

DEPARTMENT OF ZOOLOGY

Annual Report (2023-24)

Orientation Program; 16th August 2023; Zoology Lecture Theatre (RN 212); Convenor: Dr. Priya Goel: An orientation program for B.Sc. (Honours) Zoology students was organised with an aim to familiarise the students with the curriculum, rules and regulations of the college teaching methodologies and the co-scholastic activities. The session was conducted by the Teacher In-charge, Dr. Priya Goel. The session started with a welcome note followed by an overview of the infrastructure, curriculum, further scope, and opportunities. Students were also told about the continuous internal evaluation system and some motivational stories of our seniors. The Teacher In-charge also welcomed the queries put forward by students and readily answered each of them. The students were also given an overview of various subjects and not to forget the co-scholastic activities which provided the students with an assurance that the curriculum involves hands on learning activities which not are a vent to the creative talents and energies of the children but also help in their all-round development In the end, there was an ice breaking session for the students, which helped them to interact with each other. It also helped the students to understand the environment and grow into happy, skillful and creatively well-adjusted citizens. Students received detailed information about the essential aspects of college such as punctuality evaluation system etc. The students were guided to adhere to all these strictly and to co-operate with the teachers regarding the same. A tour of the college was provided to the students in which a visit to the labs of the department, classes, and museum was conducted. The session ended on a good note that the college provides the best environment to nurture the students for their holistic development.



Dr. Priya Goel, TIC, giving the overview.



Fresher students attending the session

TEACHER'S DAY CELEBRATION; 5th September, 2023; Venue: Zoology Lecture Theatre (RN 212); Synapses, the Zoological Society of Deen Dayal Upadhyaya College organized an event on the 5th of September on the occasion of **Teacher's Day**.

“Teachers are the torch bearers of the Gen-next”

The Teacher's Day was celebrated by the students of Zoology and Life Sciences department to express their gratitude for the immense contribution put forth by their teachers towards their development. Teachers are the cornerstone of students' future. The event started at around 12:45p.m. in the afternoon. The room was decorated beautifully. All the professors of the department were welcomed warmly. The atmosphere was quite momentous as everyone was elated and looked forward for the event. The celebrations started with a Ganesh Vandana recited excellently by one of the students, followed by various poetries, singing and dance performances. The teachers then stepped upon to play a number of fun games planned by the students. The esteemed teachers were given a plantlet as a token of gratitude to show the acknowledgement and recognition of the hard work put by the teachers towards their development, wishing them a Happy Teachers Day.

The event was concluded by the reviews of the Convenor, Dr. Priya Goel and all the faculties thanking the team for putting all their efforts and making the event a great success in such a short period of time.

All in all, it was celebration mode for everyone!

Finally, students requested the professors to cut the cake and make the day more memorable and successful. Towards the end, everyone gathered to click some pictures and keep the memories alive forever in their hearts. The day was celebrated with a lot of anticipation, for the sheer spirit of the occasion.



All the faculty members of the department of Zoology



The faculty members and the students enjoying the event.

ALUMNI INTERACTION; 19th September 2023; venue: Zoology Lecture Theatre (RN 212); Synapses, Synapses, the Zoological Society of Deen Dayal Upadhyaya College organized an Alumni Interaction Meet, a program to facilitate, consolidate and coordinate alumni activities. The event started around 12:30 p.m. with introductory remarks by **Honourable Principal Sir, Dr. Hem Chand Jain** followed by a warm welcome by the **Convener, Dr. Priya Goel**, along with other faculty members of the department, many enthusiastic alumni students and current students of the department joined the event. It was also the occasion of Ganesh Chaturthi and therefore, the event began with a Ganesh Vandana by a student, which was enough to instill positivity in all the attendees. There was a special celebration that included a few entertaining dance and singing performances and poetries by the students. Apart from this, a fun game was organized in which the students enthusiastically participated and enjoyed. Following these events, the previous year's council members of the society were awarded with certificates and trophies by the teachers for serving their best for the society by conducting events, sessions and competitions throughout the year. Towards the end of the events, all the alumni along with the previous council member were photographed with principal sir and faculty members of the department. Refreshments were given to all the attendees. Overall, the event was a great success and the organizers were highly appreciated to conduct such a wonderful event in a short period of time.



The faculty members and the students of the department attending the event.



All the previous year's council members of Synapses with their certificates and trophies.

