




Annual Report

2019-2020

DESHBANDHU COLLEGE



University of Delhi

Colleges

97th ANNUAL REPORT (2019-2020)

1. **Name of the College:** Deshbandhu College

2. **Major Activities & Achievements:**

Department: Biochemistry

Two lectures were organized and were delivered by two eminent scientists, Dr. Yogendra Singh and Dr. Kalpana Luthra at the inaugural session of **Biospark 2019** by Department of Biochemistry on 24th September 2019 in the Vivekananda auditorium of the College.

1. Dr. Yogendra Singh was first speaker of the event. He delivered a talk on the topic "Survival Strategies of bacterial pathogens". Dr. Singh is known as a pioneer in the field of pathogenesis and treatment of tuberculosis. He is Professor at Department of Zoology, Delhi University.
2. Second talk was given by Dr. Kalpana Luthra, Professor, Department of Biochemistry, AIIMS, Delhi. She delivered lecture on the topic, "Co-evolution of virus and host immune responses in HIV infection: Information towards immunogen design".
3. A Rangoli competition was conducted successfully in Department of Biochemistry on the topic, "Host Pathogen Interaction" which was judged by our eminent faculties.
4. A panel discussion was organized on the topic, "Eugenics: Genetic Superiority vs. Social Inferiority" in which students put their views in the favour and against of the eugenics.
5. Conducted Biochemistry Lab Workshop for INSPIRE-DST Internship program-2019 from 17-21 December 2019 at Deshbandhu College.
6. Lab Visit of Biochemistry (H) 2nd and 3rd year students to RCB Open Day in Regional centre for Biotechnology, Faridabad on 16th October, 2019.
7. Lab Visit of Biochemistry(H) 2nd and 3rd year students to RCB Outreach program on Science day 2020 in Regional centre for Biotechnology, Faridabad on 28 February, 2020.
8. Lab Visit of Biochemistry students to IGIB Open Day, Mathura road, New Delhi on 2nd March 2020.

Name of the Teacher: Dr. Kamana Singh

Extension Lectures Organised:

As a member, Organizing Committee, Lectures on "Survival strategies of Bacterial pathogens" by Prof. Yogendra Singh, Department of Zoology, DU and Prof. Kalpana Luthra, AIIMS as a part of Department of Biochemistry Fest "**Biospark**" on 24th September 2019 at Deshbandhu College.

Workshops/Conferences organized/participated

1. As Convenor, organized a two days national conference, "Pharmacovigilance: Advancements in the safe drug development", on 16th and 17th January 2020 at Vivekananda Auditorium, Deshbandhu College.
2. Attended a National conference on, "Insect Plant Biology in 21st Century", organized by Department of Zoology, Deshbandhu College on 4th and 5th November 2019 at Vivekananda Auditorium, Deshbandhu College.
3. Served as a member, Organizing committee in International Conference on "Natural Products and Human Health-2020" organized by Department of Zoology, Deshbandhu College on 27th to 29th Feb 2020 at Conference centre, North Campus, University of Delhi.
4. Served as a Member, Organizing committee in DST-INSPIRE Program, from 17th to 21st Dec 2019 at Deshbandhu College.

Poster Presentations:

1. Arya P, **Singh K**, Mishra P, Kundu B. *A review on natural compounds interacting with the amyloids and possibility of uses in treatment of neurodegenerative disorders*, at International Conference on "Natural Products and Human Health-2020" organized by Department of Zoology, Deshbandhu College on 27th to 29th Feb 2020 at Conference centre, North Campus, University of Delhi.
2. Chattree V, Jain R, **Singh K**. *Encapsulation of four natural products betulinic acid, parthenolide, honokiol, and ginsenoside Rh2 in cocktail liposome therapy for lung cancer treatment*, International Conference on "Natural Products and Human Health-2020"

organized by Department of Zoology, Deshbandhu College on 27th to 29th Feb 2020 at Conference centre, North Campus, University of Delhi.

Other Responsibilities:

1. Departmental Coordinator, DBT Advisory committee, DBT Star College scheme, Deshbandhu College, University of Delhi, 2019-2020.
2. Organised cultural performance by the students of western dance & Indian dance societies of Deshbandhu college at National conference “Pharmacovigilance: Advancements in the safe drug development”, on 16th and 17th January 2020 at Vivekananda Auditorium, Deshbandhu College.
3. Organized Rajasthani folk dance by Sahitya kala parishad at International Conference on “Natural Products and Human Health-2020” organized by Department of Zoology, Deshbandhu College on 27th to 29th Feb 2020 at Conference centre, North Campus, University of Delhi.
4. As Member of Jury Panel Judge “Mr and Miss Sabrang” 2020.
5. As Member of Jury Panel Judge “Indian Classical Solo Dance SABRANG 2020”.

Name of the teacher: Dr. Rajni Jain

Extension Lectures Organised:

As a Convenor, Organizing Committee, Lectures on “Survival strategies of Bacterial pathogens” by Prof. Yogendra Singh, Department of Zoology, DU and Prof. Kalpana Luthra, AIIMS as a part of Department of Biochemistry Fest “Biospark” on 24th September 2019 at Deshbandhu College.

Workshops/Conferences organized/participated

1. As Convenor and Resource Person, INSPIRE-DST Program, 17th to 21st Dec 2019 at Deshbandhu College.
2. As Member, Advisory board and Organizing committee, National conference on “Pharmacovigilance: Advancements in the safe drug development”, 16th and 17th January 2020 at Deshbandhu College.
3. Attended National conference on, “Insect Plant Biology in 21st Century”, organized by Department of Zoology, Deshbandhu College on 4th and 5th November 2019 at Deshbandhu College.
4. As a Member, Organizing committee, International Conference on “Natural Products and Human Health-2020” by Department of Zoology, Deshbandhu College, 27th to 29th Feb 2020 at Conference Centre, North Campus, University of Delhi.
5. Attended International Conference on Human Rights on 22-23 February 2020 at Dr. Ambedkar International Centre New Delhi-110001.

Poster Presentations:

Chattree V, **Jain R**, Singh K. “Encapsulation of four natural products betulinic acid, parthenolide, honokiol, and ginsenoside Rh2 in cocktail liposome therapy for lung cancer treatment”, International Conference on “Natural Products and Human Health-2020” organized by Department of Zoology, Deshbandhu College on 27th to 29th Feb 2020 at Conference centre, North Campus, University of Delhi.

Other Responsibilities

1. Member, DBT Advisory committee, DBT Star College scheme, Deshbandhu College, University of Delhi, 2019-2020.
2. As Member of Jury Panel Judge “Mr and Miss Sabrang” 2020.
3. As Member of Jury Panel Judge “Western Group Dance SABRANG 2020”.
4. Organized Lab Visit of Biochemistry (H) IInd and IIIrd year students to RCB Open Day in Regional centre for Biotechnology, Faridabad on 16th October, 2019.

Name of the teacher: Dr. Preeti Karwal

Extension Lectures Organised:

As a member, Organizing Committee, Lectures on “Survival strategies of Bacterial pathogens” by Prof. Yogendra Singh, Department Zoology, DU and Prof. Kalpana Luthra, AIIMS as a part of Department of Biochemistry Fest “Biospark” on 24th September 2019 at Deshbandhu College.

Workshops/Conferences organized/participated

1. Served as a Member, Organizing committee in International Conference on “Natural Products and Human Health” organized by Department of Zoology, Deshbandhu College, held on February, 27-29, 2020.
2. Served as a Member, Organizing committee in National Conference on “Pharmacovigilance: Advancements in the safe drug development” organized by Department of Biochemistry, Deshbandhu College, January 16-17, 2020.
3. Served as a Member, Organizing committee in National Conference on “Insect-Plant Biology in 21st Century” organized by Department of Zoology, Deshbandhu College, November 4-5, 2019.
4. Served as a Member, Organizing committee in the DST-INSPIRE Internship programme-2019” at Deshbandhu College, December 17-21, 2019.

Oral/Poster Presentations:

1. **Best Oral Presentation prize** for “Building a compendium for literature-based assessment of the spectrum and status of potential natural product-based anti-Systemic Lupus erythematosus (SLE) therapy.” By Akhil Kumar, Neha Gupta, Ashish Gupta, Vanshika Lumb and **Preeti Karwal*** at International Conference on Natural Products and Human Health held at University of Delhi Conference Centre organized by Department of Zoology, Deshbandhu College, February, 27-29, 2020.
2. Kartik Majila, Rachna Behl, ElbinAlosly, Ashish Gupta, Akhil Kumar, Neha Gupta, Savinitha Prakash, **Preeti Karwal***, & Vinod Scaria* “An approach towards precision diagnosis of Maturity Onset Diabetes of Young.” at International Conference on Frontiers in Biochemistry and Biotechnology: Strategies to combat Human Diseases, organized by Department of Biochemistry, Shivaji college and South Campus, DU, February, 12-13, 2020.
3. Kartik Majila, Rachna Behl, ElbinAlosly, Ashish Gupta, Akhil Kumar, Neha Gupta, **Preeti Karwal*** & Vinod Scaria* “Improved data curation strategies of genetic variants for personalized diagnosis of monogenic disorders.” at International Conference on Advances in Biosciences and Biotechnology, 2020 held at IIIT, NOIDA, Jan 30 – Feb 1, 2020.
4. Majila K, Behl R, Lumb V and **Karwal P***. “To characterize lighter shades of eye coloured mutant *Drosophila melanogaster* strains observed in wild type and white eyed fly lab stocks.” at National Conference on Insect Plant Biology in 21 st century held at Deshbandhu College, November, 4-5, 2019.

Other Responsibilities:

1. Core Member, DBT Advisory committee, DBT Star College scheme, Deshbandhu College, University of Delhi, 2019-2020.
2. Organized Lab Visit of Biochemistry (H) 2 and 3rd year students to RCB Outreach program on Science day 2020 in Regional centre for Biotechnology, Faridabad on 28 February, 2020
3. Organized and accompanied students in Lab Visit of Biochemistry students to IGIB Open Day, Mathura road, New Delhi on 2nd March 2020.

Name of the Teacher: Dr. Vineeta Kashyap

Extension Lectures Organised:

As a member, Organizing Committee, Lectures on “Survival strategies of Bacterial pathogens” by Prof. Yogendra Singh, Department Zoology, DU and Prof. Kalpana Luthra, AIIMS as a part of Department of Biochemistry Fest “Biospark” on 24th September 2019 at Deshbandhu College.

Workshops /Conferences Attended:

1. Attended National Conference on InsectPlant Biology in 21st century on 4-5th November 2019 organized by Department of zoology, Deshbandhu College, New Delhi.
2. Attended a road Show for Global Bio-India 2019, BIRAC, organized by DBT on 11th November 2019 at National Institute of Immunology, Aruna Asaf Ali Marg, New Delhi.
3. Attended International Global Bio-India 2019 Biotechnology Industry Research Assistance council (BIRAC), organized by DBT on 21-23 November 2019 at Aerocity, New Delhi.
4. Served as a Member, organizing committee in INSPIRE-DST Program, held at Deshbandhu College from 17th to 21st December 2019.
5. Member, organizing committee of National conference on Pharmacovigilance: Advancements in the safe Drug development on 16 and 17 January 2020, organized by Department of Biochemistry, Deshbandhu College.
6. Attended International Conference on Human Rights on 22-23 February 2020 at Dr. Ambedkar International Centre, New Delhi-

Poster Presentations

1. **Chattree V**, Jain R, Singh K. "Encapsulation of four natural products betulinic acid, parthenolide, honokiol and ginsenoside Rh2 in cocktail therapy for lung cancer treatment at International Conference on "Natural products and Human Health-2020 organized by Department of Zoology, Deshbandhu College on 27-29th February 2020 at Conference centre, North Campus, University of Delhi.

Other responsibilities:

1. Member of Proctorial Committee, Deshbandhu College, 2020.
2. Member of Stage Committee during SABRANG annual cultural festival of Deshbandhu College 2020 on 3rd and 4th March 2020.
3. As a Member of Jury Panel judged Western Group Dance performances and Art meisters on 3 and 4 March in SABRANG 2020.

Name of the teacher: Dr. Prabha Arya

Extension Lectures Organised:

As a member, Organizing Committee, Lectures on "Survival strategies of Bacterial pathogens" by Prof. Yogendra Singh, Department Zoology, DU and Prof. Kalpana Luthra, AIIMS as a part of Department of Biochemistry Fest "Biospark" on 24th September 2019 at Deshbandhu College.

Workshops/Conferences organized/participated

1. As Co-convenor organized a two-day national conference, "Pharmacovigilance: Advancements in the safe drug development", on 16th and 17th January 2020 at Vivekananda Auditorium, Deshbandhu College.
2. Attended a national conference on, "Insect Plant Biology in 21st Century", organized by Department of Zoology, Deshbandhu College on 4th and 5th November 2019 at Vivekananda Auditorium, Deshbandhu College.
3. Attended an International Conference titled, "Human Rights: National and International Issues and challenges, Organized by Shaikshik foundation and Deshbandhu College on 22nd and 23rd February at Ambedkar International Center, New Delhi.
4. Participated and presented a poster titled, "A review on natural compounds interacting with the amyloids and possibility of uses in treatment of neurodegenerative disorders" in International Conference on "Natural Products and Human Health-2020" organized by Department of Zoology, Deshbandhu College on 27th to 29th Feb 2020 at Conference Centre, North Campus, University of Delhi.
5. Served as a Member, organizing committee in INSPIRE-DST Program, held at Deshbandhu College from 17th to 21st December 2019.

Other Responsibilities

1. Member of Proctorial Committee, Deshbandhu College, 2019-2020.
2. As Member of Jury Panel Judge "Indian Classical Solo Dance SABRANG 2020".

Name of the Teacher: Dr. Vanshika Lumb

Extension Lectures Organised:

As a member, Organizing Committee, Lectures on "Survival strategies of Bacterial pathogens" by Prof. Yogendra Singh, Department Zoology, DU and Prof. Kalpana Luthra, AIIMS as a part of Department of Biochemistry Fest "Biospark" on 24th September 2019 at Deshbandhu College.

Workshops/Conferences organized/participated

1. As member of organising committee of two days national conference, "Pharmacovigilance: Advancements in the safe drug development", on 16th and 17th January 2020 at Vivekananda Auditorium, Deshbandhu College.
2. As a member of Registration committee of "Insect Plant Biology in 21st Century" organized by Department of Zoology, Deshbandhu College on 4th and 5th November 2019 at Vivekananda Auditorium, Deshbandhu College.
3. Served as a Member, organizing committee in INSPIRE-DST Program, held at Deshbandhu College from 17th to 21st December 2019.

Oral Presentations

1. Majila K, Behl R, **Lumb V** and Karwal P*. "To characterise lighter shades of eye coloured mutant *Drosophila melanogaster* strains observed in wild type and white eyed fly lab stocks" at National Conference on Insect Plant Biology in 21st century held at Deshbandhu College, November 4-5, 2019.
2. Kumar A. , Gupta N., Gupta A., **Lumb V** and Preeti Karwal* "Building a compendium for literature-based assessment of the spectrum and status of potential natural product-based anti-Systemic Lupus Erythematosus (SLE) therapy." at International Conference on Natural Products and Human Health held at University of Delhi Conference Centre organized by Department of Zoology, Deshbandhu College, February, 27-29, 2020.

Abstract Publication

1. Himanshu*, Gupta A., **Lumb V.** "Investigation of ROS neutralisation mechanisms adapted by cell during initial zygotic cleavage divisions" Proceedings of Frontiers in Biochemistry and Biotechnology: Strategies to combat human diseases. ISBN: 8190-1856-91.

Other Responsibilities:

1. Accompanied Lab Visit of Biochemistry (H) 2 and 3rd year students to RCB Outreach program on Science day 2020 in Regional centre for Biotechnology, Faridabad on 28th February, 2020.
2. Accompanied students in Lab Visit of Biochemistry (H) students to IGIB Open Day, Mathura road, New Delhi on 2nd March 2020.
3. Member of Proctorial Committee, Deshbandhu College, 2019-2020.
4. Member of Prize and Certificate Distribution Committee during SABRANG annual cultural festival of Deshbandhu College 2020 on 3rd and 4th March 2020.

Name of the Teachers: Dr. Astha Giri

Research publications

1. **Giri A**, Safi H, Cabibbe AM, Gupta S, Narang A, Tyagi G, Shrivastava K, Kumar C, Kumar Sharma N, Lingaraju S, Trovato A, Battaglia S, Cirillo DM, Bose M, Alland D, Varma-Basil M. Lack of association of novel mutation Asp397Gly in aftB gene with ethambutol resistance in clinical isolates of Mycobacterium tuberculosis. Tuberculosis (Edinb). 2019 Mar;115:49-55.
2. Narang A, Garima K, Porwal S, Bhandekar A, Shrivastava K, **Giri A**, Sharma NK, Bose M, Varma-Basil M. Potential impact of efflux pump genes in mediating rifampicin resistance in clinical isolates of Mycobacterium tuberculosis from India. PLoS One. 2019 Sep 26;14(9):e0223163.
3. Shrivastava K, Kumar C, Singh A, Narang A, **Giri A** et al. An overview of pulmonary infections due to rapidly growing mycobacteria in South Asia and impressions from a subtropical region. Int J Mycobacteriology. 2020 Mar 6;9(1): 62-70

Papers/Poster presentation in seminars/conferences:

1. As a member, Organizing Committee, Lectures on "Survival strategies of Bacterial pathogens" by Prof. Yogendra Singh, Department Zoology, DU and Prof. Kalpana Luthra, AIIMS as a part of Department of Biochemistry Fest "Biospark" on 24th September 2019 at Deshbandhu College.
2. Member, Organizing Committee of the National Conference on Pharmacovigilance: Advancements in the Safe Drug Development (NCPASDD- 2020) held in Deshbandhu College on 16th and 17th January, 2020.
3. Participated in the International Conference on Human Rights jointly organized by Deshbandhu College, held on 22nd and 23rd February, 2020.
4. Served as a Member, organizing committee in INSPIRE-DST Program, held at Deshbandhu College from 17th to 21st December 2019.

Oral presentations:

1. Garg K, **Giri A**. Use of Indian Spices: Age old practice as promising anti-microbials. at International Conference, NutriCon 2019, held in Thailand in November, 2019.

Poster Presentation:

1. Garg K, **Giri A**. "Promising antimicrobial activity of clove against common respiratory pathogen, *Staphylococcus aureus*" at the International Conference on Natural Products and Human Health, held by Deshbandhu College, University of Delhi on 28th Feb, 2020.

Other Responsibilities:

1. Member of Proctorial Committee, Deshbandhu College, 2019-2020.
2. Member of Discipline Committee in SABRANG 2020.
3. Accompanied Students of in Lab Visit of Biochemistry (H) II and IIIrd year students to RCB Open Day in Regional centre for Biotechnology, Faridabad on 16th October, 2019.

Department: Botany

One Week Summer Training Programme in Plant Systematics

Department of Botany, Deshbandhu College organized a 'One Week Summer Training Programme in Plant Systematics' in collaboration with ICAR-NBPGR Pusa, New Delhi and BGIR, Noida from 31 May, 2019 to 06 June, 2019. Dr. Roshni Rajamohan was the coordinator of the programme. More than 25 participants including, under graduate students, post graduate students and research scholars from University of Delhi participated in the programme. The key topics of the programme were; Describing a New Species, Key Preparation, Field Activities, Herbarium Techniques, Molecular Markers in Plant Systematics, Tree Construction using Mesquite, Molecular Systematics, Chemotaxonomy, DNA Barcoding, etc. Students thoroughly enjoyed, learned various aspects of plant taxonomy and also come to know about the scope and future in plant taxonomy. The programme ended by organizing a valedictory function on 06 June, 2019. Prof. Arun Kumar Pandey (Vice Chancellor, Mansarovar Global University, Bhopal, M.P.) was the chief guest on the occasion. Prof. Pandey briefed us about the challenges, scope and future in plant systematics and also talked about the relevance of the programme in current scenario. Tree plantation in Botanical garden was also done on the occasion by Prof Pandey along with Dr. Rajiv Aggarwal, Principal Deshbandhu College. The programme was ended with the distribution of certificates to the participants by the chief guest.

Botanical Excursion to Chopta, Uttarakhand

Department of Botany, Deshbandhu College organized a Botanical excursion to Chopta, Uttarakhand during 12 -16 September, 2019. Students of B. Sc. (Hons) Botany and B. Sc. (Prog) Life Sciences along with some faculty members and Lab-staff participated in the excursion. On the way to Chopta we visited HNB Garhwal Central University, Srinagar. Where, the students were addressed by Prof. B.P. Chamola and other scientists, visited herbal garden and other fields as well. By evening, after a very long and tiring but enjoyable journey we reached Chopta. Next day morning we moved to our next destination, Tung Nath temple (situated at elevation of 4000m asl) by tracking through a 5 km mountainous track. The track was beautiful lush green mountainous slop covered with trees and very rich in flora. Students observed, learned and discussed about the flora including various species of Fungi, Bryophytes, Gymnosperms and Angiosperms. They also learned to identify, collect and preserve different specimens of these groups. By 6 PM we came back to our tent-houses located on open green field, surrounded by thick forest. The cool healthy fresh air, clear blue sky and attractive surroundings gave a divine peace and calmness to mind and made us fresh. Next morning after having breakfast we packed up and boarded the buses for back journey to Delhi. On the way we also visited Devprayag and Rishikesh. Altogether, the visit was an amalgamation of fun, education and an inspiration for all.

