. Zoology is the study of animals wherein the student receives a highly comprehensive exposure to all levels of animal function and their diversity. As a subject it inculcates enormous interest in the young minds as they are also part of the animal kingdom. There is no doubt that understanding the development and evolution of animals help to explore ourselves better. The zoological Society has been organising events taking care to broaden the horizons of its students, with exposure to different themes and ideas.

My best wishes to all the students of Kalindi College.

Prof. Meena Charanda
Principal, Kalindi College

Note from Teacher-in-charge

Education is the element that turns knowledge bearers into aurora which has the capacity to light their own path in darkest of nights, and in the similar manner I am assured that the students of our department will gain immense knowledge from our experienced and highly skilled faculty and forge their own bright future themselves and glow like fireflies/ aurora in darkest of times.

I congratulate the convenor, co-convenor of Zoonomia society on publishing of the newsletter of zoological society "ZOOLOGIQUE". I believe this newsletter gave all the students a platform to present their hidden talents and express their thoughts and beliefs in the most beautiful and impeccable way. I hope it encouraged them to express and inspire others and bring positive change in the present world.

The Department of Zoology, Kalindi College, University of Delhi has brought opportunity for the young minds to follow their interest in the field of zoology, explore the beautiful creation and breathtaking biodiversity existing in this world. The field knows no boundaries. Moreover, the department assures the students in a journey through all the parts and niches of the living world.

May all our students soar high in uncharted skies and bring glory to the world and in their field of profession with the wings of education!

Dr. Shanuja Beri
Teacher-In-Charge

Note from Convenor

"The future belongs to those who believe in the beauty of their dreams."
-Eleanor Roosevelt

Sprouting innovation and enunciation is the elements that fuses and results of this can be best exemplified in the form of a department's newsletter. And like every new beginning as the spring is gradually unfolding itself, I am delighted to announce that the newsletter for the Zoological Society "ZOOLOGIQUE" is ready for publication. I take this opportunity to congratulate the editorial team for bringing out this amazing work which deserve whole hearted appreciation. This newsletter I believe has served as a platform for students to display their talents, express their thoughts and beliefs. I hope it encouraged them to express and inspire others and bring positive change in the present world.
Wishing good luck and a bright future to all the students.

Dr Prem Prakash Saini
Convenor,Zoonomia

Note from Co-Convenor

"Teaching should be such that what is offered is perceived as a valuable gift and not as a hard duty." **– Albert Einstein**

It had always been my dream to build an institution for quality, innovation and excellence by maintaining a high standard of academic discipline and providing world class facilities for education delivery and creating technocrats with knowledge and competence. Students are the prime stakeholders in the education system. Vibrant campus life is essential for the overall growth of a student. The Zoomania Club offer an opportunity for students to express their feelings, analyze and bring out their hidden talents. A variety of clubs helps the students to select the club of their interest, so that they could perform beyond the classroom too. The Clubs act as a platform for students to expand their academic knowledge and enhance their skills. Student clubs promote the shaping of skills of the students and make them to be ready for real life challenges. Student clubs play a crucial role in determining and channelizing the passion and interest of students, much beyond their academic pursuit. These clubs helps the students to learn new activities from experts and peers.

I am confident that the Department of Zoology, with its rich legacy, will continue to shape the future of the young minds of our country and transform their potential into successful careers resulting in national development.

Best Wishes,

Dr.Saurabh Kumar Jha, Ph.D
Co-convenor, Zoonomia

Note from Co-Convenor

"The mind that opens to a new idea never returns to its original size"

With full of curiosity for the natural world around us, our esteemed Zoological Society Newsletter, "ZOOLOGIQUE" is the one which is enriched with insightful articles, meaningful quotes, beautiful paintings, stunning wildlife photographs, etc. which was contributed by our creative and talented students and teachers of Zoology Department.

As a Co-convenor of Zoological Society, Zoonomia, I am thrilled to share our Newsletter for the session 2023-24 and I would also like to express my gratitude to our dedicated contributors who continue to enrich our publication. I would love to advise our students that whether you're diving into academic studies, immersing yourself in research projects, or exploring co-curricular activities, always remember that every step you take is a step forward. Embrace the learning journey, don't be afraid to ask questions, and never underestimate your potential. Your dedication and passion are what make our department thrive. So keep pushing boundaries, seeking knowledge, and seizing opportunities. Your passion for Zoology shines through in every submission, and it is truly inspiring.

Dr. Mayanglambam Rojina Devi
Co-Convenor, Zoological Society

Note from Co-Convenor

It gives me immense pleasure to contribute to our newsletter as the Co-convener of Zoonomia, our Zoological Society. My foremost aim is to kindle students' curiosity in zoology-related fields through a variety of engaging activities. From educational field trips to hands-on workshops, from lively quiz and essay competitions to dynamic debates, being a member of society, I would try my best to offer a spectrum of opportunities for exploration and learning.

As Rachel Carson famously stated in her book 'Silent Spring,' **'In nature, nothing exists alone.'** This profound observation underscores the interconnectedness of all living beings. With this ethos in mind, I encourage each of you to actively participate in our society's activities, share your ideas, and enrich the intellectual fabric of our college community.

The Zoological Society serves as an excellent platform for members to showcase their hidden talents in various dimensions. Whether it's through artistic expression, scientific inquiry, or advocacy for conservation, there's a place for everyone to contribute and shine.

Let's make this academic year one filled with discovery, collaboration, and growth.

Dr. Priyanka Dahiya
Co-Convenor, Zoological Society

About The College

Kalindi College

UNIVERSITY OF DELHI

(NAAC ACCREDITED 'A+')

Kalindi College, located in East Patel Nagar, New Delhi, is a prominent women's college, a constituent college of University of Delhi. Established in 1967, the college has been providing quality education to women, empowering them to excel in various academic disciplines.

Kalindi College is known for its commitment to academic excellence and it boasts a dedicated and qualified faculty across different departments. The college fosters a vibrant academic and cultural environment, encouraging students to participate in extracurricular activities, events, and competitions. Various student societies and clubs contribute to the overall development of students, providing platforms for expression in literature, arts and sports.

Being a women's college, this institution provides a nurturing and supportive atmosphere, enabling female students to pursue higher education with confidence. It plays a crucial role in promoting women-centric education and empowering its students to become accomplished individuals in their chosen fields.

About The Department

DEPARTMENT OF ZOOLOGY

The Department of Zoology at Kalindi College is an integral part of the institution's academic landscape. Established at the time of the inception of the college in 1967 it stands as a dynamic hub for the exploration and study of the fascinating world of various zoological sciences. The department prides itself on maintaining high academic standards, offering courses and programs that cover a diverse array of topics within zoology.

A team of dedicated and experienced faculty members lead the department, bringing a wealth of knowledge and expertise to the classroom. Their commitment to teaching and research enhances the overall learning experience. The faculty is specialized in various fields such as that of Radiation biology , neuroendocrinology, Applied Entomology, Reproductive biology, Neurobiochemistry, Fish Endocrinology, Reproductive Endocrinology ,etc.

Equipped with state-of-the-art laboratories and a devoted lab staff, the department ensures that students have access to modern tools and technology for conducting experiments and practical applications of the concepts. The department also offers valuable career guidance, helping students explore various career paths within zoology and related fields. Workshops, seminars, and interactions with professionals contribute to a holistic approach to career development.

ZOONOMIA- The zoological society of Kalindi college adds the final flourish. The society actively organizes fests, events and encourages student involvement in extracurricular activities, seminars, and conferences related to zoology. This not only enriches their academic experience but also nurtures a passion for the subject.

FACULTY MEMBERS

Dr. Saini did his graduation from Govt. College, Neem Ka Thana, Rajasthan and his Masters as well as Ph.D in Zoology from University of Rajasthan, Jaipur. His topic of research in Ph.D was “Study on Modifications of Body Resistance of Swiss Albino Mice by β-Carotene Rich Plant Extract” and has published many papers on Radiation Biology. Saini sir love to learn new things by surfing on the internet or studying in his free time.

Dr. Prem Prakash Saini

Dr. Manisha did her graduation from University of Delhi, her post-graduation from Sardar Patel University. She did her PhD from University of Delhi in the field of Endocrinology and has published many papers in the field of endocrinology. Beside her interest in science Dr. Manisha is an avid traveller who never misses an opportunity to hop on a plane, train or car to a new and unexplored destination. Interests range from snorkelling in Phuket to trekking to the top of Mount Batur in Bali to biking in Singapore or exploring the wonders of Uttarakhand, relaxing on the beaches of Goa or the islands of Greece, dragon boating and kayaking. She can be frequently seen planning her next escapade with family and friends. Hopping include sweating it out in the gym or going for long walks to reading fiction novels along with binging on Netflix.

Dr. Manisha Arora Pandit

Dr. Tarkeshwar Gautam

Dr. Tarkeshwar did his graduation and Masters from Kirorimal College, University of Delhi. He did his PhD in Zoology from University of Delhi completed his degree in the year 2013 and later joined Kalindi College as a professor in 2014.
His research interest are Applied Entomology, Insect-Plant Resistance, Microbiology and Bioinformatics. He has written a thesis titled "Behavioral and Physiological responses of Spilosoma towards Chinaberry". He has published many papers in renowned journals. Apart from scientific contribution Dr. Tarkeshwar loves to play flute and enjoy singing.

Dr. Kanchan did her graduation from Maharshi Dayanand University, Rohtak and Masters as well as PhD in Zoology from Kurukshetra University, Kurukshetra. She completed her phd in year 2001. Ecology has been her main subject of interest in research. She also received gold medal at Kurukshetra
She believes that the most difficult part about teaching is to satisfy her students and enthral them with new things in every class. Her goal has always been to make each and every student in the class, no matter how slow a learner, understand the concepts being taught. Apart from Science she also loves reading books, exploring new ideas related to her field and listening music.

Dr. Kanchan Batra

Dr. Shanuja Beri

Dr Shanuja Beri, a graduate student of the University of Delhi, did her Masters from Jawaharlal Nehru University. Her PhD was in the field of Neurophysiology and Biochemistry from JNU with6 years of research experience. She prepared thesis titled “Response of lipid peroxidation mediated experimental epilepsie to anti peri oxidant drugs”. She has avid interest in research having worked as a fellow in The Energy Resources Institute (TERI) in v projects related to Biofertilizers and Bio fuels. She has been teaching in Kalindi College for the past 8 years where she continues to engage undergraduate students in research projects. Her hobbies are gardening, cooking and reading apart from music

Dr Varsha Singh completed her graduation and post-graduation from University of Allahabad.
Her PhD was in the field of Neuroendocrinology and reproductive biology from Banaras Hindu University, Varanasi. Her research interest are comparative reproductive endocrinology and published more than a dozen of research articles in well reputed international journals. She has four major research projects (UGC,DST and University of Delhi) and 6 minor in house projects. Beside her professional interest she loves painting, knitting, cooking and reading books.