One-day trip to National Zoological Park, Delhi; 5th October, 2023; Convenor: Dr. Priya Goel; Faculty coordinator: Dr. Jai Kumar: A one-day educational trip programme was organized by the Synapses - the zoological society under Deeksharambh – student induction program, Department of Zoology, Deen Dayal Upadhyaya College on October, 2023. Dr. Jai Kumar taken lead to organize the trip along with four teachers Dr. Vinay Kumar Dagar, Dr. Parikha, Dr. Guddu Kumar, and Dr. Anjali was there to assist the trip plan. Approval from the Principal was taken and total 76 students and 5 teachers participated to make the visit a successful and memorable event of the life. Students and teachers assembled at the main gate of National Zoological Park, Delhi, and after taking the attendance our group entered the park at 10.am. Upon entering at the park, students were divided into groups led by designated teachers to facilitate organized exploration. The students were captivated by the diverse range of animals and birds present at the zoo. They were particularly enthralled by the Tiger, Elephant, Gaur, and Lion exhibits, where they had the chance to witness these majestic creatures up close. The objective of this educational outing was to provide the students with an opportunity to observe and learn about a variety of wildlife species in their natural habitat, promoting environmental awareness and understanding of biodiversity. Students actively participated, asking insightful questions and showing genuine interest in learning about the wildlife. The aviary was a special attraction, offering students a chance to observe a variety of exotic birds in an environment mimicking their natural surroundings. This experience fostered an understanding of avian diversity and the importance of preserving their habitats. Additionally, the park provided a valuable opportunity for students to understand the significance of conservation and the efforts required to protect endangered species. It was heartening to see the students discussing conservation initiatives and expressing their eagerness to contribute to wildlife protection. Our day trip came to an end at 12.00 pm, where all the respective teachers assembled along with their groups of students at the exit gate and took attendance before exiting the park. Overall, the trip to National Zoological Park, Delhi was a successful and enriching educational experience. It not only aligned with our academic goals but also instilled a sense of responsibility and care for the environment in our students. We express our gratitude to the college administration for supporting and organizing such impactful excursions that enhance our students' learning experience.



Photograph taken at the main gate of National Zoological Park, Delhi



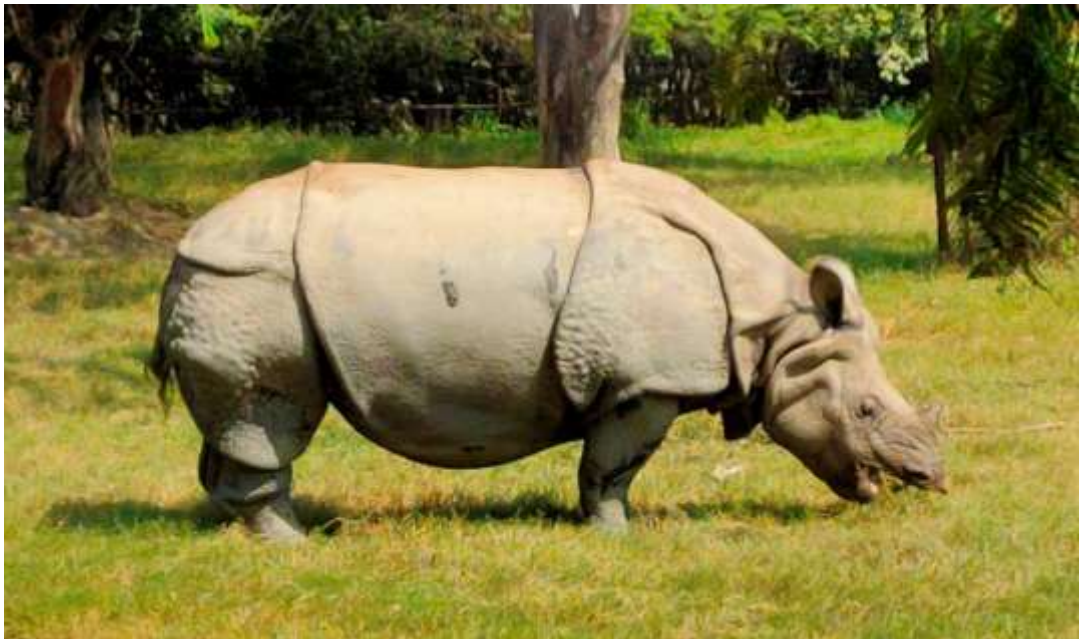
Black buck deer feeding in their enclosure