Dragonfly Campus Count-2019

Bombay Natural History Society's Conservation Education Centre (BNHS-CEC)- Delhi, as a part of the Delhi Dragonfly month-2019 celebration, selected Deshbandhu College campus as one of the survey site for the Delhi dragonfly count. On 13th September, 2019, Dr. Ishteyak Ahemad, Education officer (BNHS-CEC) at Asola Bhatti Wildlife Sanctuary, Delhi along with Department of Botany, Deshbandhu College conducted Dragonfly count/survey in our college campus. During the event, Dr. Ahemad presented an informative documentary and delivered a talk; highlighting the importance and conservation of Dragonflies, followed by discussion. More than 80 students and teachers from various Departments participated in the event. The session was followed by counting/survey of Dragonflies in Deshbandhu College campus. During the survey it was found that Deshbandhu College campus harbours a good number of Dragonflies, among the other college campuses of Delhi University, indicating relatively healthy flora/environment of our college campus. The take home message of the talk was the importance and significance of Dragonflies in biological control of mosquito population.

Butterfly Count in Deshbandhu College Campus (2019)

As a part of the Butterfly Census program under the Bombay Natural History Society Conservation Education Centre (BNHS-CEC)- Delhi, Deshbandhu College campus was selected as one of the survey site for the Delhi Butterfly Census. On 16th September, 2019 students of B.Sc. (Hons) Botany and Life Sciences along with faculty members conducted butterfly survey in Deshbandhu College campus under the keen guidance of Dr. Ishtiyak Ahmad, Education Officer, BNHS, CEC-Delhi. Before the survey, Dr. Ahemad presented an informative documentary about the butterflies and thereafter delivered a talk; highlighting the key features, importance, threats and conservation needs of butterflies. The talk was well appreciated by all and discussed in length. More than 100 students and teachers from various Departments participated in the event. During the butterfly census, a good number of butterflies were recorded mainly on *Ixora*, Aak (*Calotropis*), *Bryophyllum*, *Cassia fistula* (Amaltas), *Aeglemarmelos* (Bael), *Murraya koenigii* (Curry-leaf plant), Lemon tree, Neem etc. and the number of butterflies recorded was 25% higher than the last years survey. It was observed that Deshbandhu College campus harbours a good number of butterflies among the other college campuses of Delhi University, indicating a reasonably good flora/environment of our college campus. Students were inspired to grow more such plants in the campus and near-by areas to attract more and more of butterflies.

Inaugural function of Botanical Society

The botanical society of Deshbandhu College organized its Inaugral function on 18th September, 2019. This event is held every year as a way of announcing the commencement of the new session of the society. The event began with the lighting of the lamp accompanied by the singing of Saraswati Vandana by fellow students. Professor M.V. Rajam (Department of Genetics, University of Delhi, South Campus) was the chief guest on the occasion. Dr. Anju Chhibbar, advisor Botanical society along with Dr. Rajender Kumar (Teacher-in-Charge) and Dr. Dharmendra K. Mallick felicitated the chief guest. Prof. Rajam gave a talk on- "*Transgenic and RNA silencing based strategies for crop protection against pathogens and insect pests*" wherein he talked about how RNA interference is a potent method using only a

few double-stranded RNA (dsRNA) molecules of a particular gene to silence its expression, which has made it one of the hottest topics in molecular biology. The lecture was followed by a series of questions asked by the students as well as the teachers. One of the main attractions of the event was the introduction of newly elected office bearers and members of the botanical society for the session 2019-20. Vidisha Saxena of B.Sc. (H) Botany III-year was announced as the President, Ashish Kashyap B.Sc. (P) Life sciences III-year (Vice-president), Shrishti Gupta. B.Sc. (H) Botany II-year (Secretary) and Mohd. Abdulla B.Sc. (P) Life Sciences II-year (Treasurer) of the botanical society. The event was concluded by a thanking note by the president of the society.

Botanical Fest “Sanjeevani”

“Sanjeevani” – a botanical fest was presented by Botanical Society, Department of Botany, Deshbandhu College on January 31st, 2020. The day started with student based activities and competitions like Extempore, Hawk eye, Vigyan shabd-kosh, Leaf painting, Shutterbug and Mock CID. Students from different colleges of Delhi University and Departments of Deshbandhu College participated in the activities. The events were judged by the teachers of Deshbandhu College as well as from other colleges of Delhi University. Winners got attractive cash prizes and certificates of appreciation. The chief guest of the event Dr. Anand Sharma (DDGM, Indian Meteorological Department, Government of India, Mausam Bhawan), an alumnus of Deshbandhu College graced the occasion by delivering a talk. He interacted with the students and explained the basic principles of weather forecasting, highlighted the current scenario of world with reference to climate change and also threw light on the advancements in Indian Technology in weather forecast since last two decades. The occasion was also graced by the presence of teachers from other departments of the college. At the end, prizes were given by the chief guest to all the winners of the events.

A Botanical Trip to Yamuna Biodiversity Park

A trip was organized by Botanical society to Yamuna Biodiversity Park, a natural conservation site for specific group of endangered plants, on February 15th, 2020. A group of 70 students from B.Sc. (H) Botany and B.Sc. (P) Life Science were accompanied by the faculty members from Department of Botany. The Yamuna Biodiversity Park is spread over an area of approximately 457 acres near Wazirabad village on the flat alluvial plains of the Yamuna. It has become a home for biologically rich wetlands, grassland communities, a wide variety of fruit yielding species and an abundance of medicinal herbs. The Park also comprises a native flora and fauna which used to exist a 100 years ago and then became extinct locally. Ms. Preeti and Mr. Dinesh (the guides) divided the students in two groups and explained about the park and vegetation types in great detail. They took them to the visitor zone of the park and focused on the habitat specific genera of the park. The main attractions were migratory birds, and the wetland ecosystem. Their interactions with the ecosystem were well explained. They also got a chance to visit a gene bank with varieties of vegetables, poly-houses and greenhouses maintained for the hardening of certain plant species. They also had a glimpse of the videos depicting the transformation of deserted Yamuna bank to well established biodiversity park. Students had langar at Nanaksar Gurudwara, Wazirabad, visited the fields of mustard, wheat and pulses spread over approx. 10 hectares of land belonging to Gurudwara and returned back in the evening. It was a memorable trip full of fun, energy and enthusiasm.

A Field Visit to Botanical Garden of Indian Republic (BGIR), Noida

A field visit to Botanical garden of Indian Republic (BGIR), Noida, was organized on February 4th, 2020 as part of curriculum in Plant systematics paper. The students of B.Sc. (H) Botany II-Year accompanied by faculty members visited different sections of the garden related to medicinal plants, cacti and succulents, ferns and Pteridophytes, aquatic plants, etc. Students also visited the Herbarium situated in the garden and learnt the techniques of preparation on herbarium specimens. Students interacted with Dr Ansari, Dr Manish Khandpal and Dr Mayank Dwivedi, and gained knowledge about their areas of research. It was a knowledgeable and learning experience for them

Academic Achievements of Faculty

Dr. Sarla Gupta

- Poster Presentation in National Conference on “**Neglected and Underutilized Crop Species for Food, Nutrition, Energy and Environment**” held at National Institute of Plant Genome Research, New Delhi on August 2, 2019. Title: “*Grass pea (Lathyrus sativus L.): An excellent example of underutilized orphan crop suitable for sustainable agriculture and food security*”. Madhu Rani (Presenter), Sarla Gupta, Roshni Rajamohan and D.K. Mallick.
- Poster Presentation in National Conference on “**Neglected and Underutilized Crop Species for Food, Nutrition, Energy and Environment**” held at National Institute of Plant Genome Research, New Delhi on August 2, 2019. Title: “*Finger millet (Elusine coracana L.): A climate resilient underutilized crop with excellent nutraceuticals for achieving food and nutrition security*”. Rubina Chongthan (Presenter), Sarla Gupta, Roshni Rajamohan and D.K. Mallick.
- Poster Presentation in National Conference on “**Biotechnology for Sustainable Agriculture-BIOTIKOS 2019**” held at TERI School of Advanced Studies, New Delhi on April 17, 2019. Title: “*Grass pea (Lathyrus odoratus L.) : One of the most climate resilient orphan legume crops*”. D. K. Mallick, Sarla Gupta, Roshni Rajamohan, Mukesh Kandpal (Presenter), Manpuran Swami and Utarsh Upadhyay.

- Worked as an organizing committee member in the **National Conference on Insect- Plant Biology in 21st Century** organized by Department of Zoology, Deshbandhu college, University of Delhi, November 17-21, 2019.
- Participated in the **National Conference on “Pharmacovigilance: Advancements in the safe drug development”** organized by Department of Biochemistry, Deshbandhu college, University of Delhi, January 16-17, 2020.
- Worked as an organizing committee member in an **International Conference on “Natural Products and Human Health - 2020”** organized by Department of Zoology, Deshbandhu college, University of Delhi, February 27-29, 2020.

Dr. Bela Bhatia

- Delivered a talk on “Pictorial Journey of Flowering Trees in Deshbandhu College” In Awareness Programme on “Youth Towards Green Sustainability” jointly organized by VYK, IVN and Deshbandhu College on 19th August, 2019.
- Participated in one day workshop on “Foldscope : An Educational and Research Tool” organized by School of Sciences, IGNOU, New Delhi in collaboration with Department of Biotechnology, Govt. of India on 23rd August, 2019.
- Member organizing committee for National Conference on “Insect-Plant Biology in 21st Century” organized by Department of Zoology, Deshbandhu College on November 4-5, 2019.

Dr. Roshni Rajamohan Mathur

- Roshni Rajamohan Mathur and Arun K. Pandey, 2020, *Development and Structure of Phytomelanin in Coreopsidae (Asteraceae)*. **The International Journal of Plant Reproductive Biology** 12(1), p84-94.
- UGC-HRDC Sponsored *2-weeks Refresher Course in Life Sciences* organized by the **CPDHE (UGC-HRDC), University of Delhi**, from June 28- July 11, 2019.
- Organized *One-week summer-training programme in Techniques in Plant Systematics* as Convener, at Deshbandhu College in collaboration with NBPGR & BGIR, **31 March- 06 June, 2019**.
- Participated in the *“Workshop on Molecular Systematics: Concepts, Methods and Applications”* organized by **Mansarovar Global University, Bhopal** from 5-7 September, 2019
- Participated in the one day *“National Symposium on Bioimaging”* organized by Dyal Singh College (DU), New Delhi on 19 February, 2020.
- Participated as Member, Organizing Committee in conducting the **International Conference on “Natural Products and Human Health-2020”** organized by **Deshbandhu College (DU), New Delhi from 27-29, February, 2020**.
- Participated in National Conference on *“Biotechnology for Sustainable Agriculture- BIOTIKOS 2019”* organized by **TERI School of Advanced Studies, New Delhi on 17 April, 2019**.
- Participated in the First National Conference on *“Neglected and Underutilized Crop Species for food, Nutrition, Energy and Environment”* organized by **National Institute of Plant Genome Research, New Delhi on 2 August, 2019**.
- Participated as Member, Organizing Committee in conducting the National Conference on *“Insect-Plant Biology in 21st Century”* organized by **Deshbandhu College (DU), New Delhi from 4 -5 November, 2019**.
- Participated as Resource Person and Organizing Committee member in conducting the *“INSPIRE Internship Programme-2019”* organized by **Deshbandhu College, (DU) New Delhi from 17-21 December, 2019**.
- Participated as Member, Organizing Committee in conducting the National Conference on *“Pharmacovigilance: Advancements in the safe Drug Development”* organized by **Deshbandhu College (DU), New Delhi from 16-17, January, 2020**.
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Dr. Dharmendra K. Mallick

- Poster Presentation in National Conference on **“Neglected and Underutilized Crop Species for Food, Nutrition, Energy and Environment”** held at National Institute of Plant Genome Research, New Delhi on August 2, 2019.
Title: *“Grass pea (Lathyrus sativus L.): An excellent example of underutilized orphan crop suitable for sustainable agriculture and food security”*. Madhu Rani (Presenter), Sarla Gupta, Roshni Rajamohan and D.K. Mallick.
- Poster Presentation in National Conference on **“Neglected and Underutilized Crop Species for Food, Nutrition, Energy and Environment”** held at National Institute of Plant Genome Research, New Delhi on August 2, 2019.
Title: *“Finger millet (Elusine coracana L.): A climate resilient underutilized crop with excellent nutraceuticals for achieving food and nutrition security*. Rubina Chongthan (Presenter), Sarla Gupta, Roshni Rajamohan and D.K. Mallick.
- Poster Presentation in National Conference on **“Biotechnology for Sustainable Agriculture-BIOTIKOS 2019”** held at TERI School of Advanced Studies, New Delhi on April 17, 2019. Title: *“Grass pea (Lathyrus odoratus L.) : One of the most climate resilient orphan legume crops”*. D. K. Mallick, Sarla Gupta, Roshni Rajamohan, Mukesh Kandpal (Presenter), Manpuran Swami and Utarsh Upadhyay.

- Worked as an organizing committee member in the **National Conference on Insect- Plant Biology in 21st Century** organized by Department of Zoology, Deshbandhu college, University of Delhi, November 17-21, 2019.
- Worked as a resource person in the **“INSPIRE Internship Program 2019”**, organized by Deshbandhu college, University of Delhi, December 17-21, 2019.
- Participated in the **National Conference on “Pharmacovigilance: Advancements in the safe drug development”** organized by Department of Biochemistry, Deshbandhu college, University of Delhi, January 16-17, 2020.
- Worked as an organizing committee member in an **International Conference on “Natural Products and Human Health - 2020”** organized by Department of Zoology, Deshbandhu college, University of Delhi, February 27-29, 2020.

Dr. Rajender Kumar Sharma

- Attended two weeks refresher course in Life Sciences and Biotechnology at UGC-HRDC, Jawaharlal Nehru University, New Delhi from 19-30 August, 2019.
- Worked as an organizing member and as a resource person in the **“INSPIRE Internship Programme 2019”**, organized by Deshbandhu college, University of Delhi, December 17-21, 2019.
- Worked as an organizing member in the **National Conference on Insect-Plant Biology in 21st Century** organized by Department of Zoology, Deshbandhu College, University of Delhi, November 17-21, 2019.
- Participated in an **International Conference on “Natural Products and Human Health - 2020”** organized by Department of Zoology, Deshbandhu college, University of Delhi, February 27-29, 2020.

Dr. Aparna Nautiyal

- Presented a poster titled on “ Sacred Plants as spiritual healers in life" in “International Seminar on Science, Environmental & Spirituality” held on 13th Sep,2019 organised by Eco Club, Shivaji College, University of Delhi.
- Presented a poster entitled “ Exploring the amazing world of Mycorrhiza- A way towards sustainable agriculture" held in “International Seminar on Science, Environmental & Spirituality” held on 13th Sep,2019 organised by Eco Club, Shivaji College, University of Delhi.
- Presented a poster entitled “Role of IPR in mitigating climate change for a sustainable environment" in National Conference on “Intellectual property Rights: Challenges & Prospects" held on 22nd – 23rd October, 2019 organised by Maitreyi College, South Campus, University of Delhi.

Dr. Kumar Shantanu

- Successfully completed **The fourth ‘Botanical Nomenclature Course’** conducted by Botanical Survey of India at Shillong from **27th to 31st January 2020**
- Attended **the XLIII All India Cell Biology Conference, 2019** organized by IISER Mohali from **December 19-21, 2019**
- Successfully completed the workshop on **"Evolving Face of Microscope: from Magnifying Lens to Nanoscope"** organized by Department of Botany, Miranda House, University of Delhi on **11 and 12 December 2019**
- Attended **Faculty workshop on “DNA Barcoding and Metagenomics”** being organized by Department of Botany, Kirori Mal College held from **19th to 20th September, 2019**
- Attended **The first SERB School in Evolutionary Biology** held from **12th to 26th March 2019** at the Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru.
- Attended **7th Annual International Sustainability Conference (SUSCON VII)** at Indian Institute of Management Shillong during **November 29 - December 1, 2018**
- As **Contingent Commander** of Senior Division Cadets of 1Delhi Air Sqn (Flg) NCC in **All India Vayu Sainik Camp** secured **All India rank 2nd** (from **October 24, 2018 to November 4, 2018** at Jodhpur.
- **Conducted a Pedagogy workshop for undergraduate and post graduate science and mathematics teachers from July 31st – August 2nd, 2018**
- Presented a poster entitled **BRYOPHYTES as MEDICINE: A Remedy to Cure** at **International Conference on Advance Research in Life Sciences** organized by SGM College and Shivaji University, Kolhapur (India) from **March 27th to March 28th, 2018**.
- Participated in five days **Faculty Development Program on BIOSSTATISTICS: Theoretical and Practical Aspects** under the aegis of DBT Star college scheme of Department of Biotechnology, Govt. of India from **March 14th to March 18th, 2018** at Deen Dayal Upadhyaya College, University of Delhi.
- Yateesh M. Bahuguna, H. Govindaparyari, Shantanu Suman and P.L. Uniyal 2018. Bryophyte Diversity, Utility and Prospects. In: Plant Diversity of India (Eds A.K. Bhatnagar & Rupam Kapoor), pp 128-179. I.K. International Publishing House Pvt. Ltd., New Delhi.

Dr. Anju K. Chhibbar

- Chhibbar, A., Singh N. and Prajneshu M. (2019) Implications of IPR on global food security. Interdisciplinary National Conference on Intellectual Property Rights: Challenges and Prospects, held on October 22-[23, 2019, organized by Department of Botany, Maitreyi College, University of Delhi.
- **Worked as an Evaluator** in Vidyarthi Vigyan Manthan – 2019 for state level camp (Level-II) at New Delhi organized by VIBHA in association with DBT, NCERT and, Ministry of Human Resource and development.
- Participated in an **International Conference organized by Shaikshik foundation** in association with Deshbandhu College, Delhi University and Dr. Ambedkar International Centre New delhi: Human Rights-National and International Issues and Challenges, February 22-23, 2020.
- Worked as an organizing member and as a resource person in the **“INSPIRE Internship Programme 2019”**, organized by Deshbandhu college, University of Delhi, December 17-21, 2019.
- Worked as an organizing member in the **National Conference on Insect-Plant Biology in 21st Century** organized by Department of Zoology, Deshbandhu College, University of Delhi, November 17-21, 2019.
- Worked as an organizing member in the **National Conference on “Pharmacovigilance: Advancements in the safe drug development”** organized by Department of Biochemistry, Deshbandhu college, University of Delhi, January 16-17, 2020.
- Worked as an organizing member in an **International Conference on “Natural Products and Human Health - 2020”** organized by Department of Zoology, Deshbandhu college, University of Delhi, February 27-29, 2020.

Dr Madhu Rani

- Book- Co-author – Plant Anatomy and Embryology, Vikas Publishing House Pvt. Ltd, New Delhi (resource literature for distant education) ISBN 978-93-5338-714-3
- Research article- Occurrence of Apomixis in *Eleusine coracana*. Flora 265 (2020) Elsevier. Impact factor 1.423
- Poster Presentation in National Conference on **“Neglected and Underutilized Crop Species for Food, Nutrition, Energy and Environment”** held at National Institute of Plant Genome Research, New Delhi on August 2, 2019.

Dr. Sunita Malik

- International Conference attended: Human Rights, National and International Issues and Challenges. 22-23 February, 2020, Dr. Ambedkar International Centre, New Delhi.
- INSPIRE Internship Program, 17-21 December, 2019. Resource person, Deshbandhu College, University of Delhi.

Dr. Sourav Singh Deo

- Worked as an organizing committee member in the **National Conference on Insect- Plant Biology in 21st Century** organized by Department of Zoology, Deshbandhu college, University of Delhi, November 17-21, 2019.
- Worked as a member organizing committee in the **“INSPIRE Internship Program 2019”**, organized by Deshbandhu college, University of Delhi, December 17-21, 2019.
- Participated in the **National Conference on “Pharmacovigilance: Advancements in the safe drug development”** organized by Department of Biochemistry, Deshbandhu college, University of Delhi, January 16-17, 2020.
- Worked as an organizing committee member in an **International Conference on “Natural Products and Human Health - 2020”** organized by Department of Zoology, Deshbandhu college, University of Delhi, February 27-29, 2020.