Dr. Varsha Singh

Dr. K Vandana Rani

Dr. K Vandana Rani has completed her M.SC, M. Phil and PhD from University of Delhi. She has also received "University Faculty Development fellowship 2015" to do Master of Research from University of Nottingham where she completed her M. Research. She has more than a dozen of publication in well reputed peer reviewed or indexed journals with good impact factor. Also wrote book chapters in several published books. In the field of research she have 2 major (DBT & University of Delhi) and 4 minor projects (In house college project) in account.She has received several awards like Fellowship of ABRF (FABRF), Innovative Idea award, Best Paper award, both junior and senior research fellowship. To exchange academic knowledge she organized several National or International. Within the year 2017 to 2020 she served as Nodal officer Of Delhi University for Foreign Students in Kalindi College.

Dr. Rojina completed graduation (2010) and post-graduation (2012) from University of Delhi. Awarded Ph.D. degree in the year 2017 from University of Delhi. She has worked as a principal investigator for in-house project titled "Reinvigorate the Butterfly Conservatory" in Kalindi College, University of Delhi. At present she is the current co- convenor of Zoonomia society. Her hobbies are teaching, gardening, baking, cooking and knitting. She believes in perseverance, patience and doing everything with good faith

Dr. M Rojina Devi

Dr. Saurabh Kumar Jha

Dr. Saurabh Kumar Jha is working as an Assistant Professor in the Department of Zoology, Kalindi College at University of Delhi. Before Joining University of Delhi, he has also served more than five years as Assistant Professor, Department of Biotechnology at Sharda University, Greater Noida. He obtained his M.Sc (Biotechnology) degree from VIT University, Vellore, and Ph.D. Degree in Biotechnology (Neurobiology) was awarded from Delhi Technological University (Formerly Delhi College of Engineering) and Fellow of International Association of Stem Cell Research. His areas of interest in Neuroinformatics, Stem Cell Biology and expertise include molecular chaperone and ubiquitin E3 ligase in neurodegenerative disorders along with therapeutics action of biomolecules in aged neurons and muscles. He has published more than 150 papers in peer-reviewed and high impact factor International Journals such as Molecular Cancer, Seminar in Cancer Biology, Journal of Advanced Research, Journal of Controlled Release, Ageing Research Reviews, Drug Discovery Today, JNC, JAD, BBA, APCS, GENE & JTM (h-Index 28; i10-index 78; Cumulative impact factors 1100; Citation Index is 3200). He has also published and granted more than ten patents and published one book with Springer International publishing AG. He also has “Commendable Research Excellence Award DTU 2018” from Delhi Technological University, Delhi. Recently, Dr. Jha has received “Best Stem Cell Researcher Award 2019” by Prof. (Dr). Michele Zocchi, University of Turin, Italy. He has also presented more than 20 papers in international symposium and proceedings. Further, He has also designed and introduced the two new courses at level of B.Tech/M.Sc./PGD in “Stem Cell Technology and Regenerative Medicine” & “Genetic Engineering” in Sharda University. Dr. Jha has excellent record of accomplishment in Teaching, Research and Placement in term of B.Tech and M.Tech Biotechnology at Sharda University.

Until now, he has guided 05 Ph.D, 06 M.Tech, 02 M.Sc. and more than 20 BS students. He has also served various committee Members of Department of Biotechnology as well as Member of Academic Council at University level. He is the life and regular member of various professional societies across the globe.

Dr Neeti Pandey is working as an Asssistant Prof. in Department of Zoology, Kalindi College, University of Delhi. She has also served for seven years as Assistant Prof.in Department of Zoology SGTB Khalsa College, University of Delhi before joining Kalindi College in 2023. She obtained her M. Sc. (Zoology) degree from Dept of Zoology, University of Delhi and PhD degree in Cell and Molecular biology from Dept. of Zoology, University of Delhi. Her area of interest are Stem cell culture, Stem Cell biology, insect gut microbiota, Microbiology and Bioinformatics. She has published more than 10 research paper in peer reviewed and high impact factor international journal such as FEMS Microbiology. PLOS ONE, Journal of Microbiology and Biotechnology, BMC Microbiology. She has also published 10 sole author books with S. Chand publication house and 7 books as co-author with S.Chand publication house on subjects like Animal Diversity, Cell and Molecular Biology, Animal Biotechnology, Apiculture, Applied Entomology etc.

Dr. Neeti Pandey

Dr. Priyanka Dahiya

Dr. Priyanka Dahiya is a passionate and dedicated faculty with expertise in Immunology. She is a graduate, post-graduate and doctorate from University of Delhi. With profound curiosity for immunological responses against microbes, her research interests as highlighted through high impact publications led to unraveling of cell signalling events that have significant importance in the field of Cell biology, Molecular biology and aquatic zoology. She also worked as a Post-Doctorate Fellow in IIT-Delhi, whereby her journey in academics was equipped with robust analytical skills, keen eye for details and innovation in advancing the understanding of Immunobiology. Before starting her teaching career in Kalindi Mahavidyalaya, her teaching profile shows a breadth of experience. Apart from academics, she finds joy in painting, gardening and repurposing discarded items into artistic creations. Additionally, she is fond of engaging in physical activities like yoga and dancing.

Mr.Vikash Yadav completed his bachelor's in science from Shivaji college under University of Delhi in the year 2017. And completed his Masters from the Department of Zoology, University of Delhi in the year 2021. He also worked in Aakash Institute where he taught NEET-UG aspirants and mentored hundreds of aspiring doctor's. Other than teaching he is also interested in playing Badminton , teaching and cricket.

Mr. Vikash Yadav

Mr. Gulshan Yadav

Mr.Gulshan Yadav completed his bachelor's from Shivaji college under University of Delhi and his MSc from Shri Venkateshwar college in the year 2017. He is persuing PhD in medical science from ICMR Institute of Pathology starting from the year 2018. His research paper entitled ' "studies on assessing the role of CRISPR - Cas system in virulence and resistance in acinetobacter baumannii" he was awarded joint CSIR/UGC-JRF he has avid interest in research particularly in the field of bacterial resistance, phage therapy,CRISPR-CAS, next generation sequence data analysis.his hobbies are poem writing, playing, bamboo flute , playing cricket and kabbadi.

Dr. Shikha Rani did her graduation in 2016 from Sri Venkateswara college(DU), post graduation from Department of Zoology (DU), MPhil from Department of Zoology (DU), Pursuing PhD from (4th year)Department of Zoology (DU). Her topic of MPhil was “sex determination in catfish” and topic of PhD is “immunostimulatory effect of plant extract in fishes”. Side by side she worked in AIIMS (New Delhi) with rats and C. elegans. She was also member of Venky folk dance society and won several prices in different colleges .Her hobbies are traveling, dancing and having a chill time with her close ones.

Mrs. Shikha Rani

LAB STAFF

(DEPARTMENT OF ZOOLOGY)

Mr.Sunil Dhyani

Ms. Sushma Devi

Mr. Anoop Singh

Mr. Tarun Rathi

Mr. Amar

OFFICE BEARERS

ZOONOMIA 2023-24

Ritika Devra
PRESIDENT

Urvija Parashar
VICE-PRESIDENT

Janvi Tagra
TREASURER

Sruti Adhikari
CULTURAL SECRETARY

Shambhavi Singh
MEDIA HEAD

Himanshi Gautam
MEDIA HEAD

Khyati

MEDIA SECRETARY

Palak Dhankhar

GENERAL SECRETARY

Induja Biswas

TECHNICAL HEAD

ANNUAL REPORTS' 23-24

TEACHER'S DAY CELEBRATION

DATE: 5th SEPTEMBER,2023
TIME: 10.30 AM
VENUE: ZOOLOGY LAB

Teacher's Day was celebrated with utmost reverence to the teachers of our department. A day marking their valuable contribution in shaping the life of a student into a better human being. A number of games and involving activities were arranged by us the students. Teachers enjoyed the entire programme thoroughly and appreciated our efforts. We had various performances aligned for their recreation. Finally, we cut a cake to mark this occasion and danced on the beats of music with our lovable teachers.

RESEARCH COMMITTEE INTER-COLLEGE WORKING MODEL COMPETITION

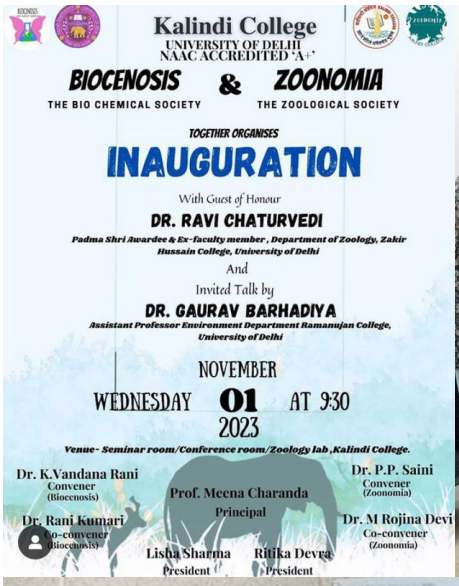
DATE: 17th OCTOBER,2023
TIME: 11AM
VENUE: DEPARTMENT OF ZOOLOGY, KALINDI COLLEGE

A number of students participated in the working model competition based on the theme Innovation For Sustainable Environment. Students participated in groups and were required to innovate a working model projecting the sustainable goals with respect to environment. Students came up with various ideas and innovations and it was a highly interesting activity performed in the year. Winners were awarded with cash prizes while other were provided with certificates for the same.

OATH CEREMONY'23

DATE:1st NOVEMBER,2023
TIME: 9.30 AM
VENUE: SEMINAR ROOM

The zoonomia (Zoological) and Biocenosis (Biological) societies of Kalindi College jointly organized the event on November 1st , 2023 the event commenced with the lighting of the lamp by our college Principal, Prof. Meena Charanda along with the convener and the Co- conveners of both societies, faculty members and our esteemed guests in the seminar room. Dr. Ravi Chaturvedi, our chief guest enlightened the student with extensive knowledge about the diversity of animals in the present world. Dr. Gaurav Barhadiya, another distinguished guests, specifically informed the student about various species of snakes found in India. The session was interactive followed by a batch pinning ceremony for the office bearers and concluded with a vote of thanks by the convener. The Fresher's ceremony was organised on the same day in Sangam Parisar to welcome the new batch of 2023-24. The main attraction of the ceremony was Ms. Freshers' contest along with some captivating performances by students.

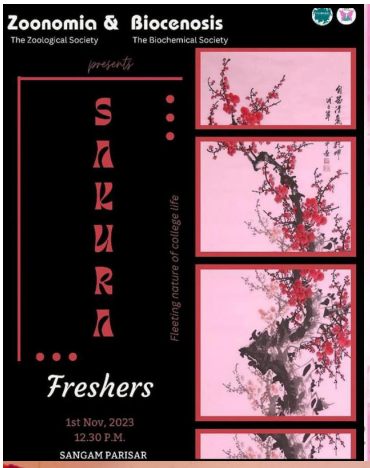


FRESHERS OF BATCH'23

SAKURA

DATE: 1st NOVEMBER,2023
TIME: 12.30PM
VENUE: SANGAM PARISAR

Official welcome and greetings were made to the freshers. Dance,music,performances,acts,speeches and food found its way on this day. Miss Freshers contest was also held on this occasion. Freshers really enjoyed the magnificence and joy in the air and resonated in positive spirit and thrill. Teachers wished them the very best for their upcoming college life and journey ahead.