Elephants in their enclosure



Swans in their enclosure



Rhino feeding in its enclosure

TATTOO MAKING COMPETITION; Theme: World Migratory Bird Day; 12th October 2023; Venue: Zoology Lecture Theatre, Room no. 212 Convenor: Dr. Priya Goel; Faculty coordinator: Dr. Parikha Kumar; SYNAPSES, the Zoological Society of Deen Dayal Upadhyaya College organised an intercollege tattoo-making competition on the occasion of **World Migratory Bird Day** which brought together students from different colleges and almost every department to raise awareness about the importance of protecting migratory birds and their habitats. World Migratory Bird Day is celebrated on 14th October globally to highlight the importance of conserving migratory birds and their habitats. The Tattoo Making Competition was organized to encourage the students to bring out their inner artists and contribute to environmental conservation through art. The key goal of World Migratory Bird Day is to draw attention to the threats faced by migratory birds, their ecological importance, as well as the need for international cooperation in order to conserve them and to encourage creativity and artistic expression allied to bird conservation.

The event attracted fourteen participants from various colleges and departments, including zoology, chemistry, botany, and the arts. The students were enthusiastic and excited for the competition, followed all the rules abided by the judges, and completed their work in the given period of time, according to the rules and guidelines prescribed. Participants were tasked with creating bird-themed tattoos that highlighted the beauty and importance of migratory birds and the significance of celebrating them through art. The judging criteria was based on creativity and originality, artistic skills, relevance to the theme, overall impression and awareness concerning the tattoo. The event succeeded in spreading awareness about the importance of World Migratory Bird Day and bird conservation and fostered a sense of community among participants and attendees who shared a common passion for bird conservation. The competition showcased the artistic talent of participants in creating bird-themed tattoos. Attendees learned the ecological significance of migratory birds and their role in our ecosystems. All the prize winners were awarded certificates towards the end of the event.

Winners of the competition:

Position	Names	College
1 st	Shradha and Anuj	Deen Dayal Upadhyaya College
2 nd	Hanshu Patel and Neha Fatima Zaidi	Deen Dayal Upadhyaya College
3 rd	Priya Kumari and Ayushi Badola	Deen Dayal Upadhyaya College

The Tattoo Making Competition on World Migratory Bird Day successfully combined art, education, and environmental conservation. It highlighted the beauty and importance of migratory birds while engaging the students in meaningful activities. The event encouraged participants and attendees to be more environmentally conscious and proactive in protecting our natural world.



Winners of the competition (left to right): **Shradha and Anuj, Hanshu Patel and Neha Fatima Zaidi, Priya Kumari and Ayushi Badola.**



Participants with the teachers.



Synapses Council with Volunteers of the event.

STUDENT LECTURE SERIES SLS_01_2023-24; 'Experience with Cryobiology and ART at National Centre for Biological Sciences, InStem Bangalore'; 29th September 2023; Venue: Zoology Lecture Theatre Room No. 212; Convenor: Dr. Priya Goel; The Student Lecture series -01 was delivered by Swarnava Dutta, student of B.Sc. (Hons) Zoology second year. He was shortlisted and got an opportunity to attend the **hands-on Workshop on Cryobiology and Assisted Reproductive Technologies (ARTs)** in the Laboratory Mouse from **September 11-14, 2023** organised by the **National Centre for Biological Sciences, InStem Bangalore**. During the session, he discussed and shared his experiences, and what he learned up there. He discussed the upcoming advancements made in fertility techniques, shared the procedures that he learned in the practicals and elaborated on what he did during the four-day-long program. He shared his four-day long schedule that he attended and the hands-on practical experiences he had there. On day-1, Monday, he had done **Mouse sperm harvesting and cryopreservation**, and discussed how he collected and frozen the sperm inside the straw, what is the need for a Sperm incubation dish, M2 media, mHTF media etc. He discussed about **embryo handling pipette** and how it proved useful during the experiment. On day-2 he had performed **sperm cryo recovery and IVF**, he told how to thaw the sperm, and how to collect and harvest the **oocytes**. He shared his experience on *In Vitro* Fertilization and washing of embryos. He had performed **Embryo collection and vitrification** on Day 3; the **IVF assessment day**, and he shared that he harvested 24 embryos in all but after cryo-recovery, he was able to rescue only 13 of them. So, he discussed the techniques and handling methods used in IVF. On the last day of the workshop, he did **Surgical Embryo Transfer**. He also briefed about **vasectomy**, NSET i.e. non-surgical embryo transfer and shared his experience of visiting the Animal Care Resource Centre, at NCBS the specific pathogen-free zone. He shared the summary of the talks given during the workshop and also discussed the challenges that Doctors face in ARTs. He discussed about lab ethics, mouse designing techniques and IVF procedures.