Ms Anjana Singh

- Participated in the National Conference on “Biotechnology for sustainable Agriculture- BIOTIKOS – 2019” organized by TERI School of Advanced Studies, New Delhi held on April 17, 2019.
- Worked as member of the Organizing Committee in the National Conference on “Insect-Plant Biology in 21st Century” organized by the Department of Zoology, Deshbandhu College, University of Delhi, Delhi held on November 4-5, 2019.
- Participated as a Resource Person in the INSPIRE Programme at Deshbandhu College, University of Delhi, Delhi held from December 17-21, 2019.
- Attended a workshop on Women Healthcare, Hygiene, Gender Sensitivity and Women Empowerment under “Mission AAA”- Awareness, Availability and Affordability of Sanitary Napkins of CSR Research Foundation supported by Bharat Petroleum Corporation Limited (BPCL) in association with Deshbandhu College, University of Delhi, Delhi held on January 8, 2020.
- Worked as an EVALUATOR for State Level Camp (Level-II), Delhi of Vidyarthi Vigyan Manthan- India’s Largest Science Talent Search for New India Using Digital Devices (VVM) 2019-20, organized by Vjnan Bharti (VIBHA) in association with Vigyan Prasar, Department of Science and Technology, Govt. of India and National Council of Educational Research and Training

(NCERT), Ministry of Human Resource Development, Govt. of India at Deshbandhu College, University of Delhi, Delhi held on January 19, 2020.

- Participated as an Organizing Committee member in the National Conference on “Pharmacovigilance: Advancements in the Safe Drug Development” at Deshbandhu College, University of Delhi, Delhi held on January 16- 17, 2020.
- Participated as an Organizing Committee member in the International Conference on “Human Rights- National and International Issues and Challenges” organized by Shaikshik Foundation in association with Deshbandhu College, Delhi University & Dr. Ambedkar International Centre, New Delhi held on February 22-23, 2020.
- Participated as an Organizing Committee member in the International Conference on “Natural Products and Human Health-2020” at Conference Centre, University of Delhi, Delhi held on February 27-29, 2020.
- Presented a poster on ‘Prospects of Nanotechnology in Insect-Pest Management’ in the National Conference on “Insect-Plant Biology in 21st Century” organized by the Department of Zoology, Deshbandhu College, University of Delhi, Delhi held on November 4-5, 2019.

Dr. Rubina Chongtham

- Chongtham, R., & Rani, M. (2020). *Eupatorium birmanicum*: A Medicinal Plant of Ritualistic Importance in the North-East Indian State of Manipur. In A. Singh, P. Singh, & N. Bithel (Eds.), *Advanced Pharmacological Uses of Medicinal Plants and Natural Products* (pp. 286-301). Hershey, PA: IGI Global. doi:10.4018/978-1-7998-2094-9.ch015. ISBN13: 9781799820949, EISBN13: 9781799820956
- Rani, M., Chongtham, R., & Singh, A. (2020). Anti-Ulcer Activities of Medicinal Plants and Natural Products. In A. Singh, P. Singh, & N. Bithel (Eds.), *Advanced Pharmacological Uses of Medicinal Plants and Natural Products* (pp. 114-127). Hershey, PA: IGI Global. doi:10.4018/978-1-7998-2094-9.ch006. ISBN13: 9781799820949, EISBN13: 9781799820956.
- Poster Presentation in National Conference on “**Neglected and Underutilized Crop Species for Food, Nutrition, Energy and Environment**” held at National Institute of Plant Genome Research, New Delhi on August 2, 2019.

Dr. Neha Yadav

- Attended two days National Workshop on “Intellectual Property Rights” held on 22nd – 23rd Aug, 2019 organised by Department of Botany, Deen Dayal Upadhyaya College, University of Delhi.
- Attended “International Seminar on Science, Environmental & Spirituality” held on 13th Sep, 2019 organised by Eco Club, Shivaji College, University of Delhi.
- Presented a poster entitled “Intellectual Property Rights and Protection of Plant Variety and Farmer’s Right” in National Conference on “Intellectual property Rights: Challenges & Prospects” held on 22nd – 23rd October, 2019 organised by Maitreyi College, South Campus, University of Delhi.

Dr. Preeti Rawat

- Webinar On “Effective Parenting during the Lockdown: Addressing Challenges”, 21 April 2020, Bharati college, University of Delhi.
- International Conference on “Human Rights” National and International Challenges. 22-23 Feb 2020. Shaikshik Foundation in association with Deshbandhu College, Delhi University and Dr. Ambedkar International Centre.

Department: Chemistry

Chemical Society of Department of Chemistry “Resonance” under the aegis of DBT star College scheme has organized an inaugural function on 27th September 2019. In this Programme Professor S. M. S. Chauhan has delivered an invited lecture on on the topic of “**Pigments of Life**”. Professor S. M. S. Chauhan, is an Emeritus Professor from Department of Chemistry, University of Delhi. During his talk Professor Chauhan have elaborated the basic chemistry involved in the pigments of life. He discussed about the biosynthesis of tetrapyrrolic compounds including porphyrins, metalloporphyrins etc. followed by their importance in the structure of Chlorophyll. Radical cation of diamagnetic Mg and Zn chlorophyll indicates the generation of radical cation at prosthetic group of Mg Chlorophyll. Degradation of chlorophyll and protoporphyrin IX in different condition have also been discussed. The nitration of selected unmetallated and metallated porphyrin are also discussed during the talk. The overall session was quite interactive and enthusiastic. The talk of the speaker was followed by the various intercollege events for the undergraduate students including **poster making, Chem Charades and talent hunt competition** (criss-cross, crossword, creative writing) . All the event/ competitions of resonance were evaluated by jury members consisting of **Convener (Dr. Deo Nandan Kumar), Co-convener** (Dr. Mahesh Chandra), co-ordinators and co-coordinators of the respective event. **The prize winning creative writing proposals were further announced to be added in the upcoming departmental magazine “Deshrasayan”**. All the competitions and events held during Resonance 2019 were based to enhance the scientific interaction, talent and skills of the participating students.

Department of Chemistry has organized an International seminar on the topic of “**Sovereignty of Nanotechnology in environmental sustainability**”. **Professor Ajay Mishra**, from (Nanotechnology and water sustainability research unit, college of engineering, science and technology), University of South Africa, Johannesburg was the chief guest of this event. His area of interest includes Nanoscience/Nanotechnology, Materials Science; Polymers, Composite/Nanocomposites and water research.

Professor Mishra addressed the current and emerging issues relating to water quality and water scarcity in his talk “**Sovereignty of Nanotechnology in environmental sustainability**”. He has focused on the development of nanotechnology techniques including enhanced membrane materials and adsorbents for the water treatment/ purification and desalination. He enlightened the audience about the synthesis of multifunctional nano-materials, nano-composites, biopolymer and/or petrochemical based biodegradable polymers, polymers based materials/composites, smart materials, CNT and graphene based composite materials and water research. He has discussed about the development of novel nanomaterials as adsorbents, or the removal of metal ions for water purification and understanding the fate of these engineered nanoparticles in the environment. Synthesis, characterization and mechanism of adsorption for Cr (VI) was elaborated using Chitosan modified clay nanocomposites. Being, a natural, widely abundant in nature, having low cost and high adsorption and cation exchange capacity clay can be used as an efficient adsorbate for the removal of metal ions from contaminated water. He has also discussed about the synthetic methodology and application of polypyrrole –Glycerine iron oxide nanocomposites for water remediation and removal of metal ions. He also enlightened the students by discussing about the Ankon water supply treatment process. In the conclusion, the research data shown ensure that polluted water is treated to acceptable levels suitable for its purpose, for example, drinking or any non-potable use, such as industrial, agricultural or groundwater discharge. During his talk he encouraged the student to understand the concept of chemistry involved water treatment and remediation process.

Department of Chemistry has given admission to 32 students in B. Sc. (H) Chemistry and 93 students to B. Sc. Program (Industrial Chemistry) during the session of 2019-2020.

Academic Achievements of Faculty

Name of the Teachers: **Bhawani Shankar**

Books and Journals with ISBN/ISSN numbers only:

- Maity, J.; Srivastava, S.; Rana, R.; **Shankar, B.**; Khanna, N.; Prasad, A. K. “ Biochemical synthesis of coumarin glycosides: A review” *J. Indian Chem. Soc.* **2020**, *97*, 117-134 (ISSN: 00194522).
- Kumar, B.; Maity, J.; Kumar, A.; Khatri, V.; **Shankar, B.**; Prasad, A. K. “Synthesis of novel 3-[(1-glycosyl-1H-1,2,3-triazol-4-yl)-methylamino]ket-2-en-1-ones” *Chem. Heterocycl. Comp.* **2018**, *54*, 362-368 (ISSN: Electronic 1573-8353; Print 0009-3122).

Papers/Poster presentation in seminars/conferences

- Presented a poster in 26th ISCB International Conference (ISCBC-2020) on “*Integrating Chemical, Biological and Pharmaceutical Sciences for Innovations in Health Care*” held at Nirma University, Ahmedabad, India during January, 22-24, 2020.
- Presented a poster in 2nd National Conference on “*Emerging Trends and Future Challenges in Chemical Sciences (ETFC-2020)*” held at Kirori mal college, University of Delhi, Delhi during January 10-11, 2020.
- Presented a poster in 25th ISCB International Conference (ISCBC-2019) on “*Trends in Chemical and Biological Sciences: Impact on Health and Environment*” held at Hotel Golden Tulip, Lucknow during January, 12-14, 2019.

Department: Commerce

Commerce as a stream of education is an important field oriented programme which prepares the students for the industry. The current commerce curriculum has been dynamically designed to suit today's business environment.

We, at Deshbandhu College are fervent believers of developing our students' knowledge, skills, attitude and values through dynamic and interactive methods of teaching and evolve students into highly professional citizens who are capable of shaping their future. Students can get a strong foundation with extensive opportunities for hands-on experience, skilled learning and active interaction with business community. It equips the students to join the corporate world immediately after the course and provides in-depth knowledge to those who wish to pursue higher studies, specialized professional courses such as Management, Chartered Accountancy, Company Secretary Ship, Cost Accounting, Law and many more.

The dedicated and qualified faculty members of the Department provide an education which integrates student's theoretical, practical and technical knowledge and help them to articulate problem solving attitude among them. We always persuade our students to paint their future with colours of success.

In each academic session, a team of members is elected among the students through the election process. This elected team forms the "The Commerce Society-- **COMSOC**".

The Commerce Society “COMSOC” organizes an Annual Festival “Minerva” in every academic year. The Society invites external experts to deliver special lectures at the inaugural session of the festival. Students from our college and other colleges of University of Delhi participate in large numbers. It provides a platform for students to interact, display their talents and develop new skills.

Under the supervision of faculty members, the society organizes several workshops, seminars and talks by eminent speakers to enhance students' knowledge and further increase their learning.

Academic Achievements of Faculty

Name of the Teachers: **Dr. Seema Gupta**

- 1 Co-ordinator of Refresher Course in Business Management, Economics and Commerce in CPDHE from 28th June to 11th July 2019

Name of the Teachers: **Dr. Surabhi Dhingra**

- 1 Participation as Paper Presenter: Presented in brief in the International Conference “Bharatiya Women: Past, Present and Future” held on 23 and 24th February, 2019 held at NDMC Convention Centre, New Delhi.
- 2 Participation as Paper Presenter: Presented a paper in an International Conference “Harmony: Interface of Cosmic, Ethical and Religious Orders” held in Bengaluru (January 9 to 12, 2019).

Department: Computer Science

Education today is incomplete without any knowledge of computers. A skilled student of computer science is best equipped to advance in life. The IT Industry has varied profiles such as application programming, database and network administration, web-designing, e-commerce, multimedia and animation.

A degree in Computer Science can further lead students towards an MCA, M. Sc. or an MBA to improve career prospects. The department has produced quality professionals, holding important positions in the Information Technology industry in India and abroad. The dedicated faculty, besides theoretical teaching, lays special emphasis on problem-solving skills and practical hands-on training. The department is well equipped with two state-of-the-art laboratories with 40 dual boot computers hosting Windows and Linux platforms.

Name of the Teachers: Ms. **Rakhi Saxena**

Publication:

- 1 R Saxena, S Kaur, V Bhatnagar - Physica A: Statistical Mechanics and its Applications, 2019

Major Activities & Achievements

Department: Economics

The Economics Department has conducted following events in the Academic year 2019-20:

1. Seminar on “Inequality, Poverty and Population in India’s Economy” on 30th September, 2019 in collaboration with IQAC by renowned Prof. S. Subramanian (who is a retired Professor from the Madras Institute of Development Studies (MIDS), an elected Fellow of the Human Development and Capabilities Association, and a member of the advisory board of the World Bank’s Commission on Global Poverty).
2. Annual fest of the economics society, ECON’FLIX 20, based on economics incorporated in the widely popular TV shows by NETFLIX, an American media services provider, was successfully organized on 17th February, 2020
3. Educational-cum-fun trip to Manali was organized between 20th and 24th February.

Paper Presentation and Participation in National/ International Seminars, Symposiums, Conferences and Workshops:

1. Dr. Sangita Singh participated in the “Annual Global Alliance for Mass Entrepreneurship” held on 12th December in The Park, New Delhi organised by facebook .
2. Dr. Sangita Singh participated in a conference on “India: Roadmap to a dollar 5 trillion economy” held on 20th December 2019 organised by FICCI.
3. Dr. Sangita Singh participated in the summit on “MSME ECOSYSTEM: Connecting Dots and Bridging gaps” held on 3rd December organised by FICCI.
4. Dr. Savita Singh participated in the proceedings of International Symposium on ‘India and its Diaspora: Cooperation Opportunities for Mutual Development’ held on 11th April 2019 at Jawaharlal Nehru University, New Delhi.
5. Juhi Lohani Harjani participated in International conference on “Business and Entrepreneurship development in a globalised and digitalized era” organised by Academy for Global Business Advancement at IIT Delhi on July 2-4, 2019.

6. Mr. Nadeem Ahmad's research paper titled "Measuring Socio-economic Inequality in Self-Reported Morbidity in India: Decomposition Analysis", has been accepted for publication in a journal "Review of Development and Change" DOI: 10.1177/0972266120916317 (ISSN: 09722661). 1-23. SAGE, 1st March, 2020
7. Mr. Nadeem Ahmad presented the paper: "Socioeconomic Inequality in Catastrophic Health Expenditure among Households in India: Decomposition Analysis" during the Young Scholar Initiative (YSI) ASIA CONVENING held on 12 - 15 August, 2019 in Hanoi, Vietnam
8. Mr. Nadeem Ahmad presented the paper titled "Catastrophic Out-of pocket Health Expenditure and Poverty Nexus among Informal Sector Households in India: The Household Well-being Approach" at 2nd International Conference on An Uncertain World: Growth, Development and Sustainability held at FLAME university, Pune, India.

Academic Achievements of Faculty:

I. A.S. Lamba

- Served as the Teacher-in-Charge for the current academic session.
- Successfully organized Ecofest- ECON'FLIX 20 and educational-cum-fun trip to Manali (mentioned above).

II. Dr.Sangita Singh

- Served as the convener of the Entrepreneurship Cell of Deshbandhu College, Fiontrai.
- Served as the Convenor of Students' Union Advisory Committee, Deshbandhu College.
- Served as a member of Cultural Committee.

III. Dr. Savita Singh

- Participated in the Faculty Development programme on "The Relevance of Artificial Intelligence, Block Chain, Digitisation in Social Science & Contemporary International Relations: Issues and Concerns" from 01st -05th July,2019 at Amity University, Uttar Pradesh.
- As the Convenor of ENACTUS Deshbandhu, organized the screening of the movie, "The Price of Free" at the college auditorium on 28th August, 2019 in collaboration with Kailash Satyarthi Children's Foundation and IQAC.
- Served as a Member of Library Committee (Arts), Deshbandhu College.
- Served as a Member of Prospectus Committee, Deshbandhu College.

IV. Dr.Jitender Kumar

- Served as a member of the Entrepreneurship Cell of Deshbandhu College, Fiontrai.
- Served as a member of Students' Union Advisory Committee, Deshbandhu College.

V. Dr. Neha Jain

- Served as a member of Proctorial Committee, Deshbandhu College.

VI. Shreya Malhotra

- Completed and Received M. Phil. degree in May 2019 from CITD, SIS, Jawaharlal Nehru University. Dissertation Title : Family law and Violence

Department: English

The English Department offers an amalgamation of literary and cultural forms through the study of English texts from the British Isles along with works outside the canon such as African, Australian, American, Ancient Greek, Indian, etc. The course involves a thorough study of the forms of literature like drama, poetry, prose, short stories, etc. coupled with genres such as Autobiography, Travel-Writing, Essays, Science Fiction, Films, etc.

Name of the Teachers: **Mr. Krishnan Unni P.**

Publication:

Traumatic Spaces and Unmapped Geographies in Ghada Karmi's The Return in English Studies in India. Department of English, University of Kashmir. Vol.27, January 2019. [ISBN: 0975-6574]. Pp.41-54.

Conference Organization/Presentations:

1. Invited Guest Speaker at Loyola College, Chennai on Protest Writings on January 21, 2019
2. International Conference on Posthumanism in University college, Thiruvananthapuram , Keralam on November 19, 2019.
3. Invited Speaker at Madras University, Department of English on Trajectories of Contemporary Protests and Literature on January 22, 2019.
4. Two lectures in the Refresher course organized by Malayalam Department of Calicut University on New Historicism: Novel in History and History of the Novel, on January 28, 2019.
5. Keynote address on Body, Text and Performance in the one day national conference organized by Baselius College, Kottayam on January 30, 2019.

6. Invited speaker at B.C.M. College, Kottayam on January 30, 2019 on the topic From Postmodernism to Posthumanism
7. Keynote address on Human Rights and Literature at Govt. College, Manimalakunnu, Kottayam on January 31, 2019.
8. Invited special lecture at Shyamlal College, Delhi University on March 12, 2019 on Discourses on the ' Fantastic': Fantasy in Literature and Arts.
9. Invited special lecture at M.G. College, Thiruvananthapuram on " Your World is not Their World":The Politics and Ethics of Fantasy Narratives on July 4, 2019.
10. Keynote address at NSS College, Karamana, Thiruvananthapuram on July 7, 2019 in the national seminar on Postmodernism: Theories and Derivatives
11. Invited speaker at Mahatma Gandhi University, Department of English as the concluding speaker of Prof. V.C. Harris Memorial lecture series and talk delivered on Fear as the Aesthetics of Modernism on July 9, 2019.
12. Keynote address at Manarcadu College, Kottayam in the national seminar on Cultural Studies and lecture delivered on Ensemble of Heroes: Disgraceful Outcasts: Toward a New Turn of Cultural Studies on July 10, 2019.
13. Invited speaker at N.S.S. College, Pandalam, Department of English and a talk delivered www.deshbandhucollege.ac.in Page 11 on Power, Identity and Relationships in Postcolonial Narratives on July 11, 2019.
14. Invited speaker at St. Alberts College, Kochi by the Department of English and a lecture delivered on Theory, Text and Performance on July 16, 2019.
15. Keynote lecture delivered at Aligarh Muslim University in Modern Indian Languages Department on The Domain of Malayalam Short Story in the 21st Century as part of the two day national conference on Malayalam Short Story in the 21st Century on September 16, 2019.
16. International Conference on Migration, Slave Narratives and Refugees organized by Malayalam Department, Calicut University, Kerala on February 6, 2020.
17. International conference on Plural Stories: Rewriting and Retelling Stories as Subversive conducted by Indonesian Embassy, at Indian International Centre, New Delhi on

Department: Environmental Studies

We all know that the Earth's capability to cater to the needs of human beings is limited and is day by day exhausting. The recent United Nations IPCC report states that it is "UNEQUIVOCAL" that CLIMATE CHANGE is occurring due to human activities. Realizing the grave consequences in the short and long term, following the philosophy that "Prevention is better than cure" and Mahatma Gandhi's quote that "Earth has enough to fulfill the needs of the human beings but not everyone's greed", the Government of India included the study of Environment and its protection, an integral subject at the graduation level. In accordance, a new and separate "Department of Environmental Studies" has been established at the Deshbandhu College to impart environmental education to the students of the college. The purpose of the Department is not only to impart Environmental education but also make students to inculcate and ponder over the Values, Philosophy, Principles, Ethics of the Environment and the need for Environment protection. The purpose of imparting Environmental education at Deshbandhu College is to endeavor and sensitize the students toward "Nature and its Biotic and Abiotic components" and inspire them to become the "AMBASSADORS and PROTECTORS of the ENVIRONMENT"

Activities of the Department:

The college community planted around 100 Saplings in the institution ground in order to make it a green campus. College community energetic mentally and physically, inspire the students' creativity, provide habitat to a variety of flora and sustaining ground to them. This occasion brought the whole community of the college together in planting the saplings with involvement and exuberance.