THE VISIT:
YAMUNA BIODIVERSITY PARK

DATE: 8th NOVEMBER,2023
TIME: 10 AM
VENUE: YAMUNA BIODIVERSITY PARK

The 1st and 3rd year of our respective department paid a visit to Yamuna Biodiversity Park. Dr Shanuja Beri, Dr Varsha Singh, Dr Tarkeshwar Gautam and our lab staff were there to guide us. We explored through the various biodiversity aspects with reference to our course. We saw different kinds of birds and animal species. Vivid variety of butterflies also caught our sight. We explored through wetlands and visited a gallery having pictures showing succession the park. It was an informative and fun academic as well as recreational activity for us and the teachers.




CAMPUS BIRD COUNTING

ORGANIZED BY DEPARTMENT OF ZOOLOGY

DATE: 17th FEBRUARY,2024
TIME: 8 AM
VENUE: KALINDI COLLEGE CAMPUS

The Department of Zoology conducted a bird counting field survey led by Dr. Shanuja Beri, with assistance from external ornithological expert Dr. Pankaj Gupta. The survey encompassed multiple locations within the campus including Saraswati Park, Botanical Garden, August Kranti Park, the vicinity surrounding the Amphitheatre, and the college's backyard. Utilizing specialized equipment such as binoculars, high-resolution cameras, and bird identification cards, the team systematically observed and documented bird species present in the designated areas. The recorded avifauna included Hawks, Bulbuls, Yellow-footed Green Pigeons, Woodpeckers, Parrots, Eagles, alongside a diverse array of insect species. Additionally Dr Pankaj Gupta introduced the participants to two digital platforms, namely Merlin and eBird, to enhance their understanding and documentation of bird biodiversity.

ANNUAL FEST

CHRYSALIS'24

DATE: 5th - 6th MARCH, 2024
TIME: 10 AM ONWARDS
VENUE: ZOOLOGY LAB, SANGAM PARISAR

inter-college fest was organised on March 5th and 6th 2024. The first day commenced in the Zoology Department, with lighting of the lamp in presence of the invited guest Dr. Prabhu Chandra Mishra Founder President of International Association of Stem cell and Regenerative Medicine. Our esteemed guest of the day enlightened students and teachers on regenerative medicine and stem cell advancing human healthcare. Following the informative session several competitions including Photographic competition, poster making competition, scientific quiz game and 'Porter head' for fun were organized. On the second day, March 6th 2024, the event commenced with diverse performances by M. Charanya, Abishek, Shubham, Aniket, Sarthak Himanshi, Adarsh, Sudarsh, Ashish, Jaideep, 11th hour, The loverzzzz, and Harmonic Hues. The fest was a joyful and fulfilling highlight of the year attracting the most participants an audience every performer received certificates of appreciation making it a truly unforgettable moment of the year

OFFICE BEARERS

ZOONOMIA 2022-23

Dr Manisha Arora Pandit
CONVENOR

Dr Tarkeshwar Gautam
CO-CONVENOR

THE TEAM-

President: Harshita Rai

Vice-President: Akarshi Aggarwal

Treasurer: Sneha Sharma

General Secretary: Urvija Parashar

Cultural Secretary: Bhor Shrivastava

Media Secretary: Kumkum Rana &
Himanshi Gautam

ANNUAL REPORTS' 22-23

OATH CEREMONY'22

DATE: 7th FEBRUARY,2023
TIME: 10.30 AM
VENUE: SEMINAR ROOM

The oath ceremony for the newly elected office bearers were conducted along with badge pinning. Our honourable speaker Mrs Komal Pal, senior dietician was invited for a small talk who enlightened us about diet and nutrients for young females. Active participation of both the students and the teachers was seen. Following which the elected office bearers took the oath with the Convenor Dr Manisha Arora Pandit guiding and badge pinning took place where office bearers with honoured with the badges by the Convenor, Co-convener,TIC and all other esteemed faculty of our department.

FRESHERS OF BATCH'22

IBTIDAA

DATE: 7th FEBRUARY,2023
TIME: 12.30 PM
VENUE: ZOOLOGY LAB

Official welcome and greetings were made to the freshers. Dance,music,performances,acts,speeches and food found its way on this day. Miss Freshers and Miss Zoonomia contest was also held on this occasion. Freshers really enjoyed and made merry in spirit and thrill. Teachers wished them the very best for their upcoming college life and journey ahead.

CAMPUS BIRD COUNTING

ORGANIZED BY DEPARTMENT OF ZOOLOGY

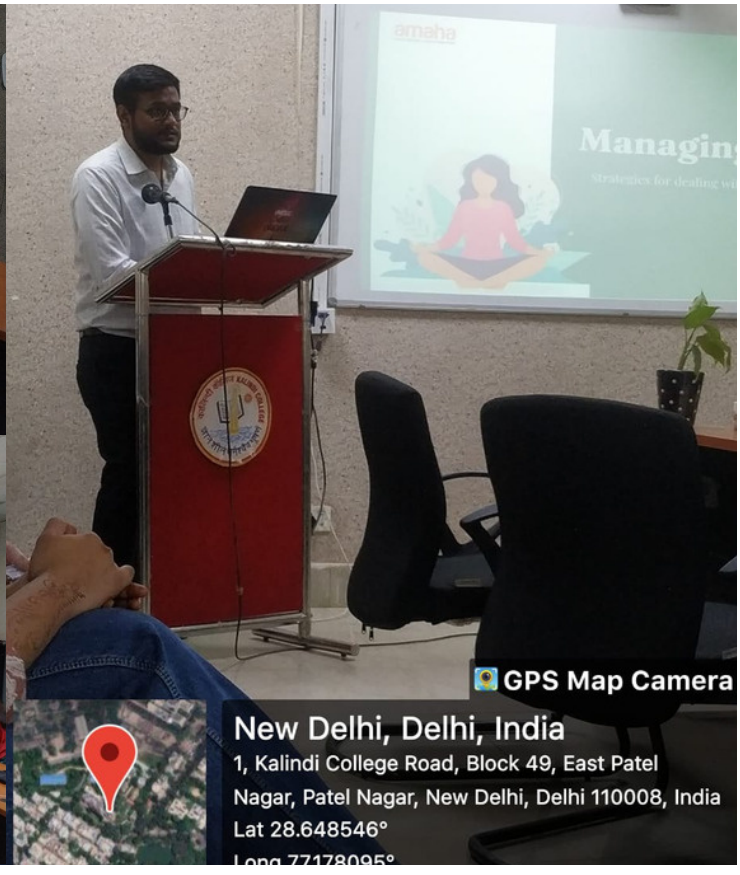
DATE: 17th FEBRUARY,2023
TIME: 8 AM
VENUE: KALINDI COLLEGE CAMPUS

On 17th February 2023 ,The Department of Zoology conducted a bird counting field project under the guidance of Dr Shanuja Beri and also an external expert Dr. Pankaj Gupta well equipped with binoculars, specialized cameras and bird photocards for Saraswati Park, Botanical Garden, August Kranti Park, area around Ampitheatre and also the backyard of college. A number of species of birds were found in the campus namely Hawks, Bulbuls, Yellow footed green pigeon, Woodpecker, Parrots ,Eagles and a vivid variety of insects.

HEALTH TALK ON STRESS MANAGEMENT

DATE: 16th MARCH ,2023
TIME: 11.30 AM TO 1.00 PM
VENUE: SEMINAR ROOM

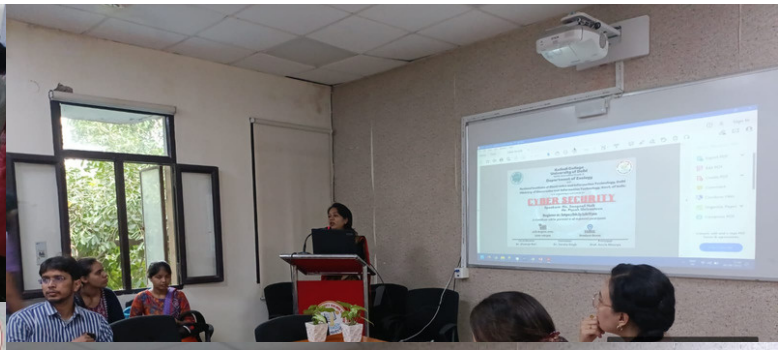
On 16th March 2023,The Department of Zoology under the coordination of Dr. Kanchan Batra and in association with AMAHA organized a Health Talk by Mayank Rajput,Senior Consultant Psychologist on Stress Management. The session was highly interactive and relatable to the students. It was also an engaging talk wherein we stress management techniques. Students araised their curiosity and teachers also showed active participation.



TALK ON CYBER SECURITY

DATE: 22nd AUGUST,2022
TIME: 11.00 AM TO 2.00 PM
VENUE: SEMINAR ROOM

On 22nd August 2022,The Department of Zoology conducted a talk on Cyber Security under the guidance of Dr. Varsha Singh and Dr. Tarkeshwar. The event started with the lamp lighting and felicitation of our estemeed guests Ms Swapnali Naik & Mr. Piyush Srivastava. The session was full of knowledge and was relatable to many students who earlier was a victim of cyber crime. In the session we talked about different types of cyber crime such as cloud security, network security, application security and also IOT internet of things security.
On the same day our newsletter "Zoologique" for session 2021-2022 was also inagurated.



ANNUAL FEST'23

HELIX

DATE: 25th - 26thMARCH
TIME: 10 AM ONWARDS
VENUE: SANGAM PARISAR, ZOOLOGY LAB

The annual departmental fest for session 2022-23 took place for 2 days. First day included cultural activities while the 2nd day included academic events. A number of performers viz Kartik, Karma Dance Crew, Chitransh Tyagi, Vivek Saini, Aman Tyagi and 11TH Hour Band lit up the fest. The entire fest was wholesome, enjoyable and fulfilling. It emerged to be the most popular intra college fest of the year with maximum number of participants and audience. A number of competitions were also conducted with rewards and awards. It was indeed a memorable and fabulous time of the year.

A GUIDE TO PCOD

WHAT IS PCOD?

LIFESTYLE DISORDER THAT CAN ONLY BE MANAGED NOT BE CURED

Condition affecting ovaries (reproductive organ in woman) that produce progesterone and estrogen hormones that regulates the menstrual cycle.

10% women in the world are suffering from pcod.

TESTS TO BE DONE

- Ultrasound of the lower abdominal region.
- Blood test including (blood sugar level, follicle stimulating hormone , testosterone , progesterone, luteinizing hormone , prolactin }

WHAT HAPPENS?

Ovary produces immature or partially mature eggs, which over time become cysts,

Due to which large amount of male hormones (androgens – testosterone) are secreted.

This further causes skipped or irregular periods.