STUDENT LECTURE SERIES (SLS_02_2023-24); ‘mRNA Vaccines and Discovery Of Covid-19 Vaccine: the Road To Noble Prize’; 17th October 2023; Venue: Zoology Lecture Theatre Room 212; Synapses, the Zoological Society of Deen Dayal Upadhyaya College in collaboration with Science Foundation Committee organized a lecture on the topic: mRNA Vaccines and Discovery Of Covid-19 Vaccine: the Road To Noble Prize which was presented by Abhishek Kumar, a student of B.Sc. Life Sciences (2nd year). The event started at around 12:45p.m. with around 20 enthusiastic students attended the session. The speaker began with his introduction then continued with the details about mRNA vaccine in which the presenter described how the mRNA vaccines work on humans, he also described spike proteins(where they are located and how they work) and a schematic representation of two mRNA vaccines through a presentation. The second part of the lecture was based on the two scientists, Katalin Karikó and Drew Weissman, who got the Noble Prize for their discoveries concerning nucleotide base modifications that led to the development of mRNA vaccines against Covid-19. The presenter then discussed about the early life, career, scientific contributions and awards of both the scientists who worked on the vaccine and contributed for base modifications. The audience was eager to learn more about the interesting topic. Towards the end of the presentation, the student explained the “Discovery of mRNA vaccines for COVID-19” and the efforts behind this significant discovery. The topic caught the attention of everyone present in the room.. At last, the speaker thanked the professors for giving him an opportunity to be a part of this lecture. After the session, the students were given time to interact and ask questions. Students felt the session informative and interactive. Following this, the teachers appreciated the efforts of the presenter. The session ended with providing certificates to the presenter and student coordinators of the session.



The audience paying keen attention to the words of the speaker.



The faculty members providing a certificate to the presenter, Abhishek Kumar.

STUDENT LECTURE SERIES (SLS_03_2023-24): ‘Understanding Menstruation: Dispelling Myths Through Scientific Insights’ 29th January 2023; venue: Zoology Lecture Theatre Room No. 212; student coordinator: Aditi Rawat and Abhishek Kumar; Convenor: Dr. Priya Goel; Faculty coordinator: Dr. Guddu Kumar. The lecture aimed to tackle misconceptions surrounding menstruation. Approximately 50 students attended the lecture, actively participating and demonstrating a keen interest in the scientific insights presented. The lecture delved into dispelling myths related to menstruation, attributing these misunderstandings to a lack of communication. The primary goal was to provide scientific insights to bridge the information gap. A detailed explanation of menstrual cycles, elucidating the pivotal role of hormones such as Estrogen, Progesterone, LH, and FSH in controlling the cycle was given. Discussion on common menstrual disorders, accompanied by an analysis of the reasons behind their increasing prevalence; followed by exploration of 10 common myths, offering insights into their origins and presenting a scientific perspective. To further break the taboo surrounding menstruation, the speaker recommended to consider the following potential follow-up actions or events: Workshops and Educational Programs, Collaboration with Health Professionals, Community Outreach Programs, Incorporate Menstrual Education in Curriculum, Social media campaigns and partnerships with NGOs. After the lecture a Question-and-Answer Session was held where students had put up their questions which was thoroughly answered. This dynamic Q&A session facilitated engaging discussions, enabling the audience to seek clarifications and deepen their understanding of the topic. The lecture successfully underscored the significance of dispelling menstruation myths through scientific education. By fostering a better understanding of this natural biological process, it contributes to breaking down societal taboos surrounding menstruation.



STARTING THE LECTURE: DELIVERING AIM OF THE LECTURE & INTRODUCTION ABOUT MENSTRUATION AND REASON FOR ORIGIN OF MYTHS



AROUND 50 STUDENTS ATTENDED THE LECTURE



STUDENT LECTURE SERIES (SLS_04_2023-24) ‘Machine Learning and Its Applications’; 07th February, 2024; venue: Zoology Lecture Theatre (Room no. 212); Speaker: Om Prakash Kumar, student of B.Sc.(H) Zoology V semester; Teacher Co- Ordinators: Dr.Jai Kumar & Dr. Vinay Singh Dagar; Student Coordinators: Vanshica Sharma & Surbhi; Convenor: Dr. Priya Goel; The lecture aimed to enlighten students about the fascinating world of machine learning. The presenter focused on the key aspects of Deep Learning and Artificial Intelligence. The working of Machine Learning and its applications were discussed in detail, making it easier for students to comprehend the tasks ML does in our daily life. The speaker also showcased his project – The **Maze Robo Solver Bot. He explained its design, algorithms, and implementation and shared its insights gained during the project.-The lecture made everyone really excited! Students joined in and shared their happy thoughts. They talked a lot and asked cool questions, making it super interesting. It showed how important it is to understand machine learning in our tech-filled world.The lecture provided valuable insights into the world of machine learning, inspiring students to explore this dynamic field. As we move toward an AI-driven future, understanding machine learning becomes essential for both personal growth and societal progress. Remember, the journey in machine learning is just beginning, and there’s much more to discover!**