Department: Hindi

Academic Achievements of Faculty:

Name of the Teachers: **Bajrang Bihari Tiwari**

Books and Journals with ISBN/ISSN numbers only:

Books

I) Kerala men Samajik Andolan aur Dalit Sahitya,

ISBN : 978-81-944401-0-9

Publisher : Navarun, Vasundhara, Ghaziabad

First edition- 2020

II) Pour une poignee de ciel : Poemes au nom des femmes dalit

ISBN : 978-2-36229-274-3

(Translation of my co-edited book 'Yathasthiti se Takrate hue : Dalit Stree Jeewan se judi Kavitayen')

Publisher : Editions Bruno Doucey, Cour d'Alsace-Lorraine 67, rue de Reuilly 75012 Paris

First edition : 2020

Publication of papers/ articles

I) 'Dalit Kavyandolan : Nyay ka Swar'

Ajkal, January-February 2020

ISSN : 0971-8478

Publication Division, CGO Complex, Lodhi Road, New Delhi

II) 'Sampradayikta ka Prashna aur Dalit Stree Kavita'

Hans, November 2019

ISSN : 2454-4450

Akshar Prakashan Pvt. Ltd., Dariyaganj, New Delhi

Papers presentation in seminars/conferences

'Aj ke Sankat aur Hindi Kahani'

Paper presented in a National Seminar on 'Samkaleen Hindi Kahani' organized by Rajya Karmchari Sahitya Sansthan, U.P. Lucknow on 15.2.2020

'Sant Kaviyon ka Bhasha Chintan'

Paper presented in a National Seminar on 'Madhyakaleen Sant Sahitya aur Dadu Vani ki Prasangikta' organized by Hindi Vibhag, Rajasthan Vishwavidyalay, Jaipur, 6-7 February 2020.

'Bhakti Kavya men Prem aur Parivar'

Lecture delivered on 7.1. 2020 in a Refresher Course on 'Hindi Sahitya aur Sanskriti' (6-18 January, 2020) organized by UGC-HRDC, JNU, New Delhi.

'Dalit Atmkatha par Vichar'

Lecture delivered on 5.11.2019 in a Refresher Course on 'Contemporary Indian Literature : Trends and Practices' (1-14 Nov.2019) organized by UGC-HRDC, Doctor Harisingh Gour Vishwavidyalaya Sagar

Name : Dr. Prem Prakash Sharma

Published Paper/Article :

' Sant Kavya mai Guru Nanak Dev Ka Sthan'

Journal Name: IJISSHR, Volume-VI, Issue:IV, October- December 2019, ISSN : 2349-1 876 (print)

Special Issue for P.G.D.A.V.college (Eve)d.u., CSIRS ,Lucknow

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Paper presentation in Seminars/Conference:

' Sant Kavya mai Guru Nanak Dev Ka Sthan'

Paper presented international conference' Guru Nank Dev: Philosophical Thoughts And Values'

Organized by P.G.D.A.V.college (Eve).D.U, Dak. Foundation , 1 8-1 9 October 201 9

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Participated - in a International Conference' Human Rights national and international issues andchallenges' 22-23 February 2020

Organized by Shaikshik foundation, Deshbandhu College du &Dr. Ambedkar International Center New Delhi.

Name of the Teacher: Dr. Rani Kumari

Publication of paper's/article's with ISBN/ ISSN numbers only.

1. Visthapan aur palayan se jujhti aadiwasi stri.

Book Name: Aadiwasi sahitya ke stri path.

Editor: Dr. Sneha Lata Negi.

Publisher: Vikalp publication,Soniya Vihar, Delhi- 110090

First edition: 2020

ISBN: 978-93-82695-49-3

Page No: 69-74

2. Publication of poem

Society Me Pahla Din

Yuddhratt Aam Aadmi Magazine.

Poem Issue

Editor: Ramnika Gupta.

Issue: January- March 2019.

ISSN: 2320-0359

Page No: 57

3. Publication of two short story

(3.1) Diye bujhne wale hain.

(3.2) Ijjat

Yuddhratt aam Aadmi magazine.

Story Issue

Editor: Ramnika Gupta.

Issue: April- June 2019.

ISSN: 2320-0359

Page No: 76-77

Department: History

History encompasses a very dynamic range of study i.e. past, present and future. It analyses the present in the light of the past with a view to the future. The study of History provides an opportunity to know the complexities of the present with greater sensitivity. This, in turn, shapes the mind of the students for broader and better understanding of the world around them. History not only covers the biological evolution of mankind from about 5 million years ago till date, but also covers the cultural evolution in terms of evolution of architecture, painting, sculpture, music, dance, drama, human relations within community and outside. Besides, it covers inter alia state formations, nation building, colonial struggles, freedom movements, world wars, globalization, etc, both in the context of India and the world. Students get the opportunity to have a career in various fields viz, Teaching, Publishing, Administrative Services, Archaeology, Mass Media, and Travel and Tourism along with Journalism.

Departmental Annual Fest :- PURVAVLOKAN 2019

Department: Mathematics

The Department of Mathematics & IQAC organized an open session on “**Career Counselling**” under “**KSHITIJ**” **Mathematics Lecture Series** on Tuesday February 18, 2020. The speaker of the session was **Sudhanshu Gaur**, Head, Quality Engineering, Earnest, California, USA.

The Department of Mathematics organized a **Mathematics Educational Trip to McLeod Ganj and Dharamshala in Himachal Pradesh** on February 27 – March 02, 2020. Around 50 students from the Department participated in the trip and gained knowledge and exposure to the nature and culture.

Department: Physical Education and Sports Sciences

The Academic Session 2019-20 was set apart as the time of accomplishment and a high number of prizes for Deshbandhu College (DBC). The sports students of Deshbandhu College has crossed an amazing benchmark of winning more than 100 medals in various sports and games.

The dedicated services of Deshbandhu College were recognized wherein the college received the ‘**DR. P.M. Joseph National Excellency Award**’ for the best department in India to promote one specific game and sports (Archery).The **Archery team of Deshbandhu College** has received **385 awards** in the last 5 years.

Mr. Milan has represented India and won Silver Medal at International-50th Grand Prix Liberations Pilsen

Mr. Milan has represented India and won Bronze Medal in International-Grand Prix Novi sad International Championship

The University of Delhi has invited Dr. Anjum Padyal, Head of Department to lead the contingent of more than 700 students for Mass Aerobic Fitness on the launch of the Fit India Movement by Hon. Prime minister on 29th August 2019 to celebrate National Sports Day.

The students of the yoga team and the aerobic team were deputed to conduct a daily session for IPS officers and 300 officials at the National Crime Bureau, Mahipalpur under the guidance of Dr. Anjum Padyal.

The Department of Physical Education and Sports Sciences of Deshbandhu College organized various seminars and workshop to promote sports and physical education, throughout the year, like:

1. Women's day celebration, March 2019

Chief Guests: Aishwarya Bhati (Advocate, SC)
Pragya Ghildial (INT. Para Athlete)
Dr. Sunita Godara (INT Marathon Runner)
Dr. Meenakshi Pahuja (INT Swimmer)

2. Two days of National workshop on Applied Psychology and Sports Psychology, April 7th, 2019

Chief Guest: Lt Gen Rajiv Bhalla and Dr. Sunil Dabas
Special Guest: Siddhartha Upadhyay and RJ Akriti

3. International Yoga Day, June 21st, 2019

4. National Sports Day August 29, 2019

5. Yoga Workshop by Abha Gaur on 20 Fitness Tips, 20 January 2020

6. Health check-up camp by Venkateshwar Hospital, Feb 2020

7. Dental health checkup by Amity University

8. Dental health checkup by Amity University

9. One day workshop on Sports Injuries by Dr. Mohd.Suhail and Dr. Swati M Khanna, 24th August 2019

The students of Deshbandhu College represented the college at 17 different sports like Aerobics, Archery, Boxing, Chess, Cricket, Football, Karate, Kabaddi, Kick- Boxing, Shooting, Swimming, Table Tennis, Taekwondo, Volleyball, Weightlifting, Wrestling, yoga.

They participated at different levels like

International Championship
All India Inter-University (AIU)
Delhi University Inter College (DUIC)
National and State Level.
District and Zonal.

ACHIEVEMENTS:

International

Aerobics: International Combat Games (Participation)
Shooting: Grand Prix Novi sad International Championship (**Bronze**)
50th Grand Prix Liberations Pilsen (**Silver**)

National

3 Gold (Yoga)
1 Silver (Shooting)
4 Bronze (1 Yoga, 3 Boxing)
1 qualification, 4th rank, and 5th rank in Shooting.
1 Participation (Aerobics)

State

17 Gold (5 Weightlifting, 5 Taekwondo, 5 Archery, 1 Kick Boxing and 1 Shooting)
11 Silvers (2 Weightlifting, 2 Archery, 2 Yoga, 1 Karate, 1 Taekwondo, 1 Boxing, 1 Swimming, 1 Shooting)
7 Bronze (5 Archery, 1 Taekwondo, 1 Boxing)
4th Rank (Table Tennis)
9 Participations (7 Yoga, 1 Taekwondo, 1 Shooting)

All India Inter-University (AIU)

1 Bronze (Shooting)
5 Participations (3 Weightlifting, 2 Shooting)

Delhi University Inter College (DUIC)

4 Gold (3 Weightlifting, 1 Boxing)
8 Silver (3 Weightlifting, 3 Archery, 1 Boxing, 1 Wrestling)
7 Bronze (4 Weightlifting, 2 Boxing, 1 Taekwondo)
14 Participations (9 Taekwondo, 2 Shooting, 1 Cricket, 1 Volleyball, 1 Weightlifting)

Name of the Teachers: **Dr. Anjum Padyal**

BOOKS

1. Anjum Padyal (2019), Yoga and Sports Management, Adhyan Publications (India), ISBN 978-93-83848-57-7.
2. Anjum Padyal (2019), Encyclopedia for Gym Trainers, Adhyan Publications (India), ISBN 978-93-838644-69-3

RESEARCH PAPER Presentation in International Conference

1. Anjum (2019), Yoga and meditation: Natural Way for Weight and Stress management, International Conference on natural Products and Human Health- 2020, Deshbandhu College, university of Delhi, Feb 2020.

Resource Person

1. Health Psychology and Resolution on Longevity in the workshop of Ergonomics at Aerospace by GD Goenka University, Gurugram.
2. Five days Aerobic Workshop for BPEd and MPED students of Lovely Professional University, Punjab

Awards

1. Sir PM Joseph Award for Department of Physical Education and Sports Sciences for promoting one sport exclusively, Archery
2. National Women Excellence Award for the Exemplary work in the field of Sports.

Name of the Teachers: **Dr. Rajender Lal**

BOOK - 01

1. Rajender Lal (2019), **Sports Journalism**, Friends Publications (India), ISBN 978-93-88457-31-6.

RESEARCH PAPERS/ ARTICLES IN JOURNALS (2)

1. Alka Harneja & Rajender Lal (2019), Upliftment of Indian Sports through Corporate Social Responsibility. Indian Journal of Physical Education Sports Medicine and Exercise Science (Online), LNIPE Gwalior. ISSN: 0976-1101: 32-35.
2. Anju Luthra, Rajender Lal and Dhananjay Shaw (2019), Morphology of Indian Female Athletes of Different Track and Field Events. International Journal of Sport and Health Sciences. Vol:14, No:3, 2020.

CHAPTER IN BOOKS/ PROCEEDINGS

1. Rajender Lal, Seema Sharma and Shipra Verma (2019), Contents of Social Media Marketing in Sports. Proceedings of the International Conference on Social Media Marketing Opportunities & Challenges. Jesus and Mary College Chanakyapuri, New Delhi-110021, India. ISBN938384853-7, pp135-141.
2. Rajender Lal, Arti Dhankhar and Munesh Charkravorty (2019), Unifying World through Sports. Proceedings of the UGC sponsored national Conference on Latest trends in Health and Physical Education organized by University College of Medical Sciences (Univ. of Delhi), Published by Khel Sahitya Kendra. ISBN: 978-81-7524-879-3, pp. 251-255.
3. Neelam Vats, Madhvi Pathak Pillai and Rajender Lal (2019), Impact of Preksha Meditation on Academic Anxiety of Female Teenagers. IRC 2019 International Research Conference Proceedings, December 26-27 Vienna, Austria.

DESHBANDHU COLLEGE

S.NO.	NAME	COURSE	GAME/SPORTS	TOURNAMENT	ACHIEVEMENT
1.	Priyanka K. Sonali Shivani S. Neeraj K.	B.ScBiochem.2 nd yr B.ScLifeSci.2 nd yr B.A.Prog 1 st yr B.Sc (IC) 3 rd yr	Aerobics	35th Inception Day National Crime Records Bureau	Participation
2	Milan R. Vikas K. Bhupendra Pooran P. Neeraj K. Keshav C. Arka M. Commander Chittranjan Prashant Gautam M. Sonali Priyanka K. Shivani P. Suman Sarika Sapna Sushma Sakshi Anjali C.		Aerobics/Yoga	International Combat Games	Participation
3	Pranjal Singh (c) ShubhamBishnoi Lakshya Gupta Vikas (v.c) Ankush Aman Rao Himanshu Sachin Jahid Aman Pal Soham Dutta Yogesh Sudhanshu Sagar Narendra		Cricket	Inter College Open Tournament in Gautam Buddha University	Participation Participation
4	Pranjal Singh	B.Sc. Phy.Sci.with chemistry 2 nd yr	Cricket	UP Ranji Trophy Camp	Participation
				UP Under 23 Camp	Participation
				MP Division League	Highest Wicket Taker
				Anmol Cup, Pathankot	Champion
				FS Cup, Noida	Highest Wicket Taker
				Gurugram Premier League	Man of the Match
5	Lakshay Gupta	B.A.Pol.Sci.2 nd yr	Cricket	DDCA Selection	Top 70
				Jharkhand Premier League	Scored Century
				Super Elite Division	Champion
6	DhananjoyM. ShahilQ. ArmaanH. Raman Singh Partha Ajit Pal Singh AnujB. Nikhil Sharma Dindin Shiva Pranav Ashish Thameem Komal Ekka Gogo Thansing	B.A.Pol.Sci. (H)2 nd yr B.A.History(H)3 rd yr B.A.History(H)3 rd yr B.A.History(H)2 nd yr B.A.Pol.Sci. (H)1 st yr B.A.Pol.Sci. (H)1 st yr B.Sc.Phy.Sci.2 nd yr B.A.Maths(H)2 nd yr B.A.History(H)2 nd yr B.A.SKT(H)2 nd yr B.A.Maths(H)1 st yr B.A.Prog 1 st yr B.A.History(H)2 nd yr B.A.Pol.Sci.2 nd yr B.A.History(H)2 nd yr B.A.Pol.Sci.(H)1 st yr	Football	NDIM Spradha	1 st Position
7	Dhananjoy M.	B.A.Pol.Sci.(H)2 nd yr	Football	WB Premier DivisionB	Participation
8	Ajit Pal Singh	B.A.Pol.Sci. (H)1 st yr	Football	Punjab Division	Winner
9	Partha	B.A.Pol.Sci. (H)1 st yr	Football	Assam senior District	Runner Up
10	Rahul Gaurav Vishal Giri	B.Sc (CS) 2 nd yr B.Sc.Phy.sci.2 nd yr B.A.Pol.Sci 3rd yr			

	Keshav Saurabh Chetan Vivek Aman	B.A.Maths(H)1 st yr B.Sc (CS) 1 st yr B.Sc(IC) 1 st yr B.ScChemistry1styr B.ScChemistry1styr	Volleyball	SGTB Khalsa College NCC Open Tournament	Silver
11	Rahul Gaurav VishalGiri Keshav Saurabh Chetan Vivek Aman Rohit Harshvardhan Tushar Vikash Vikash T.	B.Sc (CS) 2nd yr B.Sc.Phy.sci.2nd yr B.A.Pol.Sci 3rd yr B.A.Maths(H)1st yr B.Sc (CS) 1st yr B.Sc (IC) 1st yr B.ScChemistry1styr B.ScChemistry1styr B.A.SKT(H) 2 nd yr B.Sc (CS) 1 st yr B.A. 1 st yr B.Sc (IC) 2 nd yr B.A. SKT (H) 2 nd yr	Volleyball	Inter College	Participation
12	Shalini	B.A. Prog3 rd yr	Weightlifting	All India University	Participation
				Inter College	1 st Position
				Delhi State- Youth Junior	1 st Position
				Delhi State- Youth Senior	1 st Position
13	Dheeraj Kumar	B.A.Hindi (Hons) 3 rd yr	Weightlifting	Inter College	2 nd Position
			Powerlifting	Delhi State Junior	1 st position
14	Sarvesh Kumar Saini	B.A.Hindi(Hons)2 nd yr	Weightlifting	Delhi State Junior	2 nd Position
15	Ravi Yadav	B.A. Prog 2 nd yr	Weightlifting	Inter College	1 st Position
				All India University	Participation
16	Vikas	Pol.Sci.(Hons) 3 rd yr	Weightlifting	Inter College	3 rd Position
17	Rohit Kumar	B.Sc.(IC) 1 st yr	Weightlifting	Inter College	3 rd Position
18	Shahil Madan	B.A.History(Hons) 2 nd yr	Weightlifting	Inter College	2 nd Position
19	Sanjay	B.A. Prog 2 nd yr	Weightlifting	Inter College	3 rd Position
20	Kajal	B.A. Prog 3 rd yr	Weightlifting	Inter College	2 nd Position
				Delhi State	1 st Position
21	Anurag Kumar	B.A. Prog 2 nd yr	Weightlifting	Inter College	3 rd Position
22	Munesh Kumar	B.A.Economics (Hons)	Weightlifting	Inter College	1 st Position
				All India University	Participation
				Delhi State Junior	1 st Position
				Delhi State senior	2 nd Position
23	Radhika	B.A. Hindi (Hons)1 st yr	Wrestling	Inter College	Silver
				ZilaKesari 2020	Gold
				District Mahakumbh	Gold
			Weightlifting	Inter College	Participation
24	Vaibhav Kumar	B.A.Sanskrit(H)1 st yr	Karate	Delhi State	Silver
				Delhi Development Authority	Gold
				North India Zone Karate Championship	Gold
				Kai National KarateChampionship Assam	Participation
25	Shikha	B.Sc. (Zoology) 2 nd yr	Taekwondo	UP State	Gold
				Inter College	Participation
26	Sarita	B.A.Pol. Sci. (Hons) 1 st Yr	Taekwondo	UP State	Silver
				Inter College	Participation
27	Nargis	B.A. Hindi(Hons) 2 nd yr	Taekwondo	Delhi State	Gold
				Inter College	Participation
28	Utsav Kumar	B.A. Prog 2 nd yr	Taekwondo	Bihar State	Gold
				Inter College	Participation
			Kick Boxing	Bihar State	Gold

29	ShubhamSonkar	B.A.Hindi(H)1 st yr	Taekwondo	Delhi State	Bronze
				Inter College	Bronze
30	Gunjan	B.A. English(H) 1 st yr	Taekwondo	Uttrakhand State	Gold
31	Arka Mandal	B.A.History(H)1 st yr	Taekwondo	West Bengal State	Gold
				South Asian Open Taekwondo-Do ITF Championship	Participation
				Inter-Club	Participation
32	AniketJadhav	B.Sc (CS) 2 nd Yr	Taekwondo	Inter College	Participation
33	Vasu Dudeja	B.Sc Maths (Hons) 1 st Yr	Taekwondo	Inter College	Participation
				Inter-Club	Participation
34	Chittranjan Kumar	B.A.Prog 2 nd Yr	Taekwondo	UP State	Participation
				Inter College	Participation
				Inter-Club	Participation
35	Somender Chaudhary	B.A.History(H)2 nd yr	Taekwondo	Inter Club	Participation
36	Aishwarya Nanda	B.Com (Hons)1 st Yr	Taekwondo	Inter College	Participation
37	NishaNegi	B.A Sanskrit (Hons)1 st yr	Taekwondo	Inter College	Participation
38	Aarif	B.A. Prog 3 rd yr	Archery	Delhi State	Team Bronze
				Inter-State	Team Silver
39	Sachin	B.A. Prog 3 rd yr	Archery	Delhi State	Team Bronze
				Inter College	Team Silver
40	Rakesh S. Nayal	B.A. Prog 2 nd yr	Archery	Delhi State	Team Bronze
				Dr. Bharat Ram Annual Sports Meet	1 Gold 1 Bronze
41	SouravBaghel	B.A. Prog. 1 st yr	Archery	Delhi State	Team Bronze
				Inter College	Team Silver
				All India Inter-University	Participation
42	Shivam Kumar	B.A. Prog 1 st yr	Archery	Inter College	Team Silver
43	Archna	B.Sc. Chem. (Hons)	Archery	Dr. Bharat Ram Annual Sports Meet	1 Gold
44	Aanchal	B.A. Prog 3 rd yr	Archery	All India Inter Univerity	Participation
				Khelo India University Games	Participation
45	Neha Buswell	M.A. Pol. Sci. (Hons)	Archery	Dr. Bharat Ram Annual Sports Meet	1 Gold
				Delhi State Team	Team Silver
46	Riya Thakur	B.A. Pol Sci. (H) 1 st yr	Archery	Delhi State	1 Gold 1 Silver 1 Bronze
				Dr. Bharat Ram Annual Sports Meet	1 Silver Team Gold
47	Breena Sharma	B.A.Pol. Sci. (H) 1 st yr	Archery	Delhi State	1 Gold
				Dr. Bharat Ram Annual Sports Meet	1 Gold 1 Silver 1 Bronze
48	Meenakshi	B.A.Pol. Sci. (H) 1 st yr	Archery	Delhi State	3 Gold
				Dr. Bharat Ram Annual Sports Meet	2 Gold
49	Milan Rajawat	B.A. History (H) 1 st yr	Yoga	District Championship	Silver
				State Yoga	Silver
				Nation Yoga Competition	Bronze
				Delhi State	Participation
				ShaheedRajguru College Annual Sports Fest	Participation
50	Ravi	B.A. Economics (H) 2 nd yr	Yoga	6 th open National Yoga Champ.	1 st Rank
				2 nd Grand Master of Yoga	8 th Rank
				1 st Patanjali yoga Championship	1 st Rank