THINGS TO BE DONE

Low carbohydrate and protein rich diet
40 minutes of exercise everyday including strength training.
Avoiding dairy (except curd).
Drinking spearmint tea twice a day (for facial hair)
Drinking apple cider vinegar infused wate after meal.
Turmeric and cinnamon infused water.
Incorporating flaxseeds, pumpkin seeds, almonds and walnuts in diet.
Practising suryanamaskar (taking vitami D)
Eating leafy green vegetables such as kale and spinach
Lowering down stress levels
Drinking enough water.

WHAT YOU NOTICE?

Irregular and missed period.
Gaining weight that's hard to lose.
Excessive hair growth on face (HIRSUTISM), body parts like upper back, chest and legs.
Male pattern hair loss (hair on the scalp gets thinner and falls out)
Acne on face.
Skin darkening (neck, under breasts, in the groin.

A GUIDE TO PCOD

MEDICATIONS

Birth control pills (levora) contain both estrogen and progestin that help regulate menstrual bleeding and maintains a hormonal balance in the body.

(Metformin) reduces sugar level in body helps cell respond to insulin, enhances glycemic control and also maintains testosterone levels in the body.

Non-steroidal anti-inflammatory drugs (ibuprofen) are the over the counter medicines for pcos pain.

(Inositol) regulates menstrual cycle, lowers cholesterol, curbs carbs craving, lowers inflammation, sugar and insulin, promotes ovulation and improves egg quality.

Supplements (vitamin d , vitamin b complex, omega-3 fatty acids , magnesium and zinc)

Sneha Singh
BSc (H) Zoology
2nd Year

IF NOT TREATED THEN?

- Infertility
- Gestational diabetes
- Miscarriage or premature birth
- Type 2 diabetes or pre diabetes
- Sleep apnea
- Depression, anxiety and eating disorders.
- Cancer of the uterine lining (endometrial cancer).
- Metabolic syndrome including high blood pressure, high blood sugar, unhealthy cholesterol and significantly increases cardiovascular diseases.

MAINTAINING A HEALTHY AND HAPPY LIFESTYLE IS THE SOLUTION TO ALL PROBLEMS.

ALL THE ABOVE MENTIONED THINGS ARE DRAWN FROM SCIENTIFIC STUDIES AND RESEARCHES ONLY.

AURORA : DAZZLES OF THE SKY

Have you ever been to places near northern poles like Alaska , Canada , etc.basically the northwest territories of the world ? If yes you might have seen beautiful mesmerizing patterns of light shows covering the sky. It's fascinating to encounter this dazzling phenomenon of light . This phenomenon is called as 'Aurora' also called the polar lights

An aurora is a natural light display that shimmers in the sky . Blue , red , yellow, green and orange lights shift gently and change shape like softly blowing curtains. Auroras are only visible at night and usually only appear in lower polar regions at about 66.5 degrees north and south of the equator.

Auroras basically are of two types : Aurora borealis and Aurora Australis. Aurora Borealis is the one seen in the northern sky so is called the Northern lights and Aurora Australis is the one visible in the southern sky so is called the Southern lights.

The phenomena responsible for this to cause is the sun even though it occurs at night. We all know the earth's magnetic field is the one protects our planet from all the coming solar storms. Before this we must know a little about the types of solar storms . So there are two main types of solar storms : Solar flares and Coronal mass ejection. These are the sudden , extra bursts of the energy in the solar winds. These are associated with the sunspots .Sunspots are the coldest part of the sun and appear as dark blobs on its white – hot surface .Solar weather is often measured in sunspots.

During the coronal mass ejection,sun sends out heat and light as well as energy and dust particles along with a huge bubble of superhot electrified gases made of electrically charged particles called the ions. When a solar storm comes toward us, some of the energy and small particles can travel down the magnetic field lines at the north and south poles into earth's atmosphere and is trapped in these poles where they interact with the ions present in the ionosphere and partially the magnetosphere of the earth's atmosphere. This collision or interaction of the particles results in the formation beautiful and mesmerizing displays of light in the sky in which oxygen gives off green and red light and nitrogen glows as blue and purple light.

Auroras can also be seen in other planets like Jupiter and Saturn.Magnetic storms and active auroras can sometimes interfere with communications. They can disrupt radio and radar signals. Intense magnetic storms can even disable communication satellites. Auroras are best visible in Europe particularly Northern Scandinavia so is called the Auroras Zone. In southern regions particularly in Tasmania during the spring equinox in September.

This is the least to be concluded yet as new theories to this mesmerizing phenomenon may arise in the future with advancement in science and technologies. So is awaited.

Palak Dhankhar
BSc (H) Zoology
1st Year

ATMOSPHERIC DUST HELPS NOURISH OCEAN ECOSYSTEM

Over the years dust particles has been blamed for all the environmental problems specifically the air pollution. Residing in Delhi which has already been grappled by severe air quality crisis with dust and smoke being the major contributors it is almost impossible to think that this trouble makers can be useful in any possible way. Then ready to be amazed. A new study by State Orgean University has unravelled that atmospheric dust deposited in the ocean's surface acts as a source of nutrition for phytoplankton and thus plays a major role in mediating the global phytoplankton biomass distribution. And it all started with a simple query. For years it was known to scientist that atmospheric dust has impact on ocean and its ecosystem but the result and range of this interaction has been difficult to estimate globally. Accurate estimation of the amount of dust deposition was not possible because most of the sand deposition occurs during cyclones and rainstorms when satellites cannot see the dust. Thus, till then the effects of atmospheric input on ocean ecosystem was analysed only during large events like volcanic eruption etc, and due to this sufficient amount of data for analysing the intriguing relationship between ocean ecosystem and dust deposition was not available. On the other hand, dust also seems to have an impact on global carbon dioxide level by affecting the biological pump. This factor intrigued the scientists and encouraged them to do further research on this. To overcome this problem the research crew led by Toby Westberry, Oceanographer in Orgean university & lead author of the research paper and Behrenfeld, an Orgean State professor in department of botany and plant pathology decided to use a new approach. Instead of trying to estimate the amount of sand deposition they analysed 40 years of past data on global phytoplankton growth and distribution captured by satellite. Based on this data they studied the variation in global phytoplankton distribution over the years along with climatic variations. They collected ocean colour imagery of everyday and reports on changes in phytoplankton abundance and health. They primarily focused on change in ocean colour following every dust input. In the data collected the green colour of water suggested abundance of phytoplankton whereas blueish colour indicated scarce of phytoplankton. The Research led to very unexpected observations. And eventually the following points were concluded.

Based on the data analysis it was found that response of phytoplankton to dust deposition varies with change in location It was found that in higher latitudes, increased dust deposition causes increase in phytoplankton growth and abundance. Lower latitude shows stable relationship between phytoplankton and its predators leading to tight balance between phytoplankton growth and predation On the other hand, in higher latitudes due to scarce of potential predators of phytoplankton, the prey predator relationship is weaker. Accordingly, when dust stimulates phytoplankton growth, the predators are a step behind, and the phytoplankton population exhibit both improved health and increased abundance.

In the new paper it was estimated that deposition of dust supports 4.5% of the global annual export production, or sink of carbon. Regional variation in this contribution can be much higher, approaching 20% to 40%.

Thus, indeed dust has turned out to be a essential factor supporting the growth of phytoplankton which is considered as foundation of aquatic ecosystem.

Induja Biswas
BSc (H) Zoology
1st year

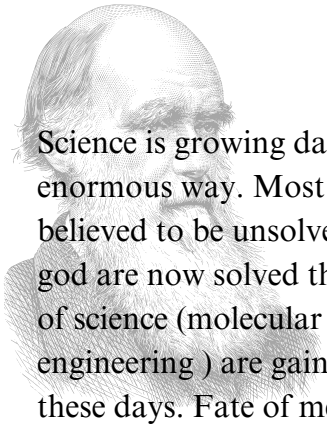
FOSSILS : THE PAST BURIED DEEP INSIDE

Dinosaur's , when we say this ,what comes to your mind?
A large animal with a long neck and tail or a large animal with huge teeths ready to chew us alive.
But how to you know what dinosaur looks like , have you ever seen one in person?
The answer of all of us will be 'NO'.
So how do we know they ever existed or what they look like. The answer is simple 'FOSSILS'.

Fossils are the preserved remains of living beings buried deep under the earth's crust, mainly in sedimentary rocks . When organism's die the soft body parts like hairs, fur's , feathers,etc., decay while the hard parts like bones ,teeth's remain to become fossils. Soft parts rarely give rise to fossils and need very specific conditions and absence of any contact with air to become fossils.
Fossils are formed by fossilisation when sediments and minerals from water seep into the body of dead remains of living matter and entirely replace the organic matter, these type of fossils are Petrified Fossils.
When an small insect get trapped in the sticky resins of trees which harden to form amber giving rise to Preserved Fossils .
Organism's can further be preserved if they are trapped in freezing cold ice or the hot molten tar. Preserved fossils are the best in their kinds.
Now imagine an organism trapped between rocks , it slowly decays ,living behind the carbon particals in the shape of their body giving rise to Carbonised Fossils.
There are many other type's of fossils which tell us about the past of living organisms and earth .
They are the important evidence's of evolution and life history on earth and Paleontology an important branch of science which deals with fossils.

Ritika Dewra
BSc (H) Zoology
3rd year

IF SCIENCE MATTERS THEN EVOLUTION DOES MATTER



Science is growing day by day in an enormous way. Most of the puzzles which are believed to be unsolved and are the acts of god are now solved through science. The tools of science (molecular biology, genetic engineering) are gaining critical insights these days. Fate of medicine and agriculture are going to be changed completely by understanding and using the tools of molecular biology that are discovered and yet to be discovered. Science made human life easy and comfortable. It is a belief, in fact it is a fact that all living organisms are developed from their earlier forms during the history of the earth.

Nature from the beginning (when there were no human beings) led the organisms to best fit into it. Through the journey of millions of years transforming life from one form to another, the most intelligent and skillful animal has evolved (HUMAN BEING). Unlike other living creatures, the human did not stop there. He started manipulating Nature for the benefit of human welfare. In course of time, he created a new path to manipulate the things in Nature and he named it SCIENCE.

Man started exploring Nature and recording the data he explored which is beneficial to the upcoming generations. Through this data another branch of science called EVOLUTION has been framed.

For example, the corn which we are using today is not in its actual form. We have transformed it to a completely different fashion from its real form. The problem is that we have changed corn so much that it now looks very different from any wild grasses.

But understanding that corn has evolved, has allowed agricultural researchers to find its wild cousin. Now, using the science of genetics, genes can be borrowed from that relative to improve corn. It has made more resistant to disease and insects, and more tolerant of salt and drought.

We studied Lamarcks evolution theory with the example of bug which evolves to best fit into nature to protect itself from the predators. Now let's bring our knowledge of evolution to the present era. If we want to see evolution in action we need to look for the organisms which have very short life period. For example insects and bugs. They have very short time between generations so they evolve very fast. You may rise a doubt , so what ? looking from the farmers point of view pests in his field are evolved in such a way that they gained resistance towards pesticides. Using too much and too fast we ourselves forcing pests to evolve and increase resistance towards pesticides…. This is not just a theory, this is fact. In this process scientists have accidentally "created," by using too many antibiotics, new breeds of super-germs that have evolved resistance to antibiotics. It's now a race: can we find new antibiotics fast enough to keep up with the mutation-and-natural-selection rates of killers like resistant staphylococcus? And if we do find something that kills it, do we run the risk of forcing it to just evolve again into an even more unstoppable forms? So evolution always does matter to understand the things that have gone wrong and discover the things that correct them.