ZOOFESTEA'24: The Annual Fest of Department of Zoology; 20th March 2024; Synapses, The Zoological Society of Deen Dayal Upadhyaya College, University of Delhi, organised Zoofeatea'24 – the Annual Departmental fest at inter college level. Various inter-college events were organized with active participation from various colleges of University of Delhi. The event details are as follows:

1. RANGAVALI – The Rangoli Making Competition

Students participated in teams of two and/or solo. Eight teams participated in the competition. The panel of judges included Dr. Lathika Nair, Dr. Rohit Jamwal, Dr. Anjali Kaushik. The judging criteria included – 1. Relevance to the theme 2. Presentation 3. Color vibrance. The competition started at 12 noon and ended at 1:00 pm. The winners of the competition were:

1st position – Molika Lamba and Jaya Onkar

2nd position – Upasna Kala and Khushi Singh

3rd position – Deepanshu Sharma

Best rangoli – Shivani and Nikita





2. TREASURE HUNT

Students participated in team of two. There was two rounds in this event in which 1st round has four rounds and in second round which is clue round. Twenty five teams participated in round 1 and eight teams qualified in round two.

Panel of judges included: Dr. Anita Gulati, Dr. Guddu Kumar, Dr. Parikha

Competition started at **10:00 am** and ended at **1:00 pm**

Event coordinators: Chitransh Gautam (BSc. Life sciences 2nd Year)

Nistha Maik (B.Sc. (H) Zoology 3rd year)

Mayur Sharma (B.Sc. (H) Zoology 2nd year)

Event Volunteers: Twinkle Verma, Diksha Sharma, Akshii, Vandana **B.Sc. (H) Zoology 1st year**

Versha, Arpit Shukla, Adarsh, Bulbul, Aditya Sharma, Mayank Sharma **B.Sc. (H) Zoology 2nd year**

Abhijya **B.Sc. (H) Zoology 3rd year**

Winners of the Competition:

1st position – Ashutosh Kumar Yadav, Mayank Verma, Tejaswini, Nida

2nd position – Jitendra, Tanmay, Barsha, Gungun

3rd position – Durvesh, Divya, Masood, Mohit





3. SPELL BEE

There were two rounds in this event and fourteen students participated in both the rounds.

Coordinators and Judges: Dr. Vinay Singh Dagar, Dr. Jai Kumar

Supervisor: Aditi Rawat (B.Sc.(H) Zoology 3rd year)

Event Coordinator: Adarsh Kumar Rai, Tanmay (B.Sc.(H) Zoology 2nd year)

Volunteers: Tripti Mishra and Sonam (B.Sc.(H) Zoology 1st year)

The Competition started at 1:30 pm and ended at 2:30 pm.

Winners of the competition :-

1st position – Gungun of B.Sc.(H) Botany 2nd year

2nd position – Harshita of B.Sc.(H) Botany 2nd year

3rd position – Barsha of B.Sc.(H) Botany 2nd year





4. TUNE TWISTER

Students participated in team of two. There were two rounds in this event. 20 teams participated in round one, then 14 teams got qualified for round two.

Panel of judges include: Dr. Renu Solanki, Dr. Aarti Seherawat and Dr. Priya Yadav.

Competition started at 1:30 pm and ended at 3:30 pm.

Event coordinators: Mayur Sharma (B.Sc. (H) Zoology 2nd year)

Shivam Suryavanshi (B.Sc. (H) Zoology 1st year)

Event volunteers: Bulbul (B.Sc.(H) Zoology 2nd year), Nida (B.Sc. (H) Zoology 1st year), Tejaswini (BSc. H. Zoology 1st year), Thejalakshmi (BSc.(H) Zoology 1st year)

Winners of the competition :-

1st position – Tanuja and Praveen

2nd position – Ashutosh and Durvesh

3rd position – Anshul and Sangeeta





Compiled by:
Dr. Priya Goel
Convenor, Synapses, the Zoological Society
Teacher In-charge, Department of Zoology
AY 2023-24