				2 nd Jaipur yoga League 2019	1 st Rank
				1 st National Yoga Championship	1 st Rank
51	Gautam	B.Sc Biochemistry (H) 2 nd yr	Yoga	Assam State	Silver
				National Yoga	Gold
52	Priyanka	B.Sc Biochemistry (H) 2 nd yr	Yoga	Rhythmic Yoga	4 th Rank
				District Yoga	4 th Rank
				Delhi State	Participation
53	ShivaniSaxena	B.A.Prog 1 st yr	Yoga	Rhythmic Yoga	4 th Rank
				Delhi State	Participation
				Hansraj College	Participation
54	Sushma	B.A. Hindi(H) 2 nd yr	Yoga	Gautam Buddha University Yoga	3 rd Rank
				Delhi State	Participation
				District Yoga Championship	4 th Rank
55	Sapna	B.A. Prog 2 nd Yr	Yoga	Gautam Buddha University Yoga	3 rd Rank
				Delhi State	Participation
56	Suman	B.A.Hindi (Hons) 1 st yr	Yoga	District Yoga Championship	4 th Rank
				Delhi State	Participation
57	Sonali	B. Sc Life sci 2 nd yr	Yoga	District Yoga Championship	4 th Rank
				Delhi State	Participation
58	ShivaniPaddar	B.A. Hindi(H) 1 st yr	Yoga	District Yoga Championship	4 th Rank
				Delhi State	Participation
59	Sarika	B.A. Hindi(H)	Yoga	Gautam Buddha University Championship	3 rd Rank
				Delhi State	Participation
60	Neeraj Kumar	B.Sc (IC) 3 rd yr	Yoga	Shaheed Rajguru College Annual Sports Fest	Participation
61	Kajal	B.A Prog 3 rd Yr	Boxing	Delhi State	Silver
				Inter College	Silver
62	Diya	B.Sc (Chem)3 rd Yr	Boxing	Delhi State	Bronze
63	Akshit	B.Sc. (IC)2 nd Yr	Boxing	Inter College	Bronze
64	Ritik	BA Prog 1 st yr	Boxing	Inter College	Gold
65	Deepanshu	B.A Prog 1 st Yr	Boxing	Inter College	Bronze
66	Puneet	B.A Prog 1 st Yr	Boxing	SAI National	Bronze
67	Murli		Boxing	IABF Senior National	Bronze
				Delhi Olympics	Bronze
68	Riya Raghav		Boxing	IABF Senior National	Bronze
69	MauryaHanspal	B.Com (H) 3 rd Yr	Swimming	Delhi State	Silver
70	SauravSuman	B.A.History (H) 1 st Yr	Table Tennis	Bihar State Ranking	4 th Rank
71	PragyaTeotia	B.A.Pol. Sci. (H) 3 rd yr	Shooting	XXIX ALL India G.V. Mavalankar Shooting Championship	Participation
				35 Delhi State	Participation
				39 North Zone	Participation
				Inter College	Participation
				North East Delhi District	Silver
				Purnatva Open Shooting Championship	Bronze
				DDA Shooting Competition	Gold
				Precision Shooting Competition	Participation
72	Ashish Rana	B.A.English (H) 3 rd yr	Shooting	UP State	Gold

				63 rd National	National Qualify
73	Milan	B.A.Pol.sci.(H) 3 rd yr	Shooting	UP State	Silver
				National	4 th Rank 5 th Rank Sliver
				All India Inter-University	Bronze
				International-Grand Prix Novi sad International Championship	Bronze
				International-50 th Grand Prix Liberations Pilsen	Silver
74	Mohd Tahir	B.A.Prog 3 rd yr	Shooting	Delhi State	Qualify
				39 th North Zone	Participation
				Inter College	Participation
				Mavalankar Shooting Championship	Participation
				Manav Rachna Shooting Championship	Participation
				Indian Revenue Match, JaspalRana Shooting Dehradun	Participation
				Shri Krishna Shooting Academy, Hisar Haryana	Participation
75	Ram Sharma Kush Mishra Karan Pravesh Piyush Mishra	B.A.History(H)3 rd yr B.ScPhy.Sci.3 rd yr B.ScPhy.Sci.3 rd yr B.Sc(IC) 1 st yr B.A.Eco(H) 1 st yr	Chess	Festival Of Youth Sports Shri Ram College Of Commerce	Team-2 nd Rank
76	Rahul Piyush Agarwal Karan Kush Mishra Samir Ram Sharma	B.A.Prog 2 nd yr B.A Eco(H) 1 st yr B.ScPhy.Sci.3 rd yr B.ScPhy.Sci.3 rd yr B.Sc (IC) 3 rd yr B.A.History(H)3 rd yr	Chess (Boys)	Inter College	Team -Participation
77	Sakshi Parul Mishra Deepa Kriti Sharma Kirti Usha	B.Sc (IC) 2 nd yr B.ScLife Sci. 2 nd yr B.ScLife Sci. 2 nd yr B.A. Prog 1 st yr	Chess (Girls)	Inter College	Team - Participation

Department: Physics

Physics Department is mandated to nurture high standards of education to our undergraduate students of Honours and Programme. The department has highly experienced and research oriented faculty members who constantly engage in raising the academic standards of the department to accomplish this mandate. Due to the concerted efforts of its faculty members and non-teaching staff the department has been able to establish well equipped Physics experiment Labs such as Solid State Physics Lab, Electronics Lab, Computational Techniques Lab, Numerical Simulation Lab, Communications Lab, Thermal lab, Optics, Opto-electronics and Waves Lab, Electricity and Magnetism Lab and Mechanics lab. The department has developed two new practical labs *i.e.* Advanced Optics Lab including interferometry and spectrophotometry and Nanomaterials Fabrication and Analysis lab in the current session. In order to give a fillip to skill based education the department has also established an Instrumentation Lab where the undergraduate students will be encouraged to tinker with different concepts of Physics to fabricate basic instrumentation for the undergraduate curriculum. The department faculty is taking initiative to fabricate low cost equipments in the lab itself. Two of the experimental set-ups that have been put in place are (a) to determine g value of a freely falling body by digital timing technique and (b) polarization by diffraction method.

The department has also started an ambitious basic research programme aimed at developing a research bent of mind amongst undergraduate students under the aegis of DBT-STAR College Scheme in which the department is one of the five participating departments. Physics department is conducting interdisciplinary research work under the DBT funded STAR college scheme on entitled proposals:

- a) Dielectric measurements of materials using Surface Plasmon Resonance (SPR).

Principle Investigators: Dr. U. P. Tyagi and Dr. Ayushi Paliwal

- b) Magnetic Semiconductor Devices Using hetero-structure thinfilms.
Principle Investigators: Dr. Kakoli Bera and Dr. Monika Sharma
- c) Physical and Biological investigations on Transition metal doped TiO₂Nanostructures: A promising diluted magnetic semiconductor(DMS).
Principle Investigators: Ms. Manju Rani, Dr. Aditya Saxena and Dr. Brijmohan Prajapati
- d) BallMilling:Top-downapproachforthe preparationofmagneticnanomaterials.
Principle Investigators: Mr. Ajay Pratap Singh Gahlot and Dr. Monika Sharma
- e) Optical and electrical dispersion of biomolecules, nanomaterials, thin films and optically anisotropicmaterials.
Principle Investigators: Dr. Aditya Saxena and Dr. Amit Choudhary.

The department organized a One-Day National Seminar on Advances in Nano-Sciences held 21st Oct 2019 for college students under aegis of DBT STAR college scheme. Two eminent scientists and academicians Prof. Bijoy K. Kumar, JNU and Dr. Balaji Birajdar, JNU had delivered lectures entitled “Magnetic Nanostructures for microwave/mm-wave electronics enabling 5G technology and beyond” and “Nanoscale characterization using electron microscopy” respectively. Students got a chance to understand nanoscale characterization techniques such as Scanning Electron Microscopy (SEM) and Transmission Electron Microscopy (TEM). The lectures elaborated about the need for these techniques at nanoscale.

Physics Department was also a partner department in the DST-INSPIRE Internship Program held from the 17th December 2019 to 21st December, 2019 where children from more than 200 schools participated and the department set up experiments in digital electronics on designing of voting machine. The following faculty members actively contributed to the conduct of the said internship program: Dr. U. P. Tyagi, Mr. Ajay Pratap Singh Gahlot, Dr. Aditya Saxena, Dr. Yogesh Kumar, Mr. Rakesh Kumar Meena, Ms. Deepti Goel, Dr. Ayushi Paliwal, Dr. Reeta Singh, Dr. Monika Sharma, Mr. Sanjesh Kumar, Dr. Brijmohan and Dr. Ruchika Joshi. The student members of Physics Society also actively participated in helping these programs such as Yatender Singh (President), Kaushik (Vice President), Ankit Pathak (Secretary), and Arvind Puniya (Joint-Secretary).

The Physics Department was involved in the successful organization of “Vidyarthi Vigyan Mathan State Level Examination” for students from class VI-XII on 19th January, 2020. The following faculty members were involved in the conduct of the said examination: Dr. U. P. Tyagi, Mr. Ajay Pratap Singh Gahlot, Dr. Aditya Saxena, Dr. Amit Choudhary, Dr. Monika Sharma, Ms. Jyoti Kapil, Dr. Vikram Verma, Dr. Brijmohan and Mr. Sanjesh Kumar.

An educational trip under the aegis of Physics Society was organized by the department to ‘Vigyan Samagam’, National Science Centre, New Delhi on 20th February, 2020 to introduce the students to some of the cutting edge and latest developments in the field of research where India is a key partner in the group of countries participating in the seven mega projects. The students got a chance to understand the scientific concepts and technological aspects of these mega projects. These Mega projects were Large Hadron Collider project (CERN), Facility for Antiproton and Ion Research (FAIR), India-based Neutrino Observatory (INO), International Thermonuclear Experimental Reactor (ITER), LASER Interferometer Gravitational Wave Observatories (LIGO)-India project, Square Kilometer Array (SKA) telescopes project and Thirty Meter Telescope (TMT). Students and teachers also attended a lecture over there which was delivered to explain the Gravitational waves and the LIGO project. The following faculty members accompanied the students on this trip: Dr. U. P. Tyagi, Dr. Pankaj Singh, Mr. Ajay Pratap Singh Gahlot, Dr. Aditya Saxena, Dr. Yogesh Kumar, Dr. Amit Choudhary, Mr. Rakesh Kumar Meena, Ms. Deepti Goel, Dr. Ayushi Paliwal, Dr. Reeta Singh, Dr. Monika Sharma, Mr. Sanjesh Kumar, Dr. Vikram Verma, Dr. Brijmohan Prajapati, Ms. Jyoti Kapil, Ms. Priyanka Lamba, Dr. Md Chand Asique,

The following faculty members of the Department were members of the Organizing Committee of International Conference on Human Rights, held on 22-23 February, 2020, organized by Deshbandhu College: Dr. Pankaj Singh, Mr. Ajay Pratap Singh Gahlot, Dr. Aditya Saxena, Dr. Yogesh Kumar, Dr. Amit Choudhary, Mr. Rakesh Kumar Meena, Ms. Deepti Goel, Dr. Ayushi Paliwal, Dr. Reeta Singh, Dr. Monika Sharma, Mr. Sanjesh Kumar, Dr. Vikram Verma, Dr. Brijmohan Prajapati, Ms. Jyoti Kapil, Ms. Priyanka Lamba, Dr. Md Chand Asique, Dr. Raju Kumar, Ms. Priyanka Meena and Ms. Srashti Tomar.

The following faculty members of the Department were members of the Organizing Committee of International Conference on "Natural Products and Human Health", held on 27-29 February, 2020, organized by Deshbandhu College: Dr. Aditya Saxena, Dr. Yogesh Kumar, Dr. Ayushi Paliwal, Dr. Brijmohan, Mr. Sanjesh Kumar, Ms. Jyoti Kapil, Ms. Priyanka Meena and Ms. Srashti Tomar.

Faculty members of the Department have conducted various academic and research activities and have won various honours and distinctions during the session 2019-2020 as per details provided below:

Honours/Distinctions

1. Dr. Pankaj Singh:

- a. **NCC Activities:** Successfully completed ANOs Refresher Course from 09 September to 29 September 2019 at OTA (Office Training Academy) Kamptee, Nagpur and promoted for **Lieutenant Rank**.
- b. Appointed as contingent commander by Delhi Directorate in "All India Nau Sainik Camp" (AINSC-2019) at Visakhapatnam (AP) from 02-13 October 2019, Delhi Directorate stood 8th in all India Ranking.

2. Dr. Aditya Saxena:

- a. Editor: *Journal of Nano Science, Nano Engineering & Applications*, (STM Journals, Noida, India) 2018-2020. eISSN: 2231-1777, ISSN: 2321-5194
- b. Editor: *Omni Science: A Multi-disciplinary Journal*, (STM Journals, Noida, India) 2011-2020, Aditya Saxena. eISSN: 2231-0398, ISSN: 2347-9949
- c. **Coordinator**, Internal Quality Assurance Cell, Deshbandhu College, Delhi University since 23rd January, 2020.
- d. **Member**, Working Group for the revision of the Course entitled Statistical Mechanics Course Code 32221602 in Programme (CBCS) B.Sc.(Hons.) Physics, Delhi University according to UGC's Learning Outcome-Based Curriculum Framework (UGC-LOCF), 2019-20
- e. **Member**, Working Group for the revision of the Course entitled Thermal Physics and Statistical Mechanics Course Code 32225415 in Programme (CBCS) B.Sc.(Hons.) Physics, Delhi University according to UGC's Learning Outcome-Based Curriculum Framework (UGC-LOCF), 2019-20
- f. **Member**, Working Group for the revision of the Course entitled Thermal Physics and Statistical Mechanics Course Code 42224303 in Programme (CBCS) B.Sc. Physical Science, Delhi University according to UGC's Learning Outcome-Based Curriculum Framework (UGC-LOCF), 2019-20
- g. **Resource Person**, Workshop for Development Of Scripts for the Modules of Training Package in Physics for Teachers Teaching at Higher Secondary Stage for dissemination in MOOC's format, DESM, NCERT, 16th-20th March, 2020.
- h. **Resource Person**, Workshop for Development Of Scripts for the Modules of Training Package in Physics for Teachers Teaching at Higher Secondary Stage for dissemination in MOOC's format, DESM, NCERT, 24th-28th February, 2020.
- i. **Resource Person**, Workshop for Development Of Scripts for the Modules of Training Package in Physics for Teachers Teaching at Higher Secondary Stage for dissemination in MOOC's format, DESM, NCERT, 27th-31th January, 2020.
- j. **Resource Person**, Workshop for Development Of Scripts for the Modules of Training Package in Physics for Teachers Teaching at Higher Secondary Stage for dissemination in MOOC's format, DESM, NCERT, 26th-30th December, 2019.
- k. **Resource Person**, Workshop for Development Of Scripts for the Modules of Training Package in Physics for Teachers Teaching at Higher Secondary Stage for dissemination in MOOC's format, DESM, NCERT, 23th-27th September, 2019.

3. Dr. Yogesh Kumar:

- a. Appointed as an Executive council member of Indian Association of Physics Teachers (IAPT, RC-1) 2017-2021.
- b. Appointed as an Executive Council member of Indian Association of Physics Teachers (IAPT, RC-1) 2017-2021, Delhi and Haryana Region.
- c. Written two chapters of Statistical Mechanics for PG students syllabus at Uttarakhand Open University, course code: MSCPH508, 2020.
- d. Best Presentation Award in the IAPT Regional Competition on Innovative Experiments in Physics- 2019 organised by the IAPT, RC-1, 2019.
- e. Convener and Resource person in DU Pre-Entrance summer school 2019 at Department of Physics and Astrophysics, University of Delhi, for imparting training to undergraduate students, in the discipline of Physics 2019.
- f. Paper setter for various Physics papers of B.Sc.(Hons) Physics, May 2020, at Indira Gandhi University, Rewari, Haryana.
- g. Appointed as an Observer in conducting National Standard Examination - 2019 on 24.11.2019 for school students (Class XI & XII) in India.
- h. Organised seventh annual convention of IAPT, RC-1, Delhi 2019.
- i. Member in the Committee of Courses for making model test paper of Element of Modern Physics for B.Sc. (Hons) Physics, University of Delhi, session 2020.
- j. Subject Working Groups member in designing the syllabus of Solid State Physics for B.Sc. (Hons) Physics and B.Sc. Physical Sciences students, LOCF (CBCS) Undergraduate Physics courses revision of Delhi University, 2019.
- k. Final drafting team Member LOCF (CBCS) Undergraduate Physics courses revision 2019 at Department of Physics and Astrophysics, University of Delhi, 2019.

Publications (Books/journals) with ISSN/ISBN

1. "Graphene-TMD Van der Waals Heterostructure Plasmonics." **P. Goswami**, and **U.P. Tyagi**, Journal of Scientific Research, 12(2), 169-174 (2020).
2. Estimation of surface particulate Matter (PM_{2.5} and PM₁₀) Mass Concentrations from Ceilometer Backscattered Profiles, Avinash N. Parde, Sachin D. Ghude, Prakash Pithani,