Janvi Tagra
BSc (H) Zoology
3rd Year

FLOCK OF BIRDS AND MURMURATION

A flock is a gathering of individual birds to forage or travel collectively. This flocking behaviour also exhibited by goats. It consist of individual fromrom same species or from two or more species which is known as mixed flocks. These flocks shows two different behaviour characteristics that is sally and gleaners. Sallies consume their prey in air during the flight and gleaners consume prey living within vegetations.

Murmuration are huge group of starlings that twist, turns, swoop and swirl across the sky in beautiful shape shifting clouds. They don't simply fly in a flock. They twist and turn into all different shapes in the sky. Starlings are small to medium size birds. These are mainly known as partial migrants.

Flocking offers foraging benefits and protection from predators. Flocking helps birds to notice and defend against predators, as they can all look in different directions to see threats. That V formation enables them to spend less energy across long distance flying. Other type of flock formation is cluster formation which is common in pigeon, where a large number of birds fly in a moving 3 dimensional cloud with no formal structure. This structure is useful for avoiding predator. Birds often fly in flocks ranging from very structured V formation to loose clusters to improve flight efficiency, navigation or for predator avoidance. It shows great importance in closed habitat such as forest where early warning calls plays a vital important in the recognition of dangers.

Shruti Jha
BSc (H) Zoology
1st year

MIGRATORY BIRDS

Bird migration refers to the regular seasonal movement, often North and South along a flyway between breeding and wintering grounds . Many species of bird migrate , those birds that move from one part of the world to another according to the season we called as migratory birds.

They are indispensable to healthy ecosystem and to the well being of people in every region of the world . They provide food and income. Consume most of the insects which help to disperse crop seeds and also capable of stimulating primary productivity.

Some of the examples of migratory birds are as –

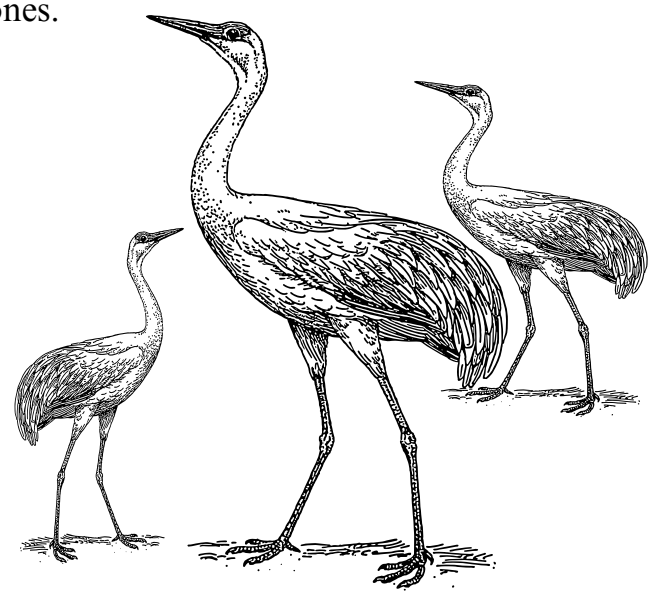
1. Bar Headed Goose known as the highest flying bird in the world and migrates to India every winter season. During its annual migration, this species travels directly over Himalayas on its route between it's nesting grounds and winter quarters in india.
2. Siberian Crane from Siberia usually come to India during winters looking for a better suitable climate condition.

Migratory Birds have the perfect morphology and physiology to fly fast and across long distances . Often ther journey is an exhausting one ,during which they go to their limit.

The Red knot has one of the longest total migration routes of any bird, travelling up to 16,000 km twice a year.

And Artic Tern also an example without mentioning the record breaking feats of it no bird migration list ever been completed as by far the longest migration known in the animal Kingdom , this medium sized bird travels 90,000 km from pole to pole every year from Greenland in the North to the Weddell Sea in the South .

And the main objective behind this migration is to find the best ecological condition and habitats for feeding , breeding and raising their young ones.



Nishu
BSc (H) Zoology
1st year

LIVER:- THE COOLEST ORGAN

1. Jack of All Trades: Our liver does three main jobs: filtration of blood, fuel storage, and makes liquid called bile that helps us digest food. The liver performs several other functions.

2. Big Organ on Campus: Our biggest organ noticeably is skin but take a notice, average adult liver weighs around 3 pounds and holds 1 pint or about 13% of your blood at any given time. Cone-shaped and deep reddish-brown, it sits sandwiched between diaphragm and stomach.

3. Self-sufficient: If injury or disease damages the liver, surgeons can sometimes take out as much as three-quarters of it without destroying it. It often grows back to its former size within a few weeks. And if one needs a new liver, doctors can sometimes use just a piece of someone else with matching blood group and it will grow to fit the body.

4. Nutrient Centre: Small intestine absorb nutrients from food, like carbohydrates, amino acids, glycerol, vitamins, minerals, salts and passes them into blood through cells. After absorption the nutrients are send to the liver for further transport to body, then stores several of them, including iron, foliate, and Vitamins A, D, and B12, and delivers them where and when your body needs them.

5. Brain Sharpener: Liver keeps us thinking right by getting rid of toxins in the blood. When liver doesn't work properly, these chemicals can build up and change the mood, sleeping habits, and the way you
act. Over time, one might also have shaky hands, jerking muscles, and sluggish speech.

Janvi Tagra
BSc (H) Zoology
3rd year

THE UGLY SECRET OF THE BEAUTY PRODUCTS

Almost every one in the current generation is fond of makeup and beauty products. From top brands to local items every one is in the race to launch the best products for humans but ever is this kicked in our mind that how these products are tested that whether they are worthy for our skin or not, how we get the most suitable products for our skin. No, among so many people only few know the complete truth, that is how these products are tested whether they are acceptable for human skin or not.

Cosmetic testing includes testing on animals, which is common method performed by almost all the top brands such as Bobbi Brown, Mac, Revlon, Lancôme,NARS etc. Whether it is moisturizing lotion, cosmetic or a perfume single products are tested on the sinless animals like rabbits, guinea pigs, hamsters, rats and mice. It affects their health hazardously. Cosmetic testing is so unethical as it causes distress, pain, and even death to those innocent creatures. In recent years we can have alternatives to animal testing, advanced technology such as in vitro testing can provide accurate results without harming animals and it will be more cost effective. By spreading awareness among the consumers about ethical implications on cosmetic testing on animals can demand for cruelty-free products.

Shambhavi Singh
BSc (H) Zoology
3rd year

LANGUAGE: THE ART OF EXPRESSION

Language as whole can be considered as the base for everything that happens in our life . It is the source for us to convey what we feel and think. Imagine there is no language or words , close your eyes and feel the world around for few minutes, a world without a word, if we remove launguage from our life , a wierd feeling of fear and anxiety surrounds us which we again will not be able to express without words or launguage. It is created by you and me and all of us. Without launguage there would be nothing, words like honesty, love , trust, fear have always been abstracts that can neither be seen nor can be touched but with words we can express them , and this expression creates the most beautiful bonds among us like friendship, and our relation with others.Launguage imparts confidence within us, even if we can't see , can't listen or can't speak, we can still be able to communicate with sign or body language. Thus without us realising launguage became a part of us .

Ritika Devra
BSc (H) Zoology
3rd year

WOMEN'S VOICE

Mankind has always subjected to exploitation,injustice and humiliation look around yourself. Look at all of history that's all you will see men's jealousy, lust, pride, enmity ,women's suffer the consequence. All of these negative emotions.
Man indulge in battle but the women of the defeated Kingdoms are tormented
Men lose their property while drinking and gambling women are destined to starve.
Mens ,overcome by their Pride restrict women's freedom ruin their hapiness men get defeated at the hand of life .and give up their families.
And women??
Women's keep struggling to feed their small child.count all the suffering in this universe. it will be very apparent that compared to men women suffer much more. What kind of society have be created wherein, one half of mankind relentlessly exploits the other half. And those exploited women give birth to the next generation of mankind. Look at the nature those seed which give birth to new plant are surrounded by petals they are surrounded by colour and perfume. The place where the future is conceived should we surrounded only by beauty happiness ,contentment ,and respect. Is that not so? But by making women suffer the society makes the future generation suffer torture ,exploitation, pain after experiencing such experience in such torment . How can women give birth to happy and healthy progeny? Hanse whenever any women is humiliated exploited whenever a woman's hair is pulled in some form of the other the seed of a battle is sown. In some form or the other an Epic begins . Judge for yourself do so again and again

Shivani
BSc (H) Zoology
1st Year

LGBTQIA+

LGBTQIA stands for :-
L - Lesbian
G - Gay
B - Bisexual
T - Transgender
Q - Queer
I - Intersex
A - Asexual

It is a very vast term that cannot be explained in a few sentences or expressed easily.

Taiwan is the Asia's first country to legalize same sex marriage.
Every year Pride Month is being celebrated in the month of June which is truly dedicated to the celebration for LGBTQIA community.

Even though we are in 21st century, we live in a democratic country like India where people are highly educated.
Some people have the same old mindset about these communities and look down on them. They treat them as they are sinners.
People think that this is American culture which has evolved in our very own country.
But it too existed in older times.
People think that they are trying to influence our future generations into wrong path and putting bad impression to the society and to our culture.

But now, it is high time where we as people need to understand that due to societies pressure and so called culture we are not letting them and suppressing their courage to grow or live to the fullest; as they too are humans like us who have all the rights to live their life as they wish.
Because of us they are not being confident enough, true to themselves, and cannot accept themselves for who they are.
It's totally ok if you don't like them, cannot accept or support them, but atleast do not spread hate about these communities.

THEY ARE NOT SINNERS; THEY ARE NORMAL HUMANS LIKE US.
THEY ARE NOT MENTALLY ILL; THEY ARE JUST BEING THE WAY THEY WANT TO BE.
IT'S TOTALLY THEIR CHOICE AND WE SHOULD BE PROUD OF THEM FOR ACCEPTING THEMSELVES AS THEY ARE.

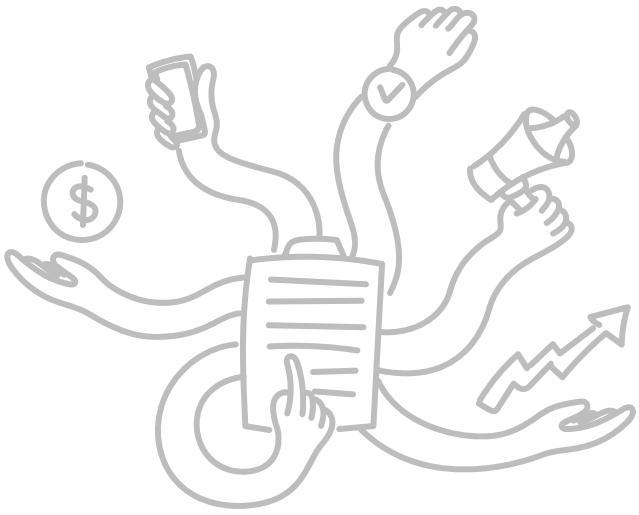
Roselata Lagun
BSc (H) Zoology
1st Year

PRODUCTION, CONSUMPTION AND SOCIETY

"Several creations by us are incredibly & lot more detrimental than all the natural creations by the universe & the cause that will lead all to the end would be nothing but creation of & by us."

Production is, has been and will be a vital activity for society. Needs gave wheels to production and self-serving made paddling rapid and ceaseless. Consumption was a need too,to sustain. Now,of a desire and ever flowing channel of wanting and getting. The question mark is on how much, not on why. Why is obvious, production for profit and consumption for pleasure. How much should society produce to meet the needs? How much should society consume to be content? If we are producing in surplus, why there are crisis? If we are consuming more than needed, why there is no contentment? Having resources still lacking. Lacking sense and always consuming yet starving. All these mirror how our society is organised. Blaming all on rising population is an escape. Escape for producers "to feed" and consumers "to want". We were surviving thousands of years ago and so now. What altering is dependency to survive. Society wants more than just three vital needs but what is leading us to never- ending more? What is in between production and consumption? Advertising, advertising is what makes this huge business going. Promotion of products they want you to consume,not you. Desire to purchase a product is not yours,it is there's. Advertising itself is a game, quite tempting. Game they play with you every passing minute,without you being aware. Trends changing every hour,and so your so-called needs, tricking you to consume more. No one is keen to know the process of production because it is a "process" not an instant gratification one gets from consuming. Production and consumption is indeed a need but can be reduced at some extent & slowed down to give society a thought and direction.

Manisha Bishnoi
B.A (Hons.) Political Science



YOU'RE IN LOVE WITH THE IDEA OF BEING LOVED!

Sometimes I think love is the most beautiful thing that a human heart can feel,
And on the contrast i think it is the feeling that shatter the heart into pieces.
Somedays I'm a hopelessly romantic kind of girl,
Other days i just don't want to talk to them.
In books and movies loves seems so worthy to fight for,
In real it seems just nothing one should go for,
Love seems more a disaster to my heart.
Irony how it is coming from a person who thought love is just everything
I will never say that loving someone is just waste
Truly love is most beautiful and disastrous at the same time.
My soul is in love deep down,
My heart says it's just a phase you'll get over with this,
And my mind says love is not meant for you.
Feeling of love is like a winter evening
A cold Breeze soothing down your soul deeply then
Breezes Turing into Strom and shivering your body to wake you up in reality.
Love is miraculously powerful it makes you cry, hate, ashamed, stressed, all at same time
It shows you your real self the one you're hiding inside.
It's okay to fear from love cause it's not always pleasant,
Loving someone doesn't ever mean you have to lose yourself,
If you are loving righty then you will find yourself first than your love,
And sometimes maybe you don't love them
You fear losing them and in that fear you lose yourself,
You love being loved by them but forgot that it is not meant for you.
LOVE IS JUST A FEELING AND YOU ARE ALLOWED TO FEEL!

RITUPARNA GUPTA
BA PROGRAM

YES ! SHE IS A VIRAGO

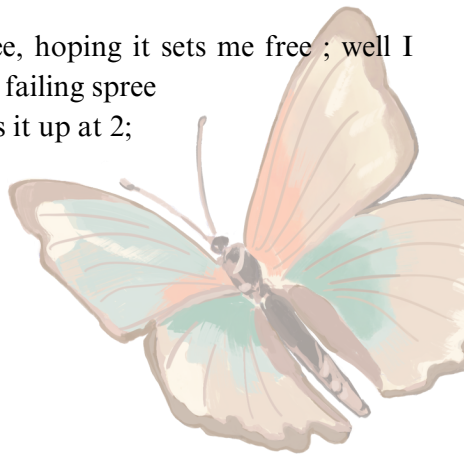
So excited I was to see the lights
Prepared the beauty inside and happy vibes
Those filthy pain and scream of her crying
Her hands holding me with pleasing shrine.
Yes! She is a Virago;
Worthy enough, a woman so tenacious.
A smile on face, deep scars carrying inside
Rolling down the tears, yet defines it jolly
Feelings are deprived, greet with kindness besides
Epitome of selflessness, bears the turmoil so firmly.
Yes! She is a Virago;
Special enough, a woman so graceful.
Bruised by them, dying inside everyday
Eyes not closed, endure wearing mask of strength
Yet full of wisdom of sages and shamans
No wound exist can't healed by her.
Yes! She is a Virago;
Modest enough, a woman so despondent.
Gloomy her broken into thousand pieces
Still has rage to fight and break the cages
With the grail to grind the "this time"
To end tears of those gloomy whines.
Yes! She is a Virago;
Irked enough, a woman so resilient.
Peaceful and inclusive, she was too captivating

SANJANA MAIKUP
BSc (H) ZOOLOGY
1st YEAR

COUNT TO 5

I am not a social butterfly;
I shy away from the noise and the crowd
I don't mingle well with people, I often feel out of place; tongue-tied
I'm out of tone, how do I find the toner? they call me a loser, a misfit and a loner
stepped out just an hour ago or so, can't fathom how I already feel so low
can't articulate the veins of my feelings, every cycle had me suffocating
lend me the air so I can finally breathe, i cut the skin; nerves start to crawl underneath
I poured out my lungs, air is all i need ; blood dripping out of my skin planted the seed
words can't comfort me so I hit the floor, i locked myself behind a cracked door
I feel the cardium bursting and my ribs rupture, I can't feel the ground and my brain can't capture
the flood in my nerves doesn't let me scream , no, I'm not drowning, im swimming upstream
trembled so hard now i can't even move, muscles so rigid; defeated the bones
I count to five and hold it in for two, I count to five, I forget numbers too
I play the rule of three, hoping it sets me free ; well I failed it too, im on the failing spree
I count to 5 and I mess it up at 2;

DIVYA
BSC(H)ZOOLOGY
3RD YEAR



JUST A SPECIES LIKE OTHERS

The Beauty of love is to make comfort for others...
The understanding to feel the pain of others
The connection to make out of others...
The believe to nurture the loneliness of others...
The intense bond is to find out the love of you from others..
The desire to win the hearts of others...
The Beauty of innocence lies in the love for others....
The Purpose of living for healing the wound of others
To make them aware that we are also the part of them
The sense of care to protect them....
The profound love for being together to become one of them
The beauty of life depends in the love for others.....
To be loved and cared is the best thing we can give to them
The Beauty of innocence lies in the love for others.....
What's the point for being the smartest if we don't make for others....
The desire to become the supreme among others....
They sense a life of love and togetherness not to rule them
They might shout to stay with us but with love not with dominance....
The understanding is to make them feel that they are also pretentious like us .....
The Beauty of innocence lies in the love for others.....
The beauty is in the diversity not in the quantity...
So one is for others and others is for one another
They have the right to live like us but they live in silence....
Then why we overpowered to them ??.....
Live ,love and like so we can make one in others....
To understand the pain and healed by relief.....
The beauty of innocence lies in the love for others.....

Shivani Singh
BSc (H) Zoology
2nd Year

PEACE IS NOT SILENT

Peace does not always mean there is nothing wrong or that everyone is safe
If that were the case , what would happen when peace' is broken?
Peace is the eradication of pure hatred or intentional harm.
Peace is not eradicating all diseases , only the biggest and worst.
Peace doesn't mean there will be no harm , for how will we deal with harm when it comes?
Peace does not mean total agreement , because , if that were the case , who would push the society to advance ?
Peace means that no one genuinely wishes to harm on others or is forced to in their situations.
Peace is not getting rid of disagreement , but the comfort in its existence .
The phrase 'fight for peace ' does not make sense, for true peace can only come from peace.

ANURADHA KUMARI
B.Sc (H) ZOOLOGY
1st YEAR

WOMEN EMPOWERMENT

Loose yourself From a painful Past.
Forgive.
Open yourself Up to healing
Let go and find Freedom.
The world laughs When she cries,
It ignores her,
When she tries something
Else,
When the world humiliates her,
She simply smiles.
But it need a guide ,
She lead them for miles.
All her worries are Buries in her heart ,
But this fifty world Tries to rip her apart.

KHUSBOO SINGH
BSc ZOOLOGY HONOURS
1st YEAR

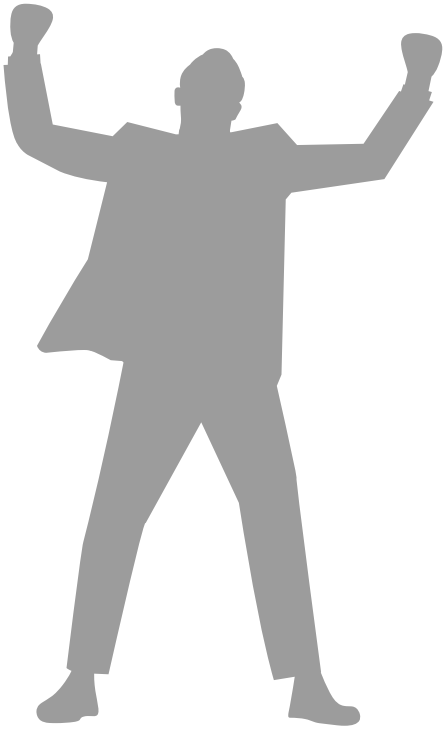
जिंदगी,अनुभव और जीत

कहते हैं जिंदगी बहुत खूबसूरत हैं, बस जीने के लिए एक खास नज़रिया चाहिए। सच कहतें हैं। मगर, क्या जिंदगी जीते हुए इतनी खूबसूरत लगती भी हैं जितनी हम सुनते हैं, नहीं ना !! जानतें हैं क्यों ?? क्योंकि हमनें कभी वो नज़रिया स्वयं में तलाशा ही नहीं, हम बस उदास होकर एक जगह बैठ जाते हैं और सोचते रहते हैं कि हमें ये नहीं मिला, हमें वो नहीं मिला, ऐसा होता तो कैसा होता, और ना जाने कितना कुछ। कितनी कल्पनाएं कर लेते हैं, जल्द ही उन्हें बिखरता देखते हैं तो हताश हो जातें हैं, कभी जिंदगी को कोसते हैं, तो कभी भगवान को, तो कभी किस्मत को। पर असल में जिम्मेवार केवल हम होते हैं, क्योंकि हम अपनी समस्याओं को इतना बड़ा बना देते हैं कि हम स्वयं उसके बोझ तले दबते चलते हैं, ना जाने क्या कुछ सोचने लगते हैं और फिर ख्याल आता हैं कि क्यूं ना जिंदगी का अंत कर दिया जाए, पर फिर एक ख्याल कि नहीं, हमारे बाद हमारे अपनों का क्या होगा। बस इसी कशमकश में उलझते-उलझते एक वक्त ऐसा आता हैं कि हम पूरी तरह हारा हुआ महसूस करतें हैं, कुछ समझ नहीं आता, क्या करें, कैसे करें और फिर हालत और हालात बिगड़ते लगते हैं और बिगड़ते-बिगडतें इतने बदतर हो जाते हैं कि कुछ करने को मन ही नहीं करता और फिर शुरू होता हैं दिल को बहलाने और फुसलाने का काम। हम स्वयं को हजारों बहाने देते हैं कि नहीं हमारी तबियत ठीक नहीं हैं इसलिए हम ये काम नहीं करेंगे और भी कितने बहाने तलाश लेते हैं उन कामों से बचने के लिए, जिन्हें करना हमारी जिंदगी के लिए, हमारे भविष्य के लिए आवश्यक हैं। असल में हम उस परिस्थिति का सामना नहीं करना चाहते इसलिए बहाने तलाशने लगते हैं, पर क्या ये उचित हैं??