- Narendra G. Dhangar, Sandip Nivdange, Gopal Krishna, D. M. Lal, R. Jenamani, **Pankaj Singh**, Chinmay Jena, Ramkrishna Karumuri, P. D. Safai, D. M. Chate, *Aerosol and Air Quality Research*, 2019, DOI:10.4209/aaqr.2019.08.0371 (Impact Factor –2.735).
3. Electric field dependence of optical dispersion process in short pitch ferroelectric liquid crystal, **Amit Choudhary**, Ambika Bawa, Anil K. Thakur, Lokesh K. Gangwar, Suraj Kumar, Surinder P. Singh, and Ashok M. Biradar*, *Optical Materials*, 102, 109771 (2020). ISSN: 0925-3467 (print) 1873-1252 (web).
 4. Partially unwound helical mode in surface stabilized ferroelectric liquid crystal geometry Sidra Khan, Jai Prakash, Shikha Chauhan, **Amit Choudhary**, and Ashok M. Biradar, *Journal of Molecular Liquids*, 305, 112767 (2020). ISSN: 0167-7322.
 5. Bismuth ferrite nanoparticles for modulation of helical structure at the interface of ferroelectric liquid crystal and substrate, Sidra Khan, Jai Prakash, Shikha Chauhan, **Amit Choudhary**, and Ashok M. Biradar, *Journal of Applied Physics* 127, 074102 (2020). ISSN: 1089-7550.
 6. Impact of twisted alignment on the smectic layer structure of ferroelectric liquid crystal, Ambika Bawa, Tarundeep K. Lamba, **Amit Choudhary***, Gautam Singh, Rajesh, Surinder P. Singh, Ashok M. Biradar, *Journal of Molecular Liquids*, 302, 112332 (2020). ISSN: 0167-7322.
 7. Low frequency dielectric processes in deformed helix ferroelectric liquid crystals, Ambika Bawa, **Amit Choudhary***, Anil K. Thakur, Suraj Kumar, Rajesh, Surinder P. Singh, and Ashok M. Biradar, *Applied Physics A*, 126, 171 (2020). ISSN: 1432-0630.
 8. Ferroelectric ordering at interface of paraelectric phase of liquid crystal and solid substrate in confined geometry, S. Kumar, L. K. Gangwar, **A. Choudhary***, Rajesh, S. P. Singh, and A. M. Biradar, *Applied Surface Science* 496, 143695 (2019). ISSN: 0169-4332.
 9. Harsimrat Kaur, **Monika Sharma**, Ramkrishna Ghosh, Satyabrata Mohopatra, and Bijoy K. Kuanr, "Magnetic bipolar transistor based on ZnO/NiO/Si heterostructure using pulsed laser deposition," *AIP Advances*, 10, 015119, 2020. ISSN: 2158-3226. DOI: 10.1063/1.5130046.
 10. **Monika Sharma**, and Bijoy K. Kuanr, "Microwave devices based on template-assisted NiFe nanowires: Fabrication and characterization," *Journal of Physics D: Applied Physics*, 53, pp. 065001, 2020, ISSN: 022-2207. DOI: 10.1088/1361-6463/ab55a4.
 11. **Monika Sharma**, Anindita Das and Bijoy K. Kuanr, "Co-based Full Heusler Alloy Nanowires: Modulation of static and dynamic properties through deposition parameters," *AIP Advances*, 9, 125054, 2019, ISSN: 2158-3226, DOI: 10.1063/1.5130036.
 12. **Monika Sharma**, Ananjan Basu, and Bijoy K. Kuanr, "Magnetization reversal switching in nanocylinders using dynamic techniques," *Journal of Magnetism and Magnetic Materials*, 476, 2019, pp. 234-242. ISSN: 0304-8853. DOI: 10.1016/j.jmmm.2018.12.074.
 13. "Electro Optic (EO) effect in Proton Exchanged lithium niobate: Towards EO modulator", **Ayushi Paliwal**, Anjali Sharma, Ruyan Guo, Amar S. Bhalla, Vinay Gupta, Monika Tomar, *Applied Physics B* 2019 125 (2019) 115. Impact factor: 1.769. ISSN: 0946-2171.
 14. "Impact of plasma dynamics on magneto optic kerr effect (MOKE) in Mn doped BFO thin films", **Ayushi Paliwal**, Savita Sharma, Monika Tomar, and Vinay Gupta, *Physica B: Physics of Condensed Matter* 571 (2019) 57-63. Impact factor: 1.135. ISSN: 0921-4526.
 15. "Multiferroic BFO/BTO multilayer structures based magnetic field sensor", Savita Sharma, **Ayushi Paliwal**, Monika Tomar, and Vinay Gupta, *Physica B: Physics of Condensed Matter* 571 (2019) 1-4. Impact factor: 1.135. ISSN: 0921-4526.
 16. "Detailed Sensitive Detection of Impurities in Waste Engine Oils Using Laser Induced Breakdown Spectroscopy, Rotating Disk Electrode Optical Emission Spectroscopy and Surface Plasmon Resonance", Cherry Dhiman, **Ayushi Paliwal**, Mohd. Shahid Khan, M. N. Reddy, Vinay Gupta, Monika Tomar, *World Academy of Science, Engineering and Technology International Journal of Physical and Mathematical Sciences*, 13(7) (2019). ISSN: 20103778, 2010376X.
 17. "Lossy Mode Resonance-Based Refractive Index Sensor for Sucrose Concentration Measurement", R. Saini, A. Kumar, G. Bhatt, A. Kapoor, **A. Paliwal**, M. Tomar, V. Gupta, *IEEE Sensors Journal* 20 (3) (2019) 1217-1222. Impact factor: 3.076, ISSN: 1530-437X.
 18. "Thermo-optic Aided Tunability of Sr_{0.6}Ba_{0.4}Nb₂O₆ Thin Film-based Electro-optic Modulator Using Waveguide Coupled SPR Modes", S. Gupta, **A. Paliwal**, V. Gupta, M. Tomar, *Plasmonics* (2019) 1-9. Impact Factor: 2.366. ISSN: 1557-1963.
 19. "Dynamically tuneable PLD grown SBN75 thin film based Electrooptic modulator", S. Gupta, **A. Paliwal**, V. Gupta, M. Tomar, M. (2019). *MRS Advances*, 4(41-42), 2265-2269. ISSN: 2059-8521.
 20. "Plasmon-Assisted Crystalline Silicon Solar Cell with TiO₂ as Anti-Reflective Coating", S. Jain, **A. Paliwal**, V. Gupta, M. Tomar, *Plasmonics* (2020) 1-11. Impact Factor: 2.366. ISSN: 1557-1963.
 21. "Ferroelectric Sr_{0.6}Ba_{0.4}Nb₂O₆ thin film based broadband waveguide coupled surface plasmon electro-optic modulator", S. Gupta, **A. Paliwal**, V. Gupta, M. Tomar, *Optics & Laser Technology* 122 (2020) 105880. Impact Factor: 3.319. ISSN: 0030-3992.
 22. "Surface Plasmon Resonance assisted optical analysis of Strontium Barium Niobate thin films." Surbhi Gupta, **Ayushi Paliwal**, Vinay Gupta, and Monika Tomar. *Applied Surface Science* 501 (2020) 144178. Impact Factor: 4.439. ISSN: 0169-4332.
 23. "Long Range Surface Plasmons assisted highly sensitive and room temperature operated NO₂ gas sensor", Surbhi Jain, **Ayushi Paliwal**, Vinay Gupta, and Monika Tomar. *Sensors and Actuators B: Chemical* 311 (2020) 127897. Impact factor: 3.840. ISSN: 0925-4005.
 24. Effect of magnetic field on QGP equation of state, **Yogesh Kumar**, *JPS conf. Proc.* 26, 024028 (2019).
 25. Effect of Magnetic Field on Dilepton Production Rate in Relativistic Heavy Ion Collisions, P. K. Sethy, **Y. Kumar**, S. S. Singh, *J. Sci. Res.* 12 (2), 215-221 (2020).
 26. **Brijmohan Prajapati**, S. Roy, S. Sharma, A. G. Joshi, S. Chatterjee and A. K. Ghosh, "Bandgap Engineering and Signature of Ferromagnetism in Ti_{1-x}Mn_xO₂ Diluted Magnetic Semiconductor Nanoparticles: A Valence Band Study," *physica status solidi (b)* 256 (5), 1800262 (2019). ISSN: 2050-7534.
 27. S. Roy, **Brijmohan Prajapati**, A. Singh, A. G. Joshi, S. Chatterjee and A. K. Ghosh, "Identification of point defects on Co-Ni codoping in SnO₂ nanocrystals and their effect on the structural and optical properties," *Journal of applied physics* 126 (15), 154303 (2019). ISSN: 1089-7550.
 28. Paul, P. Raha, A. N. Dubey and **Brijmohan Prajapati**, "Effect of Nano-Titanium Dioxide Polymorphs Priming on Seed Germination and Seedling Growth of French Bean (*Phaseolus vulgaris* L.)," *International Journal of Agriculture, Environment and Biotechnology* 12 (2), 121-127 (2019). ISSN: 0974-1712.
 29. M. Kumar, **Brijmohan Prajapati**, A. Singh, S. Kumar, A. Kumar and S. Mittal, "Structural, optical and magneto-electric coupling analysis in 'Y'-doped double perovskite La₂NiMnO₆ nanoparticles," *Chemical Physics* 532, 110688 (2020). ISSN: 0301-0104.
 30. M. Kumar, **Brijmohan Prajapati**, A. Singh, "B-site ordering effect on structural and magnetic properties of 'Y'-modified double perovskite La," *Journal of Materials Science: Materials in Electronics* (2020). <https://doi.org/10.1007/s10854-020-03350-6>. ISSN: 0957-4522.

31. 'On the restricted four-body problem when primaries are triaxial rigid body', Md Sanam Suraj, **Md Chand Asique**, Rajiv Aggarwal. *Astronomical and Astrophysical Transactions*, 31(1), 2019. ISSN-1476-3540.
32. 'On the perturbed photo gravitational restricted five-body problem: the analysis of fractal basins of convergence', Md Sanam Suraj, Amit Mittal, Rajiv Aggarwal, **Md Chand Asique**, Prachi Sachan. *Astrophysics and Space. Sci.*, 364, 87, May-2019, (IF: 1.885, Thomson Reuters via Journal Citation Reports), ISSN: 0004-640X, <https://doi.org/10.1007/s10509-019-3575-3>, Published by- Springer International Publishing, (UGC Journal number:1409).
33. 'Divulging the effect of small perturbations in the Coriolis and centrifugal forces in the photogravitational version of autonomous restricted four-body problem with oblate primary', Md Sanam Suraj, **Md Chand Asique**, Amit Mittal, Rajiv Aggarwal. *Astronomical Notes*. <https://doi.org/10.1002/asna.201913629>. 340(5), 413-429, 2019 (IF:1.322); ISSN:1521-3994 (UGC Journal number:1388)
34. 'On the spatial collinear restricted four-body problem with non-spherical primaries', Md Sanam Suraj, Rajiv Aggarwal, Amit Mittal, Om Prakash Meena, **Md Chand Asique**. *Chaos, Solitons & Fractals*, 133(2020) 109609. <https://doi.org/10.1016/j.chaos.2020.109609>, ISSN: 0960-0779, (IF-3.064), Published by- Elsevier.
35. ON THE PERTURBED RESTRICTED FOUR-BODY PROBLEM, **Md Chand Asique**, Md Sanam Suraj, Rajiv Aggarwal, ISBN-13:978-620-0-46693-8. Verlag/Publisher: LAP LAMBERT Academic Publishing.

Seminar/Conferences:

- 1) **Jyoti Kapil**, Presented a Poster titled "Review Article on Density Functional Theory" in International Conference on Recent Trends in Materials and Devices (ICRTMD-2019) organised by Amity University, Noida from 18-19 Dec, 2019.

Achievements of Our Students:

1. **JAM-2019 Exam Qualified:** Tushar Chauhan, Aryan, Kashish Kumar, Keshav Singh, and Neetesh Mudgal.
2. **JEST-2019 Exam Qualified:** Tushar Chauhan.
3. **DU Entrance Exam:** Ritika Bindha.
4. Mh. Muaz Ansari won second position in "Shayari" competition, held in "SynTHESIS- 2K20" of Deshbandhu College.

Department: Sanskrit

1. *Sanskrit Sadyah Nibandha-lekhan Pratiyogita:*

A graduation, Shastri, post-graduation and Acharya level Sanskrit essay writing competition was organized by the department of Sanskrit of Deshbandhu College in collaboration with Delhi Sanskrit Academy on 26th September 2019. The chief guest was Prof. Ramesh Kumar Pandey, Vice-chancellor, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi. Saraswat athiti was Dr. Kanta Bhatiya, vice president of Delhi Sanskrit Academy and chaired by our respected principal Dr. Rajiv Aggarwal.

2. *Tenth (10th) Saraswati Vyakhyanmala:*

Annual lecture series of the department 'Saraswati Vyakhyanmala' was organized on the occasion of Basant Panchami on 30th January 2020. The chief guest was Padam shri awardee Prof. Abhiraj Rajendra Mishra and chaired by our respected principal Dr. Rajiv Aggarwal.

ACADEMIC ACHIEVEMENTS OF FACULTIES

1. DR. RAJVIR SHASTRI (Assistant Professor):

▪ Supervision of M. Phil Thesis, Under Progress:

- 1) Amal Barman, *अथर्ववेदीययज्ञ - एकविवेचन*
- 2) Manish Kumar, *आधुनिकसंदर्भमेंऋग्वैदिकसंवादसूक्तोंकामहत्त्व*

▪ Supervision of Doctoral Thesis, Under Progress:

- 1) Mantu Sarkar, *दयानन्दऔरउवटकृतयजुर्वेदीयनिर्वचनोंकातुलनात्मकअध्ययन*

2. DR. ASHISH KUMAR (Assistant Professor):

▪ Co-Supervision of Doctoral Thesis, Submitted- [01]

- 1) Lakhveer Singh - '*Guru Nanak Bani and Manusmriti: Antar-samwad*'

▪ Supervision of M.Phil. - Dissertations, Awarded- [01]

- 1) Devraj Singh - '*Vajrasuchi mein Pratibimbūt Samajik Vyavastha*'

▪ **Research Paper Publications:**

- 1) Disciples of a Saint Engineer (The Buchen of Spiti) in "**BODHI-PATH**"- ISSN-2347-8004, Vol-18, 2020, P-05 as Co-Author.

▪ **Research Paper Presentations:**

- 1) Paper Presented on '**Pravas Eevam Sahitya**' in the Two Days International Conference on "**Pravasi Punjabi Sahitya: In Contemporary Context**" by Parvasi Sahitya Adhyan kendra, at Gunjrawala Guru Nanak Khalsha College, Ludhiyana, Punjab, on 23rd - 24th January, 2020.
- 2) Paper Presented on '**Vaidik Sahitya mein Nari-Vimarsh**' in International Conference (Under CPI) on "**WOMEN: AN EQUAL WORLD IS AN ENABLED WORLD**" organized by Shanti Devi Arya Mahila College, Dinanagar, Punjab, on 6th March, 2020.

▪ **Invited as Resource Person and delivered lectures:**

- 1) Acted as **Resource Person**, in International Conference (Under CPE) on "**WOMEN: AN EQUAL WORLD IS AN ENABLED WORLD**" organized by Shanti Devi Arya Mahila College, Dinanagar, Punjab, on 6th March, 2020.
- 2) Acted as **Resource Person**, in the Two Days International Conference on "**Parvasi Punjabi Sahitya: In Contemporary Context**" by Parvasi Sahitya Adhyan kendra, at Gunjrawala Guru Nanak Khalsha College, Ludhiana, Punjab, on 23rd-24th January, 2020.
- 3) Conducted **Extension Lecture** on the topic of '**Sanskrit aur Hum**', organized by Department of Sanskrit, Shanti Devi Arya Mahila College, Dinanagar, Gurdaspur- 143531, Affiliated to Guru Nanak Dev, University Amritsar, Punjab, 19th July, 2019.

▪ **Administrative Assignments/Activities:**

- 1) **Coordinator**, Discipline Committee, at Main Stage: at barricade, '**Sabrang**', 6th March, 2019.
- 2) **Nodal Officer**, **New Pension Scheme**, Deshbandhu College, University of Delhi, 2017 to till date.
- 3) **Nodal Officer**, **Admission Committee**, Deshbandhu College, University of Delhi, 2019-20.
- 4) **Coordinator**, **Discipline Committee**, at main stage: at barricade, '**Sabrang**', 3rd-4th March, 2020.

3. DR. SARVENDRA KUMAR (Assistant Professor):

▪ **Participation in National conferences:**

- 1) विषय: **भारतीयसंस्कृति एवं गुरुत्व**, श्यामाप्रसादमुखर्जीमहिलामहाविद्यालय, दिल्लीविश्वविद्यालय, दिल्ली एवं विश्वविद्यालय अनुदान आयोग, भारत सरकार के संयुक्त तत्वाधान में द्वि-दिवसीय राष्ट्रीय संगोष्ठी – **समकालीन संस्कृति, संचार और साहित्य**, 6-7 फरवरी 2020.
- 2) Participated in the "**Workshop on Health Awareness**" held on 28th January 2020 conducted by Shyama Prasad Mukherjee College for Women, University of Delhi in collaboration with Heart Care Foundation of India and WUS DUC.

4. DR. MUKESH KUMAR MISHRA (Assistant Professor):

▪ **Research Paper Publications:**

- 1) Mishra, Mukesh Kumar, **मम्मटीयकाव्यप्रयोजन: एकसमीक्षा**, **Shodha-Prabha** (A Refereed Quarterly Research Journal of Shri Lal Bahadur Rastriya Sanskrit Vidyapeeth, New Delhi), July, 2019, ISSN - 0974-8946.

▪ **Research Papers approved for Publications: (Research papers under publication):**

- 1) Mishra, Mukesh Kumar, **मृच्छकटिकमैवर्णितसमाज**, **Shodha-Prabha** (A Refereed Quarterly Research Journal of Shri Lal Bahadur Rastriya Sanskrit Vidyapeeth, New Delhi), ISSN - 0974-8946.
- 2) Mishra, Mukesh Kumar, **नाट्य - कार्यावस्थानिरूपण**, **Shodha-Prabha** (A Refereed Quarterly Research Journal of Shri Lal Bahadur Rastriya Sanskrit Vidyapeeth, New Delhi), ISSN - 0974-8946.

▪ उप-सम्पादक, **देश- 2019** एवं सम्पादक, संस्कृत-अनुभाग, **देश- 2019**.

- 1) सामान्यपत्र - '**पर्यावरणविषयक चिन्तन प्राक्संस्कृतसाहित्यश्च**', संस्कृत - अनुभाग, देश - 2019.
- 2) लघुकथा - '**अहोविवृतिकारस्यमहिमा**', संस्कृत - अनुभाग, देश - 2019.

▪ **Special lectures delivered:**

1) UGC NET/JRF & SLET classes, one in a week, Sponsored by UGC and Organized by Shri Lal Bahadur Rastriya Sanskrit Vidyapeeth, New Delhi, from September, 2019 to December, 2019.

▪ **Participation in National conferences/ Seminars/Workshops:**

- 1) International conference on "**Human Rights: National and international issues and Challenges**" organized by Shaikshik foundation in association with Deshbandhu College, Delhi university on 22-23 February, 2020 at Dr. Ambedkar International Centre, New Delhi.
- 2) Participated in workshop organized by CSR Research Foundation on "**Women Healthcare, Hygiene, Gender Sensitivity and Women Employment under**" Mission AAA"-Awareness availability and Affordability of Sanitary Napkins supported by Bharat Petroleum Corporation Limited (BPCL) in association with Deshbandhu College, University of Delhi on 08-01-2020 at Deshbandhu College.

5. DR. SANEHLATA PAWAR (Assistant Professor):

▪ **Participation in National conferences/ Seminars/Workshops:**

- 1) National Workshop on "**संस्कृतछन्दएवंसंगीत**" organized by Shyama Prasad Mukherjee Women College, University of Delhi on 28.09.2019.
- 2) Participated in workshop organized by CSR Research Foundation on "**Women Healthcare, Hygiene, Gender Sensitivity and Women Empowerment**" under "Mission AAA"-Awareness availability and Affordability of Sanitary Napkins supported by Bharat Petroleum Corporation Limited (BPCL) in association with Deshbandhu College, University of Delhi on 08-01-2020 at Deshbandhu College.
- 3) International Conference on "**Human Rights: National and International Issues and Challenges**" organized by Shaikshik Foundation in association with Deshbandhu College, Delhi University on 22-23 February, 2020 at Dr. Ambedkar International Centre, New Delhi.

6. DR. DEVENDRA SINGH RAJPUT (Assistant Professor):

▪ **Research Paper Publications:**

- 1) **Preservation of Science and Technology Manuscripts of Sanskrit: A Technology Based Approach**, published in the book **Vedānta Science and Technology: A Multidimensional Approach** (proceeding of the 22nd International Vedanta Congress), ISBN 978-81-246-0947-7 (Hb), Page No. 697, D.K. Printworld (P) Ltd, New Delhi, 2020.
- 2) **Multimedia and E-Learning-Based Presentation of Sanskrit Heritage Texts: The Case of Śrīmadbhagavadgītā**, published in the book **Vedānta Science and Technology: A Multidimensional Approach** (proceeding of the 22nd International Vedanta Congress), ISBN 978-81-246-0947-7 (Hb), Page No. 685, D.K. Printworld (P) Ltd, New Delhi, 2020.

▪ **Participation in National conferences/ Seminars/Workshops:**

- 1) International Conference on "**Human Rights: National and International Issues and Challenges**" organized by Shaikshik Foundation in association with Deshbandhu College, Delhi University on 22-23 February, 2020 at Dr. Ambedkar International Centre, New Delhi.

Participated in workshop organized by CSR Research Foundation on "**Women Healthcare, Hygiene, Gender Sensitivity and Women Empowerment**" under "Mission AAA"-Awareness availability and Affordability of Sanitary Napkins supported by Bharat Petroleum Corporation Limited (BPCL) in association with Deshbandhu College, University of Delhi on 08-01-2020 at Deshbandhu College

Department: Zoology

Research Projects

1. Funded by Indian Council of Medical Research, Ministry of Health & Family Welfare, Government of India “Design, synthesis and biological evaluation of novel lead compounds for treatment of Fibrodysplasia Ossificans Progressiva (FOP)” (2020-2023), **Principal Investigator: Dr Indrakant K Singh.**
2. Funded by Department of Health Research, Ministry of Health & Family Welfare, Government of India “Pharmacophore modelling to design novel inhibitors of MCL1 as targeted therapy of human cancer” (2019-2022), **Principal Investigator: Dr Indrakant K Singh.**
3. Funded by Department of Biotechnology, Ministry of Science & Technology, Government of India “DBT-Star College Scheme Project” (2019-2022), **Principal Investigator: Dr Indrakant K Singh.**

Minor Research Projects under DBT Star College Project

To promote undergraduate research following projects have been initiated under DBT Star College Project

1. Documentation of Ecological Adaptations in Freshwater & Marine Fishes based on Morphological, Biochemical, Molecular Data & Food Selection Behaviour of Closely Related Species.
Name of the Mentors: Dr. Moses Rinchui Ngasainao, Dr. Sandhya Rai, Dr. Kiran Bala
2. Dermatoglyphics: A preliminary tool for Blood group Typing
Name of the Mentors: Dr Kiran Bala, Dr Gouri and Dr Moses Rinchui Ngasainao
3. To Predict the Knowledge, Attitude, Behaviour and Practice of Vitamin D and Sunlight among the students and Spread Awareness.
Name of the Mentors: Dr Sandhya Rai and Dr Manisha Sengar
4. Assessment of effects of sub-lethal doses of ethanol and hexane extract of *Ocimum sanctum* on dengue mosquito *Aedes aegypti* L (Diptera: Culicidae).
Name of the Mentors: Mr. Mohd shazad, Dr. Sunil Kayesth and Dr. Kamal Kumar Gupta
5. In-vitro screening of salivary Amylase, Lipase and Protease against tea extract, Urea and detergents used in synthetic milk, acidic water contained in aluminum cookware and water heated in plastic cookware in microwave oven.
Name of the Mentors: Dr. Sunil Kayesth, Mohd shazad and Dr. Kamal Kumar Gupta
6. Effect of yoga on the pulmonary health of young adults of age 18-22 years.
Name of the Mentors: Dr Varsha Baweja, Dr Gajendra Singh and Dr Sushma Sharma

Conferences/Symposiums organized

1. **National Conference on “Insect-Plant Biology in 21st Century”** held at Deshbandhu College, University of Delhi, Kalkaji, New Delhi on November 4-5, 2019.
2. **International Conference on Natural Products and Human Health** held at University of Delhi, Delhi, India on February 27-29, 2020.

Zoological Society: Chimaera

Chimaera has been functioning over the years with the aim to inculcate scientific culture and team spirit among the students. The student president of Chimera for the year 2019-20 is Mr. Aritra Chakraborty of B Sc Hons IIIrd year.

Zoological Society **Chimaera** had its inaugural function under the aegis of **IQAC** and **DBT Star College** on October 4, 2019. The theme for the inaugural function of Chimaera 2019-20 was **Glorified reptiles: The Birds**. From amazing birds to their diversity in India, and from migration of birds to threats faced by them, the lecture series were delivered by **Dr Asad Rahmani, a great ornithologist and Ex Director Bombay Natural History Society (BNHS)**. There were various events organized in the inaugural function alongside the lecture such as – the Biodiversity Quiz and the Photo exhibition which provided the students of the college as well as of the other colleges a platform for showcasing their talents.

Excursion Tour/ Educational Visit/s

1. Ten days educational trip to Kanyakumari and Trivandrum was organized with the aim to aid the students acquire basic knowledge of marine ecosystem. 28th December 2019 to 6th January 2020
2. One day visit to Aravalli Biodiversity Park, Gurugram was organized on 26th September 2019 for B. Sc (Hons.) Zoology 1st year to study Perspectives in Ecology Practical Curriculum.
3. One day Educational trip to Regional Centre for Biotechnology, Faridabad was organized for B.Sc.(Hons) Zoology IIIrd year on 16th October 16, 2019

4. One day Educational trip to Aravalli Biodiversity Park, Vasant Vihar, Delhi was organized for a batch of 50 students of B.Sc (Prog.) Life Science Ist Semester on 25th October 2019.
5. One day Educational visit to “National Science Center, Pragati Maidan, New Delhi” was organized for B.Sc (Prog.) Life Science 4 th Semester, on February 12, 2020.
6. One day visit to Okhla Bird Sanctuary was organized for students of Zoology to study biodiversity especially avian biodiversity.

Colloquium

To inculcate scientific aptitude among young minds and make them aware of latest developments in Science, the Department of Zoology this year started a lecture series **Colloquium** held every Friday at 12:30 pm. The initiative was led by Dr. Varsha Baweja and the student president is Mr. Kunal Balhara of B Sc Hons IIIrd year. A total of 14 talks were held throughout the session out of which 12 were delivered by distinguished scientists/experts of various fields and 2 talks were delivered by students of the college. These students presented the outcome of the internship or project which they have done previously. Reports of all the lectures were prepared by Ms Ankita Lal, B Sc Hons IIIrd year and have been uploaded on Facebook page of the college.

S No	Date	Name of the Speaker	Designation and Affiliation of the speaker	Title of the Talk
1. DBT Star +IQAC	26.07.19	Dr Shivani Soni	Scientist, California State University, California	Role of erythroblast macrophage protein (Emp) in macrophage development and function
2.	2.08.19	Dr Kamal K Gupta	Associate Prof. Deshbandhu College	Career opportunities for undergraduate students
3.	9.08.19	Mr Akshay Dwivedi	Researcher, IISER, Mohali	Techniques to study avian biodiversity
4.	23.08.19	Mr Kunal Balhara	Student, Deshbandhu College	Life skills, leadership and caring for others
5.	30.08.19	Dr Varsha Baweja	Associate Prof. Deshbandhu College	Insect Biodiversity
6.	6.09.19	Dr Gajendra Singh	Assistant Prof. Deshbandhu College	Association of Vitamin D with Impaired Fasting Glucose, Hypertension, Obesity and associated risk factors of Vitamin D amongst Children from a high altitude region of Himachal Pradesh, India
7.	20.09.19	Ms Kalyani Seth	Research Scholar in Clinical Psychology	Sensitization discussion on special needs inclusion and childhood disorders
8. DBT Star + IQAC	27.09.19	Mr A K Sirohi	IES, General Assistant, Center for Railways Information Systems (CRIS)	The art of knowing self: A journey to excellence
9. DBT star + IQAC	4.10.19	Dr Asad Rahmani	Ex Director, Bombay Natural History Society (BNHS)	Amazing Birds, Diversity of birds in India, Migration of Birds
10.	1.11.19	Mr Kapil Jawa & Ms Bharati Dudeja	Educational wing of Sri Satya Sai Seva Organization	Life is a Game, Play it
11.	10.01.2020	Dr Varsha Baweja	Deshbandhu College, New Delhi	Biopesticides: A potent tool of Green Technology for mitigation of Pesticide Pollution
12.	17.01.2020	Prof Rima Dada	Lab for Molecular Reproduction and Genetics, Dept of Anatomy, All India Institute of Medical Sciences(AIIMS) New Delhi	Impact of yoga on complex human diseases
13.	31.01.2020	Mr Stanzin Nubru	B Sc Hons Zoology, Sem IV, Deshbandhu college	The Changpas and Snow Leopard
14.	07.02.2020	Dr Ayyappa Raja	Research Scholar at CSIR-IGIB, Delhi	From Crest to Color: On a Quest to Differ- Epigenetics in Cell Fate Specification

Biodiversity is the essence of life, therefore, the Department of Zoology this year started a Biodiversity Club to ignite the young minds and to deepen their knowledge of biodiversity and its conservation. This club was initiated by Dr. Varsha Baweja and the student president Mr. Prithwik Bhowmik of B.Sc. Hons IIIrd year. Following activities were organized in the academic year (2019-2020):

1. Under the aegis of DBT Star College a nature walk was organized to explore and document the insect biodiversity of Deshbandhu College Campus on September 28, 2019. 60 students along with mentors Dr Kamal Kumar Gupta (Co-ordinator), Dr Sunil Kayesth, Dr Moses Rinchui, Mr Mohd Shazad, Dr Gouri Nandy, Dr Gajendra Singh and Mr Akshay Dwivedi participated in the programme. The college campus was divided into 6 zones depending on the density of vegetation cover of the area. More than 100 different types of insects belonging to order Thysanura, Odonata, Orthoptera, Dermaptra, Embioptera, Dictyoptera, Isoptera, Thysanoptera, Lepidoptera, Diptera and Hymenoptera, Coleoptera were observed. The most commonly observed insects were butterflies, moths, bees, wasps, different types of flies and beetles. The insects were captured in camera.
2. A nature walk to Okhla Bird Sanctuary intending to observe and assess, both the flora and the fauna of the sanctuary, with special emphasis on the avian population was organized on January 23, 2020 under the guidance of Dr Varsha Baweja and alumnus of the department and biodiversity extraordinaire Akshay Dwivedi. 50 students along with teachers Dr Kiran Bala, Dr Gouri Nandi, Dr Sushma Sharma and Dr Gajendra Singh participated in this one day long visit. Around 60 birds belonging to various families were observed. To name a few there were Brown headed barbet, Pied bushchat, Indian grey hornbill, Purple swamphen, Great cormorant, White breasted Kingfisher, Red Whiskered bulbul, Black-headed Gull, Painted stork, Spot-billed duck, Little Grebe, Common Moorhen, Common Chifchaf, Purple heron, Great white pelican. In hindsight, this excursion was as fruitful as they come because the students gained knowledge of a plethora of birds as well as the ecology of that region.
3. A quiz on **Blue Revolution** was organized on February 14, 2020 to generate awareness about conservation of biodiversity among the students. Ms Vandana Saini, B Sc Hons IIIrd year and Ms Richa Gupta (Vice President, Colloquium), B Sc hons IIIrd year were the quiz masters.

Name of the Teacher: Dr Ranjana Seth, Associate Professor

Publications

1. Seth, R.K., Patil, B.V., Zarin, M., Khan, Z., Hanchinal, S.G., Haveri, R.V., Gopalkrishna, A., and **Seth, Ranjana**. 2020. Studies on the ontogenic radio-sensitivity in *Callosobruchus* species complex to establish a generic dose of phytosanitary irradiation as a post-harvest quarantine treatment for disinfestation of pulses. Radiation Physics and Chemistry. DOI: [10.1016/j.radphyschem.2020.108686](https://doi.org/10.1016/j.radphyschem.2020.108686)

Papers Presented in National/ International Conferences

1. Tyagi. E., Kochar, M., Keshavam, C.C., **Seth, Ranjana**, Seth, R.K., Gupta, M. and Singh, Y. 2020. In-silico identification and in-vitro characterization of *Mycobacterium tuberculosis* Rv1985c as a novel nucleoid-associated protein. In: **International Conference** on Natural Products and Human Health, Deshbandhu College, University of Delhi, Delhi, India (27-29 Feb., 2020).
2. Angmo, N., Sengupta, M., Vimal, N., **Seth, Ranjana** and Seth, R.K. 2020. Influence of scales dislodgement of moths on the efficiency of Inherited sterility technique for suppression of a serious polyphagous pest *Spodoptera litura* (Fabr.) [Lepidoptera: Noctuidae]. In: XVII AZRA **International Conference** on Frontier Research in Applied Zoology and Insect Pest Management Strategies: A Way Forward for Food and Nutritional security, UAS Raichur, Karnataka, India. (Feb. 12-14, 2020)
3. Yadav, P., Arora, S., Singh, Y., **Seth, Ranjana** and Seth, R.K. 2020. Biorational pest control tactics to integrate with Inherited Sterility technique for suppression of a serious polyphagous pest *Spodoptera litura* (Fabr.) [Lepidoptera: Noctuidae]. In: XVII AZRA **International Conference** on Frontier Research in Applied Zoology and Insect Pest Management Strategies: A Way Forward for Food and Nutritional security, UAS Raichur, Karnataka, India. (Feb. 12-14, 2020).
4. Tyagi. E., Gupta, M., Keshavam, C.C., Kochar, M., Seth, Ranjana, Seth, R.K. and Singh, Y. 2019. Identification and biochemical characterization of *E. coli* *iciA* homolog *rv1985c* in *Mycobacterium tuberculosis* as novel nucleoid-associated protein. 60th Annual Conference of The Association of Microbiologists of India (AMI-2019), Central, University of Haryana, Mahendragarh, Haryana (15-18 Nov.2019).

Participation in Symposia/Conferences & Academics related activities:

1. Participated and a member of Organizing Committee for International Conference on Natural Products and Human Health, Deshbandhu College, University of Delhi, Delhi, India. February 27-29, 2020.

Name of the Teacher: Dr. Kamal Kumar Gupta, Associate Professor

Books:

Hindi Vishvakosh: Part -3 Vigyan. Kendriya Hindi Sansthan, Agra, Ministry of Human Resource Development, Government of India. ISBN: 978-93-88359-38-2

Paper Published:

1. **Gupta K. K.**, Kayesth S., Mohd Shazad and Shailendra Kumar. 2019. Implication of mating on oocyte development in red cotton bug, *Dysdercus koenigii* (Fabricius, 1775) (Heteroptera: Pyrrhocoridae). Polish Journal of Entomology. 88(4): 333-348. DOI: 10.2478/pjen-2019-0022, ISSN: 0032-3780
2. Kayesth S., Shailendra Kumar, Mohd Shazad and **Gupta K. K.** 2019. Effects of hexane extract of *Lantana camara* leaves on reproductive bioactivities of *Dysdercus koenigii* Fabricius (Heteroptera: Pyrrhocoridae). Acta Ecologica Sinica. <https://doi.org/10.1016/j.chnaes.2019.05.007>. ISSN 1872-2032

Papers/Poster Presentation in Seminars/Conferences

1. Chaudhary A., **Gupta K. K.**, Impact of plant derived sterol binding proteins on reproductive bioactivities of *Helicoverpa armigera* and its implications on 'integrated pest management' National Conference on "Insect-Plant Biology in 21st Century" held at Deshbandhu College, University of Delhi, Kalkaji, New Delhi on November 4-5, 2019
2. Parveen, **Gupta K. K.**, *Wolbachia* as a potential agent for biological control of mosquito- a strategy for management of mosquito borne diseases. National Conference on "Insect-Plant Biology in 21st Century" held at Deshbandhu College, University of Delhi, Kalkaji, New Delhi on November 4-5, 2019
3. Chaudhary A., **Gupta K. K.**, Singh D. Ichthyo faunal diversity in relation to physicochemical parameters of river Asan Dehradun, Uttarakhand, India. 39th Annual Conference of Environmental Biology, organised by ICAR-National Bureau of Fish Genetic resources at Lucknow on November 29-30. 2019
4. Kumar S., **Gupta K. K.**, Farnesol induced changes in the haemolymph profile and developmental anomalies in *Dysdercus koenigii* (Hemiptera: Pyrrhocoridae). International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
5. Shah V. K., **Gupta K. K.**, Potentials of herb *Ageratum houstonianum* in management of dengue mosquito *Aedes aegypti*: an approach for sustainable vector management. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
6. Sharma C., Shah V. and **Gupta K. K.**, Effects of farnesol on survival, growth and development of *Aedes aegypti* L. (Diptera: Culicidae) International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
7. Chaudhary A., **Gupta K. K.**, Impact of plant derived sterol carrier protein inhibitors on insects growth & development. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
8. Priyanka, Kayesth S., Parveen, **Gupta K. K.**, Oviposition preference of red cotton bug *Dysdercus koenigii* on preferred and non-preferred host plants. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
9. **Gupta K. K.**, Application of insect plant interactions in integrated pest management. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
10. Verma A K, Myneedu V P, Arora J, Naz F, **Gupta K. K.**, Shazad M, Sarin R, Kayesth S 2020, Antibacterial potential of ethanol extract of *Ocimum sanctum* against clinical isolates of *Pseudomonas aeruginosa*. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237

E- Contents Developed

1. Inheritance and Variation- Linkage, Chromosome Variation, Mutation. Modules of Training Package in Biology for Teachers Teaching at Higher Secondary stage. MOOC Format, NCERT
2. Locomotion and Movement. Modules of Training Package in Biology for Teachers Teaching at Higher Secondary stage. MOOC Format, NCERT
3. Molecular Basis of Inheritance: 1 Structure and replication of DNA. Modules of Training Package in Biology for Teachers Teaching at Higher Secondary stage. MOOC Format, NCERT

Resource Person

1. Let's Innovate Competition organized by Delhi Public School, R.K. Purum Delhi, on July 13, 2019
2. Development of Script for the Modules of Training Package in Biology for Teachers Teaching at Higher Secondary stage for Dissemination of MOOC Format. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From August 26-30, 2019
3. Workshop on Biotechnology-Principles and Processes, Army Public School, Dhaula Kuan, New Delhi held on Sept 2, 2019
4. Development of Script for the Modules of Training Package in Biology for Teachers Teaching at Higher Secondary stage for Dissemination of MOOC Format. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From November 25-29, 2019
5. Innovation in Science Pursuit for Inspired Research (DST) held at Deshbandhu College, Kalkaji, New Delhi, Dec 17-20, 2020

6. Development of Script for the Modules of Training Package in Biology for Teachers Teaching at Higher Secondary stage for Dissemination of MOOC Format. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From Dec 30, 2019-Jan. 3, 2020
7. Attended Workshop cum Orientation Programme on Leadership in Educational Administration for Academic Administrators in Universities and Colleges, Organized by the Department of Educational Administration, National Institute of Educational Planning and Administration, July 24-26, 2019 at NIEPA, New Delhi.

International/ National Conference Organized:

1. National Conference on “Insect-Plant Biology in 21st Century” held at Deshbandhu College, University of Delhi, Kalkaji, New Delhi on November 4-5, 2019. **Convenor**
2. National Conference on Pharmacovigilance Advancement in the Safe Drug Development. held at Deshbandhu College, University of Delhi, Kalkaji, New Delhi on January 16-17, 2020 **Advisory Member**
3. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. **Co-converor**

Coordinator of the Students Activities

1. Nature walk to explore and document the insect biodiversity of Deshbandhu College Campus under Biodiversity club of Department of Zoology and DBT Star College, on September 28, 2019

Name of the Teacher :Dr Sunil Kayesth, Assistant Professor

Papers Published:

1. **Kayesth S.**, Shailendra Kumar, Mohd Shazad and Gupta K. K. 2019. Effects of hexane extract of *Lantana camara* leaves on reproductive bioactivities of *Dysdercus koenigii* Fabricius (Heteroptera: Pyrrhocoridae). Acta Ecologica Sinica. <https://doi.org/10.1016/j.chnaes.2019.05.007>. ISSN 1872-2032
2. Gupta K. K., **Kayesth S.**, Mohd Shazad and Shailendra Kumar. 2019. Implication of mating on oocyte development in red cotton bug, *Dysdercus koenigii* (Fabricius, 1775) (Heteroptera: Pyrrhocoridae). Polish Journal of Entomology. 88(4): 333-348. DOI: 10.2478/pjen-2019-0022, ISSN: 0032-3780

Papers/Poster Presentation in Seminars/Conferences

1. **Kayesth S**, Gupta K. K. 2019 Influence of *Catharanthus roseus* hexane extract on bioactivities of *Dysdercus koenigii* and GC-MS analysis to explore the potent chemicals. Eighth International Symposium on Molecular Insect Science, (MOLI-2019) at Sitges, Barcelona, Spain on July 07-10, 2019.
2. Verma A K, Myneedu V P, Arora J, Naz F, Gupta K. K., Shazad M, Sarin R, **Kayesth S**. Antibacterial potential of ethanol extract of *Ocimum sanctum* against clinical isolates of *Pseudomonas aeruginosa*. International Conference on Natural Products and Human Health (ICNPHH-2020), held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
3. Priyanka, **Kayesth S**, Parveen, Gupta K. K. Oviposition preference of red cotton bug *Dysdercus koenigii* on preferred and non-preferred host plants. International Conference on Natural Products and Human Health (ICNPHH-2020), held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
4. Biswas C, Sameer, Arora J, **Kayesth S**. A data Interpretation on the basis of survey conducting through a questionnaire about the utilization of safer cosmetics. International Conference on Natural Products and Human Health (ICNPHH-2020), held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
5. Raj S, and **Kayesth S**. Medjool dates (*Phoenix dactylifera*) “An emerging medicinal and super-food. International Conference on Natural Products and Human Health (ICNPHH-2020), held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
6. Choudhury S G, Meena T, Arora J, **Kayesth S**. Studying the trend of *Diabetes mellitus* in a cohort of numerous individuals due to various life style habits. International Conference on Natural Products and Human Health (ICNPHH-2020), held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237

International/ National Conference/ Others Organized:

1. National Conference on “Insect-Plant Biology in 21st Century” held at Deshbandhu College, University of Delhi, Kalkaji, New Delhi on November 4-5, 2019. **Member, Organizing Committee.**
2. Innovation in Science Pursuit for Inspired Research (DST) held at Deshbandhu College, Kalkaji, New Delhi, Dec 17-20, 2020. **Member, Organizing Committee.**
3. Vidyarthi Vigyan Manthan 2019, India’s Largest Science Talent Search for New India Using Digital Devices, organized by Vijnana Bharti (VIBHA) in association with Vigyan Prasar, Department of Science and Technology, Govt. of India on 19th January, 2020. **Evaluator for State Level Camp (Level-II)**
4. International Conference on Natural Products and Human Health (ICNPHH-2020, supported by UGC, INSA, DBT and CSIR), held at University of Delhi, Delhi, India on February 27-29, 2020. **Convener, Organizing Committee.**

Resource Person in Student Activities:

Nature walk to explore and document the insect biodiversity of Deshbandhu College Campus under Biodiversity club of Department of Zoology and DBT Star College, on September 28, 2019

Name of the Teacher :Dr Varsha Baweja, Associate professor, Teacher-in-Charge

Paper Published:

1. **Baweja Varsha** and Rawat R. 2020. Biocompatibility of *Steinernema glaseri* with a nematode trapping fungus *Arthrobotrys superba* on different nutrient media. *Acta Ecologica Sinica*. <https://doi.org/10.1016/j.chnaes.2020.03.001> ISSN 1872-2032

Papers/Poster Presentation in Seminars/Conferences

1. **Baweja V.** and Himanshu. Soy consumption and prevailing statistics of neurodegenerative disorders in Asia. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
2. Chakraborty, A. and **Baweja, V.** Curcumin in cancer: an end to our woes? International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
3. Tiwari, S K and **Baweja, V.** Therapeutic effects of curcumin in gynaecological cancers. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237

Resource Person

1. Online Course in Science for Teachers teaching at Upper Primary Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From July 22-26, 2019.
2. Development of Script for the Modules of Training Package in Biology for Teachers Teaching at Higher Secondary stage for Dissemination of MOOC Format. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From November 25-29, 2019
3. Online Course in Science for Teachers teaching at Upper Primary Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From December 9-13, 2019.
4. Development of Scripts for the Modules of Training Package in Biology for teachers teaching at Higher Secondary Stage for dissemination in MOOC format. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From December 30, 2019 to January 3, 2020.
5. Development of Tactile Kit in Science at Upper Primary Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From March 11-13, 2020
6. Innovation in Science Pursuit for Inspired Research (DST) held at Deshbandhu College, Kalkaji, New Delhi, Dec 17-20, 2020
7. Participated as 'Evaluator' for Biology in Vidyarthi Vigyan Manthan (VVM) 2019-20, State Level Camp (Level II) Delhi held at Deshbandhu College, New Delhi, January 19, 2020

International/ National Conference/ Workshop Organized:

1. National Conference on "Insect-Plant Biology in 21st Century" held at Deshbandhu College, University of Delhi, Kalkaji, New Delhi on November 4-5, 2019. **Convenor**
2. Innovation in Science Pursuit for Inspired Research (DST) held at Deshbandhu College, Kalkaji, New Delhi, Dec 17-20, 2020. **Member, Organizing Committee.**
3. National Conference on Pharmacovigilance Advancement in the Safe Drug Development. held at Deshbandhu College, University of Delhi, Kalkaji, New Delhi on January 16-17, 2020 **Advisory Member**
4. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. **Co-convenor**

Invited talk/ Jury Member:

1. Let's Innovate Competition organized by Delhi Public School, R.K. Purum Delhi, on July 13, 2019. **Jury Member**
2. A talk on Insect Biodiversity was delivered in Colloquium of the Department of Zoology, Deshbandhu College on August 30, 2019.
3. A talk on Biopesticides: A potent tool of Green Technology for mitigation of Pesticide Pollution was delivered in Colloquium of the Department of Zoology, Deshbandhu College on January 10, 2020.
4. International Conference on Natural Products and Human Health – 2020 (ICNPHH-2020)" held on February 27-29, 2020 organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India. **Jury Member** for an Oral Session.