नहीं !! ये उचित नहीं, मगर परेशान मत होइए, ऐसा सभी के साथ होता हैं। यहां तक कि उन सभी के साथ भी, जिनकी जिंदगी को देखकर हमें ये लगता हैं कि ये तो कितने खुश हैं अपनी जिंदगी से, पर हमेशा जो दिखे वो सच नहीं होता। कभी-कभी बेवजह भी मुस्कुराना पड़ता है, जो दिल में हो उसे छिपाना पड़ता हैं। पर वो ऐसा इसलिए नहीं करते कि उन्हें अच्छा लगता हैं बल्कि वह ऐसा इसलिए करते हैं कि वे स्वयं को कमजोर पड़ता हुआ दिखाना नहीं चाहते। कोई नहीं चाहता कि उनके भीतर का हाल कोई और जानें और सवाल करें, इसलिए सभी उदास चेहरे पर हंसी का मुखौटा लगा लेते हैं और अंदर ही अंदर घुटते चले जाते हैं। पर हमें हमारी इस आदत को बदलना होगा, हमारे नजरिए को बदलना होगा, ताकि हम हमारे आने वाले भविष्य को बचा सके। सोचिए, अगर हम विघार्थी होकर सारा दिन हताश रहेंगे, तो हम शिक्षा ग्रहण कैसे करेंगे, और अपने भविष्य की नींव वर्तमान में कैसे रखेंगे?? इसलिए स्वयं में बदलाव लाना बहुत जरूरी हैं। अब आप कहेंगे कि मैंने ये तो बताया कि समस्या हैं पर समाधान क्या हैं ?? तो मैं अपना अनुभव आप सभी के साथ बांटने जा रहीं हूं उम्मीद करती हूं कि आपको भी इससे सहायता मिलें। मैं भी आप सभी की तरह हूं, बहुत जल्दी दुःखी हो जाती हूं, रोने लगती हूं और फिर मैं भी बहाने तलाशती हूं बचने के, जैसा कि सभी करतें हैं। सभी करतें हैं पर पहले मुझे ऐसा नहीं लगता था, पहले मुझे लगता था कि शायद़ मैं ही पागल हूं जो छोटी-छोटी बातों से परेशान हो जाती हूं, डर जाती हूं, घबरा जाती हूं। पर ऐसा नहीं था, जैसे-जैसे समय बदला, मैं भी बदली और जो सर्वप्रथम सीख मुझे मिली, वो ये कि हमारे कार्य की सौ प्रतिशत जिम्मेवारी, हमारी ही होनी चाहिए।

अक्सर हम लोग, फैसला लेते हुए कई लोगों से राय मांगते हैं जिसके पीछे एक विचार ये भी होता हैं कि कल अगर कुछ बुरा हुआ तो हम सारा दोष किसी दूसरे पर डाल देंगे, अगर हम ऐसा नहीं भी सोच रहें हो तो भी जब कठिन समय आता हैं हम किसी ऐसी बात को तलाशते हैं जिससे स्वयं को बचाया जा सके और कसूर किसी और का निकलें। जो कि अनुचित हैं। इस सीख ने मुझे कुछ ऐसा दिया, जो मेरे पास नहीं था जानते हैं क्या "आत्मविश्वास"। पहलें मैं बहुत डरती थी, पर जब से सारे फैसलें और उनके परिणाम की जिम्मेदारी स्वयं लेने लगी, निड़र होने लगी। दूसरी सीख जिंदगी से जो मिली वो ये कि हमारी समस्याओं का समाधान केवल हमारे पास हीं हैं, क्योंकि हम जिसके पास सहायता मांगने, जाने की सोच रहें हैं वह स्वयं किसी सहायक की तलाश में हैं। तीसरी सीख हर किसी की जिंदगी में कोई न कोई समस्या हैं, किंतु इन्हें सुलझा वहीं सकता हैं जो स्वयं को, समस्या को और उसके हल को समझनें में सक्षम हैं और इसके लिए जो हमें करना पड़ता हैं वो हैं "आत्मनिरीक्षण"। यदि आप किसी समस्या से, किसी चिंता से ग्रसित हैं तो पहले अपने मन को पूर्ण रूप से शांत कीजिए और फिर उस समस्या या चिंता के सभी पहलुओं पर प्रकाश डालिए, उसके उचित और अनुचित प्रभाव, सभी पर और फिर ये जानने कि कोशिश कीजिए कि क्या समस्या इतनी बड़ी हैं कि जिसका हल आप नहीं कर सकते ?? यदि जवाब "हां हैं" तो किसी से सबकुछ बांट लेने और सुझाव या सहायता लेने में कोई बुराई नहीं और यदि जवाब "नहीं हैं", फिर तो आपने अपनी समस्या का समाधान ढूंढ ही लिया। यकीन मानिए जिस दिन आपका जवाब हां होगा उस दिन आप कुछ ऐसा पा लेंगे, जो आपने कभी पहलें नहीं पाया होगा। एक ऐसा अनुभव जो जिंदगी की हर परेशानी से लड़ने के लिए आपको तैयार कर देगा और आप स्वयं को विजयी और प्रसन्न महसूस करेंगे। क्योंकि जो मन पर काबू पा ले, उसे कोई नहीं हरा सकता। इसी के साथ इस लेख को समाप्त करते हुए जिंदगी पर कुछ पंक्तियां प्रस्तुत करती हूं कि....

ऐ ज़िन्दगी, तेरा शुक्रिया,
तुने बहुत कुछ, मुझे सिखाया हैं...
एक तु ही हैं, जिसने संभाला मुझको,
वरना दुनिया ने तो, हर बार गिराया हैं...
मैं तैयार हूं अदा करने को कीमत,
उड़ान सफलता की, भरने को...
बढ़ रहा जूनून रग-रग में मेरी,
आसमां नाम मेरे, करने को.....



Mahak
BSc (H) Zoology
2nd Year

पहचान

माँ बहन बेटी ना जाने मैं किस किस नाम से जानी जाती हूँ
सालो साल मेहनत कर एक घर स्वरूप परिवार को बनाती हूँ ।
अपने रिश्ते संभालते स्वयं के पहचान को खो देती हूं ,
मैं एक माँ बेटी बहन के अलावा महिला का स्वरूप क्यों भूला देती हूँ ।
जन्म लेकर बेटी बनती हूं और अन्य रिश्ते पाती हूं ,
वही जन्म देकर फिर माँ बन जाती हूँ ।
किसी के घर की मान सम्मान वा इज़्ज़त ,
तो किसी के घर की लक्ष्मी कहलाती हूँ ।
हमेशा रिश्ते के जाल में ही फंस के रह जाती हूं ।
जिंदगी बिता देती हूं मैं उन रिश्तों में ,
ना जाने क्यों स्वयं की पहचान नहीं ढूंढ पाती हूं ।
रिश्तो का भार उठाते-उठाते कभी थक भी जाती हूं ,
पर अपनी महिला की पहचान तब भी ना जान पाती हूं ।
एक घर से दूसरे घर ब्याह करके लेजाए जाती हूं ,
वहा भी रिश्ते स्वरूप ईंटों से घर बनाती हूं ।
स्वयं छोटे मोटे बीमारियों का इलाज कर चिकित्सक बन जाती हूँ ,
अपने बच्चों को संस्कार का ज्ञान देकर एक अध्यापिका की भूमिका निभाती हूं ,
स्वयं अपने बच्चों की रक्षा कर के एक रक्षक भी बन जाती हूं ,
पर स्वयं कौन हूं मैं वो खोज ना पाती हूं ।
ना जाने क्यू हमेशा रिश्तों के जाल में ही फंसी रह जाती हूं ।
पर अब ठाना है मैने की ढुढूंगी अपने आप को ,
इस बार रिश्ते नातो के चश्मे को हटा कर मुझे जानना है अपनी पहचान को ।

SRUTI ADHIKARI
BSc (H) ZOOLOGY
2nd YEAR

वालिदैन

बिन कहे हमारे जो सब कुछ समझ जाते हैं,

आप हैं जो घबराहटों में हमारा हौसला बढ़ाते हैं|

चोट लगने पर जो हमको गले लगाते हैं

आखिर आप ही तो हैं जो गिर जाने पर फिर से उठना सिखाते हैं।

हर मुकाम पर आपने हमको सरहाया,

गलतियों पर डांटने की बजाए प्यार से समझाया।

कोई मुश्किल हो तो बस आपको याद कर लेते हैं,

प्यार है आपका तब ही तो परेशानियों का सामना कर लेते हैं।

उड़ने की मंशा

मुझे पर देकर, यूँ ना रखो बंधन में
ताकि मै एक लंबी उड़ान भर पाऊँ
मुरझा से गए हैं ये बागान, हो बरसात
तो फूल सी खिलकर, फुलवारी मेहकाऊं
हो जब दिनांत, बनू मैं लालिमा
और आसमान में बिखर जाऊँ
तम से घनी हैं ये रातें, जुग्नु बन कर
इन रातों को जगमगाऊँ
कैसा खामोश सा है ये जहान
बनू मैं पंछी और चहचहा कर गाऊँ
मंशा है मेरी उड़ने की
कर दो मुझे बंधन मुक्त
फिर मैं भी एक लंबी उड़ान भर पाऊँ
तो मैं भी क्षितिज पार कर जाऊँ

YASMITA VIKRAM
BSc (H) ZOOLOGY
1st YEAR

FUN FACTS

1. The mimic octopus can imitate the appearance and behavior of various sea creatures, such as lionfish and flatfish, to avoid predators.

2. A cheetah can accelerate from 0 to 60 miles per hour in just a few seconds, making it the fastest land animal.

3. Axolotls, a type of salamander, have remarkable regenerative abilities, capable of regrowing entire limbs, organs, and even parts of their heart and brain.

4. Honey never spoils. Archaeologists have found pots of honey in ancient Egyptian tombs that are over 3,000 years old and still perfectly edible.

5. The tongue of a blue whale can weigh as much as an elephant, and their hearts can be the size of a small car.

6. Elephants are the only mammals that can't jump, due to their size and weight.

7. The narwhal, often referred to as the "unicorn of the sea," has a long spiral tusk that is actually an elongated tooth.

8. The tongue of a chameleon can be longer than its body, allowing it to catch prey from a distance.

9. A group of jellyfish is known as a "smack."

10. The archerfish can spit water at insects above the water's surface to knock them into the water, where the fish can then eat them.

Isha Patel
BSc (H) Zoology
2nd year

TEACHER'S SECTION

CAR T CELLS

CAR T cells: engineered immune cells to treat brain cancers and beyond

Malignant brain tumors rank among the most challenging type of malignancies to manage. The current treatment protocol commonly entails surgery followed by radiotherapy and/or chemotherapy, however, the median patient survival rate is poor. Recent developments in immunotherapy for a variety of tumor types spark optimism that immunological strategies may help patients with brain cancer. Chimeric antigen receptor (CAR) T cells exploit the tumor-targeting specificity of antibodies or receptor ligands to direct the cytolytic capacity of T cells. Several molecules have been discovered as potential targets for immunotherapy-based targeting, including but not limited to EGFRvIII, IL13Rα2, and HER2. The outstanding clinical responses to CAR T cell-based treatments in patients with hematological malignancies have generated interest in using this approach to treat solid tumors. Research results to date support the astounding clinical response rates of CD19-targeted CAR T cells, early clinical experiences in brain tumors demonstrating safety and evidence for disease-modifying activity, and the promise for further advances to ultimately assist patients clinically. However, several variable factors seem to slow down the progress rate regarding treating brain cancers utilizing CAR T cells. The current study offers a thorough analysis of CAR T cells' promise in treating brain cancer, including design and delivery considerations, current strides in clinical and preclinical research, issues encountered, and potential solutions.

Huang, Z., Dewanjee, S., Chakraborty, P. Jha, SK et al. CAR T cells: engineered immune cells to treat brain cancers and beyond. Mol Cancer 22, 22 (2023). https://doi.org/10.1186/s12943-022-01712-8

Dr. Saurabh Kumar Jha

TEACHER'S SECTION

Shaurya Sharma
Dr. Varsha's Son

Keshav Gautam
Dr. Tarkeshwar's son

Sarayu Beri
Dr. Shanuja's Daughter

Keshav Gautam
Dr. Tarkeshwar's son

Dr. Varsha Singh

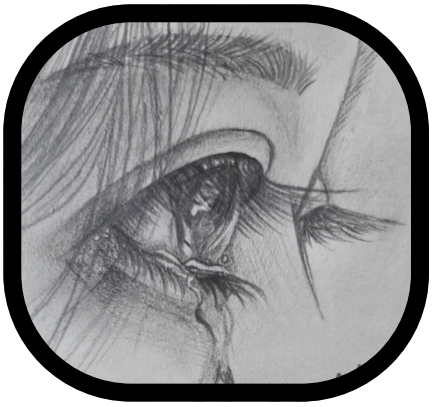
Keshav Gautam
Dr. Tarkeshwar's son

Keshav Gautam
Dr. Tarkeshwar's son

Sarayu Beri
Dr. Shanuja's Daughter

Shaurya Sharma
Dr. Varsha's Son

STUDENT'S CREATIVE MIND



Sanjana
Bsc(H)Zoology
1st year

Sruti Adhikari
Bsc(H)Zoology
2nd year

Divya
Bsc(H)Zoology
3rd year

Gargi Roy
BA(H)Journalism
2nd year

Deepanshi
BA(H)Journalism
2nd year

Palak Dhankhar
Bsc(H) Zoology
1st year

Sakshi Pathak
BA(H) History
1st year

Sruti Adhikari
Bsc(H) Zoology
2nd year

Shambhavi Singh
Bsc(H) Zoology
3rd year

WORLD THROUGH OUR LENS

CLASSIFICATION

Kingdom-Animalia
Phylum- Arthropoda
Class- Insecta
Order- Odonata
Scientific name - *Trithemis festiva*

By- Khushi
Bsc (H) botany
2nd year

CLASSIFICATION

Kingdom-Animalia
Phylum- Arthropoda
Class- Insecta
Order- Diptera
Scientific name - *Prosena siberita*

By - Tanupriya
BA (H) Geography
1st year

CLASSIFICATION

Kingdom-Animalia
Phylum- Chordata
Class- Reptilia
Order- Squamata
Scientific name - *Naja*

By- Sanjana
Bsc(H) zoology
2nd year

CLASSIFICATION

Kingdom-Animalia
Phylum- Chordata
class- Mammalia
order- Proboscidea
Scientific name - *Elephantidae*

By- Shambhavi
Bsc(H) zoology
3rd year

CLASSIFICATION

Kingdom-Animalia
Phylum- Arthropoda
Class- Insecta
Order-Hymenoptera
Scientific name- *Apis mellifera*

By- Sneha
Bsc(H) zoology
2nd year

CLASSIFICATION

Kingdom-Animalia
Phylum- Chordata
Class- Mammalia
Order- Carnivora
Scientific name - *Felis catus*

By - Janvi
Bsc(H) zoology
3rd year

WORLD THROUGH OUR LENS

CLASSIFICATION

Kingdom - Animalia
Phylum - Arthropoda
Class - Insecta
Order - Lepidoptera
Scientific Name - *Catopsilia florella*

By - Pranati
Bsc(H) zoology
2nd year

CLASSIFICATION

Kingdom - Animalia
Phylum - Arthropoda
Class - Insecta
Order - Lepidoptera
Scientific Name - *Tarucus nara*

By - Janvi
Bsc (H) Zoology
3rd year

CLASSIFICATION

Kingdom - Animalia
Phylum - Chordata
Class - Mammalia
Order -Artiodactyla
Scientific Name - *Rucervus ducaucelii*

By - Ananya
Bsc (H) zoology
3rd year

CLASSIFICATION

Kingdom - Animalia
Phylum - Arthropoda
Class - Insecta
Order - Lepidoptera
Scientific Name - Talicada nyseus

By - Shambhavi
Bsc (H) zoology
3rd year

CLASSIFICATION

Kingdom - Animalia
Phylum - Chordata
Class - Amphibia
Order - Anura
Scientific Name - *Rana*

By - Divya
Bsc (H) zoology
3rd year

CLASSIFICATION

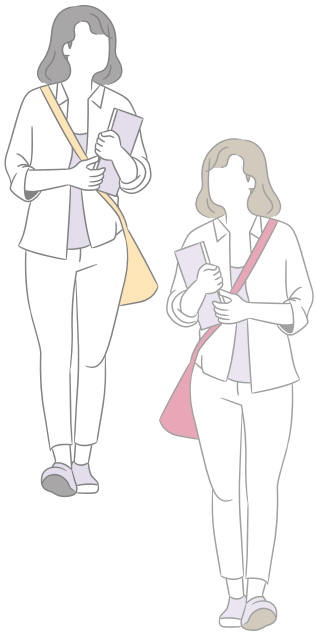
Kingdom - Animalia
Phylum - Chordata
Class - Mammalia
Order - Carnivora
Scientific Name - *Canis familaris*

By - Sneha
Bsc(H) zoology
3rd year

FACULTY MEMBERS

THIRD YEAR STUDENTS

SECOND YEAR STUDENTS



FIRST YEAR STUDENTS

STUDENT EDITOR'S

Shambhavi

Charu

Vanshika

Himanshi

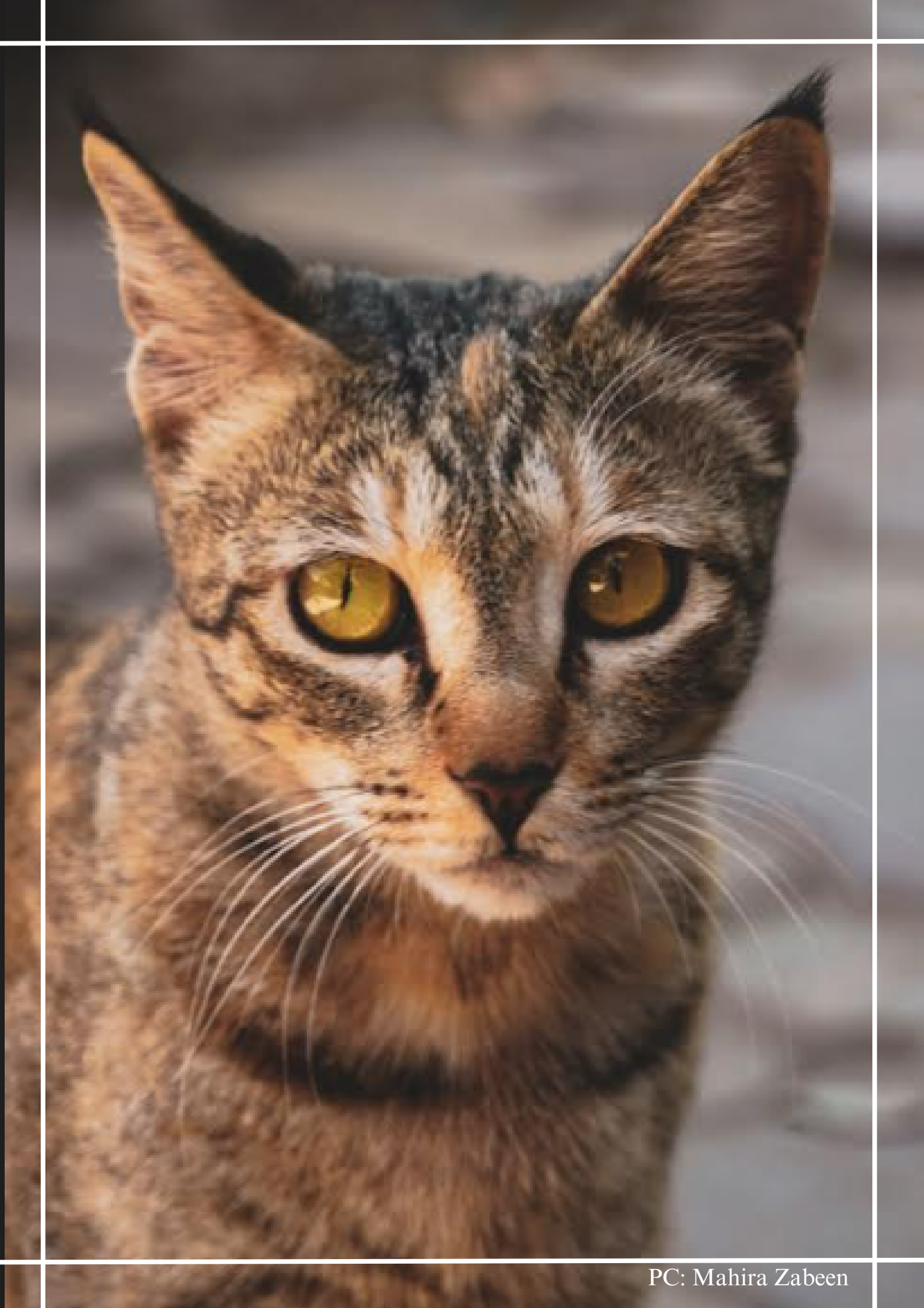
Muskan

Urvija

Khyati

Induja

Sruti



PC: Mahira Zabeen