Coordinator of the Students Activities

1. Visit to Okhla Bird Sanctuary under Biodiversity club of Department of Zoology on January 23, 2020.

Name of the Teacher: Dr Manisha Sengar, Assistant professor

Papers/Poster Presentation in Conference/Symposium

1. **Sengar, M.** and Ngasainao, M. R. An Eco-friendly Strategy for Management of Stored Grain Pest *Sitophilus oryzae* Linn. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
2. Sharma, S., Rai, S. and **Sengar, M.** Hypoxia: decoded at molecular level. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. P-120, ISBN 9-788194-428237

International/ National Conference/ Workshop Organized:

1. National Conference on Insect Plant Biology in 21st Century” held on 4-5th November 2019 at Deshbandhu College, University of Delhi, as **Organizing Member**.
2. INSPIRE Internship Programme, 17th – 21st December 2019, Deshbandhu College, University of Delhi, India. **Organizing Secretariat**
3. International Conference, ICPHH – 2020 held University of Delhi, New Delhi, India from, 27th – 29th Feb 2020 as **Organizing Secretariat**.

International/ National Conference/ Workshop Attended:

1. Attended "RCB Open Day- Aarohan" organized by Regional Centre of Biotechnology (RCB), Faridabad on October 16, 2019.
2. Attended "INMAS 59th Raising Day Celebration" held at Institute of Nuclear Medicine and Allied Sciences (INMAS), DRDO, Delhi on February 13, 2020.
3. Participated in the “International Conference on Human Right National and International Issues and Challenges” Organized by Shaikshik Foundation in association with Deshbandhu College, University of Delhi & Dr. Ambedkar International Centre, New Delhi held on February 22-23, 2020.

Resource Person in Student Activities:

1. Organized a 10 day educational trip to Kanyakumari and Trivandrum organized from 28th December 2019 to 6th January 2020 with the aim to aid the students acquire basic knowledge of marine ecosystem.

Name of the Teacher: Dr Indrakant K Singh, Assistant Professor

Book/Book Chapters:

1. **Singh I.K.* (2019)** Biocontrol Agents: Potential of Biopesticides for Integrated Pest Management. In: B. Giri et al. (eds.), *Biofertilizers for Sustainable Agriculture and Environment, Soil Biology 55*, Springer Nature Switzerland AG (<https://doi.org/10.1007/978-3-030-18933-4>), (ISBN 9781138047242) **Corresponding author*.
2. **Singh, I. K.*(2020)** Dioxin – Exposure routes, pathways, and human health implications. In: Kurwadkar, S. (Ed.), Mandal, P. K. (Ed.), Soni, S. (Ed.). (2020). *Dioxin*. London: CRC Press, (<https://doi.org/10.1201/9781315170961>) (ISBN 9781138047242) **Corresponding author*.
3. **Singh, I. K.*(2020)** Atmospheric Fate and Transport of Dioxins - Persistent Organic Pollutants. In: Kurwadkar, S. (Ed.), Mandal, P. K. (Ed.), Soni, S. (Ed.). (2020). *Dioxin*. London: CRC Press, (<https://doi.org/10.1201/9781315170961>) (ISBN 9781138047242) **Corresponding author*.
4. **Singh, I. K.*(2020)** Environmental Risks and Bioremediation of Dioxins. In: Kurwadkar, S. (Ed.), Mandal, P. K. (Ed.), Soni, S. (Ed.). (2020). *Dioxin*. London: CRC Press, (<https://doi.org/10.1201/9781315170961>) (ISBN 9781138047242) **Corresponding author*.
5. **Singh, I. K.* (2020)** Ecological risk of Dioxin Exposure. In: Kurwadkar, S. (Ed.), Mandal, P. K. (Ed.), Soni, S. (Ed.). (2020). *Dioxin*. London: CRC Press, (<https://doi.org/10.1201/9781315170961>) (ISBN 9781138047242) **Corresponding author*.
6. **Singh, I. K.* (2020)** *Textbooks of Biotechnology for Higher Secondary Stage Class-XII*” Published by NCERT, New Delhi-110016, India. (*Development team member and contributor)

Research Paper in SCI /Refereed Journals:

1. Mittal, P., Sinha, R., Kumar, A., Singh, P., Singh, A.,* Ngasainao, M. R., and **Singh, I. K.*(2020)**Focusing on DNA Repair and Damage Tolerance mechanisms in *Mycobacterium tuberculosis*: an Emerging Therapeutic Theme. **Current Topics In Medicinal Chemistry**.20(5), 390-408. **Corresponding author*. ([doi:10.2174/1568026620666200110114322](https://doi.org/10.2174/1568026620666200110114322))
2. Mittal, P., Singh, S., Singh, A.* and **Singh, I. K.* (2020)** Current advances in drug delivery systems for treatment of Triple negative breast cancer (TNBC). **Chemical Biology Letters**.7(1), 1-12. **Corresponding author*. ([URN:NBN:sciencein.cbl.2020.v7.96](https://doi.org/10.1039/C9CB00000A))
3. Arora, R., Kumar, A., **Singh, I. K.*** and Singh, A. (2019)Pathogenesis Related Proteins: a defensin for plants but an allergen for

4. Verma, P., Mittal, P., Singh, A., and **Singh, I. K.* (2019)**. New Entrants into Clinical Trials for Targeted Therapy of Breast Cancer: An Insight. **Anti-Cancer Agents in Medicinal Chemistry**19(18): 2156-2176. *Corresponding author.([doi:10.2174/1871520619666191018172926](https://doi.org/10.2174/1871520619666191018172926))

Recognition/Award/Fellowships:

- Awarded “**Long Term ICMR-DHR International Fellowship for Young Bio-medical Scientists-2019-20**” to Work at Keck School of Medicine, Norris Cancer Centre, University of Southern California, Los Angeles, USA.
- Awarded “**Post-doctoral Fellowship from Max-Planck Society, Germany**” to work as Visiting Scientist at Department of Molecular Ecology, Max-Planck Institute for Chemical Ecology, Jena, Germany. (April 19, 2020 to July 19, 2020)

Patent:

Indian Application No. 201911020282: Method for identification of multidrug resistant Mycobacterium tuberculosis strain (2019).

Project Grants (Ongoing):

1. Funded by Indian Council of Medical Research, Ministry of Health & Family Welfare, Government of India “*Design, synthesis and biological evaluation of novel lead compounds for treatment of Fibrodysplasia Ossificans Progressiva (FOP)*” (**Principal Investigator [PI] (2020-2023)**).
2. Funded by Department of Health Research, Ministry of Health & Family Welfare, Government of India “*Pharmacophore modelling to design novel inhibitors of MCL1 as targeted therapy of human cancer*” (**Mentor [PI](2019-2022)**).
3. Funded by Department of Biotechnology, Ministry of Science & Technology, Government of India “*DBT-Star College Scheme Project*” (**Principal Investigator [PI]/Coordinator (2019-2022)**).

Papers presented in International/National conferences: Oral/Poster

1. **Singh, I.K.* (2020)** Crafting insect-specific tools for IPM using RNA interference & omics techniques. In “International Conference on Natural Products and Human Health – 2020 (ICNPHH-2020)” held on February 27-29, 2020 at Conference Centre, University of Delhi, INDIA *Eminent Participants
2. Mittal, P., Singh, S., Singh, A., and **Singh, I.K.* (2020)** Drug Delivery Systems for Triple-negative breast cancer (TNBC): treatment and current advances. In “International Conference on Natural Products and Human Health – 2020 (ICNPHH-2020)” held on February 27-29, 2020 at Conference Centre, University of Delhi, INDIA *Corresponding Author
3. Singh, S., Singh, A., Kumar, S., Mittal, P. and **Singh, I.K.* (2019)** Mapping of Larval Midgut Response of *Spodoptera litura* upon Feeding *Zea mays*. In “National Conference on Insect-Plant Biology in 21st Century” held on November 4-5, 2019 at Deshbandhu College, University of Delhi, INDIA *Corresponding Author
4. Kumar, S., Agarwal, P., Singh, A., Raghava, G.P.S. and **Singh, I.K.* (2019)** A Computational Tool for Predicting, Designing and Scanning Insect Neuropeptides. In “National Conference on Insect-Plant Biology in 21st Century” held on November 4-5, 2019 at Deshbandhu College, University of Delhi, INDIA *Corresponding Author
5. Kumar, A., **Singh, I.K.** and Singh, A. (2019) Genome-wide Identification, Characterization and Expression Analysis of Calmodulin-like (CML) Protein from *Glycine max*. In “National Conference on Insect-Plant Biology in 21st Century” held on November 4-5, 2019 at Deshbandhu College, University of Delhi, INDIA.
6. Panwar, R., Kumar, A., **Singh, I.K.** and Singh, A. (2019) Functional Characterization of Cytochrome P450 Proteins from *Glycine max* involved in Jasmonate Turn over during *Spodoptera litura* Infestation. In “National Conference on Insect-Plant Biology in 21st Century” held on November 4-5, 2019 at Deshbandhu College, University of Delhi, INDIA.

Guest of Honor/ Keynote Speaker/Invited Talk/Resource Person/Member Jury:

1. Delivered an **Invited talk** on “*Potential of Omics technologies & RNAi in Insect Pest Management*” on February 22, 2020 in the “**4th international conference BioSangam 2020: Biotechnological Interventions for Societal Development at Prayagraj**” during February 21-23, 2020, Organized by Department of Biotechnology, Motilal Nehru National Institute of Technology (MNNIT/NIT), Allahabad Uttar Pradesh, India.
2. Delivered an **Invited talk** entitled “*Translational Bioinformatics in Health Sciences*” in an add-on course at **Swami Shradhanand College, University of Delhi, Delhi**, on February 13, 2020.
3. Invited as **Guest of Honor and keynote speaker** in the National conference seminar on “*Bioinformatics: Concepts, Applications & Skill Development*” on February 8, 2020, Organized by Department of Botany, Multan Modi College, Modinagar, Ghaziabad (UP), India.
4. Invited as **Resource person** for the NSTEDB, DST, Govt. of India, Sponsored two week “Faculty Development Program on

Entrepreneurship” from January 13-25, 2020, to deliver a talk on “*Era of Translational Research: insights into the role of insilico techniques*” on January 24, 2019. Organized by ABESEC Startups Lab (Business Incubator supported by ABES-EC & Meity, Govt. of India) at IFTM University, Moradabad, Uttar Pradesh, India

5. Invited as **Resource person** for PMMMNMTT, Govt. of India, Sponsored one week Faculty Development Program on “Recent Trends in Research Methodology, E-Content, Mathematics and Statistical Methods in Open Education World” from December 17-23, 2019, to deliver a talk on “*Application of Mathematics and Statistical Methods in Biomedical Sciences*” on December 23, 2019. Organized by Kalindi College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre (MHRFDC) Hansraj College, University of Delhi, Delhi, India.
6. Invited as **Guest of Honor and Keynote speaker** in an Inter school Symposium to deliver talk on “Computer-aided drug designing (CADD): a major breakthrough in the field of medicine” on August 19, 2019 at The Indian School, New Delhi.
7. Worked as a **Member Jury** for an oral session in the International Conference on Natural Products and Human Health – 2020 (ICNPHH-2020)” held on February 27-29, 2020 organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India.
8. Invited as a **Resource person** in “Development of Syllabus and Practical Manual of biotechnology for Higher Secondary Stage” March 1-5, 2020 Organized by DESM, NCERT, NIE campus New Delhi-110016, India.
9. Invited as a **Resource person** in “Development of Syllabus and textbook of biotechnology for Higher Secondary Stage Class XII” July 22-26, 2019 Organized by DESM, NCERT, NIE campus New Delhi-110016, India.

Program Coordinator/Organizer:

1. **Convener**, for the “**National Conference on Insect-Plant Biology- 2019**” Sponsored by University Grant Commission, Government of India at Deshbandhu college, University of Delhi from November 4-5, 2019.
2. **Coordinator**, for the “**Inspire Internship- 2019**” Sponsored by Department of Science and Technology, Government of India at Deshbandhu college, University of Delhi from December 17-21, 2019.
3. **Organizing Member**, **International Conference on Natural Products and Human Health – 2020(ICNPHH-2020)**” held on February 27-29, 2020.

Name of the Teacher: Dr Moses Rinchui Ngasainao, Assistant Professor

Papers Published:

1. Mittal, P., Sinha, R., Kumar, A., Singh, P., Singh, A.,* Ngasainao, M. R., and **Singh, I. K.*(2020)**Focusing on DNA Repair and Damage Tolerance mechanisms in *Mycobacterium tuberculosis*: an Emerging Therapeutic Theme. **Current Topics In Medicinal Chemistry**.20(5), 390-408. *Corresponding author. ([doi:10.2174/1568026620666200110114322](https://doi.org/10.2174/1568026620666200110114322))

Papers/Poster Presentation in Conference/Symposium

1. Sengar, M. and Ngasainao, M. R.**An Eco-friendly Strategy for Management of Stored Grain Pest *Sitophilus oryzae* Linn.**International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237
2. Goel, P., Bala, K. and Ngasainao, M. R.**Interplay between Nitric Oxide (NO) and Nitrogen Dioxide (NO₂) in plasticity of brain neurons responsible for learning and memory processes.** International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. ISBN 9-788194-428237

International/ National Conference/ Workshop Organized

1. **National Conference on Insect Plant Biology in 21st Century**” held on 4-5th November 2019 at Deshbandhu College, University of Delhi, as **Organizing Member**.
2. **INSPIRE Internship Programme**, 17th – 21st December 2019, Deshbandhu College, University of Delhi, India as **Dy. Coordinator and Resource Person**.
3. **International Conference, ICPHH – 2020** heldUniversity of Delhi, New Delhi, India from, 27th – 29th Feb 2020 as **Organizing Secretariat**.

Resource Person in Student Activities:

1. “**Academic Study Tour 2019-2020**” Organized a 10 day educational trip to Kanyakumari and Trivandrum organized from 28th December 2019 to 6th January 2020 with the aim to aid the students acquire basic knowledge of marine ecosystem.
2. “**Aravalli Biodiversity Park Visit**” One day visit to Aravalli Biodiversity Park on 26th September 2019 for B,Sc (Hons.) Zoology 1st year, Perspectives in Ecology Practical Curriculum.

Name of the Teacher: Mr Mohd Shazad, Assistant Professor

Papers Published:

1. Gupta, K. K., Kayesth, S., **Shazad, M.** and Kumar, S. (2019). Implication of mating on oocyte development in red cotton bug, *Dysdercus koenigii* (Fabricius, 1775) (Heteroptera: Pyrrhocoridae). *Polish Journal of Entomology*, 88(4), 333-348.
2. Gupta, K. K., **Shazad, M.**, and Kumar, S. (2019). Relevance of prolonged first mating in reproductive bioactivities of *Dysdercus koenigii* (Fabricius, 1775) (Heteroptera: Pyrrhocoridae). *Polish Journal of Entomology*, 88(1), 63-77.

Papers/Poster Presentation in Seminars/Conferences:

1. Verma A. K., Myneedu V. P, Arora J, Naz F, Gupta, K. K, **Shazad M**, Sarin R, Kayesth S (2020) Antibacterial potential of ethanol extract of *Ocimum sanctum* against clinical isolates of *Pseudomonas aeruginosa*. International Conference on Natural Products and Human Health-2020.
2. Gupta K. K., Kayesth S., Kumar S., Mishra M., **Shazad Mohd** (2020) Application of Insect Plant Interactions in Integrated Pest Management. International Conference on Natural Products and Human Health-2020.

International/ National Conference/ Workshop Organized:

1. **National Conference on Insect Plant Biology in 21st Century**” held on 4-5th November 2019 at Deshbandhu College, University of Delhi. **Organizing Member.**
2. **INSPIRE Internship Programe**, 17th – 21st December 2019, Deshbandhu College, University of Delhi, India. **Organizing Member.**
3. **International Conference, ICPHH – 2020** held University of Delhi, New Delhi, India from, 27th – 29th Feb 2020. **Organizing Secretariat.**

Name of the Teacher: Dr Sandhya Rai, Assistant Professor**Papers/Poster Presentation in Seminars/Conferences:**

1. Dwivedi, **Sandhya Rai**, A. Chakraborty and K. Sarkar. Birds of Delhi: ‘A lost cause’? International Conference on “Changing Environment: Understanding the Emerging Challenges and their Management Strategies (ICKC 2019)” organized by Kalindi College, University of Delhi, Delhi on April 11-12, 2019. PP 6.
2. Chakraborty, A, **Sandhya Rai**, A. Dwivedi and K. Sarkar. Leopards and humans: co-existence or conflict? International Conference on “Changing Environment: Understanding the Emerging Challenges and their Management Strategies (ICKC 2019)” organized by Kalindi College, University of Delhi, Delhi on April 11-12, 2019. PP 9.
3. S. Sharma, **Sandhya Rai**, M. Sengar. Hypoxia: decoded at molecular level. International Conference on Natural Products and Human Health (ICNPHH-2020) organized by Deshbandhu College, University of Delhi, Delhi on February 27-29, 2020. OTH0039, P-120.

International/ National Conference/ Workshop Organized

1. **National Conference on Insect Plant Biology in 21st Century**” held on 4-⁵th November 2019 at Deshbandhu College, University of Delhi. **Organizing Member.**
2. **INSPIRE Internship Programme**, 17th – 21st December 2019, Deshbandhu College, University of Delhi, India. **Organizing Member and Resource Person**
3. **International Conference on "Human Rights- National and International Issues and Challenges"**, organized by Shaikshik Foundation in association with Deshbandhu College & Dr. Ambedkar International Centre, New Delhi held at Dr. Ambedkar International Centre, New Delhi from February 22-23, 2020. **Organizing Member**
4. **International Conference, ICPHH – 2020** held University of Delhi, New Delhi, India from, 27th – 29th Feb 2020. **Organizing Member.**

National Conference/ Workshop Attended:

1. Participated in DBT sponsored workshop on “The Foldscope” organized by Kalindi College, University of Delhi held at University of Delhi, Delhi on April 10, 2019.
2. Attended "RCB Open Day- Aarohan" organized by Regional Centre of Biotechnology (RCB), Faridabad on October 16, 2019.
3. Attended "INMAS 59th Raising Day Celebration" held at Institute of Nuclear Medicine and Allied Sciences (INMAS), DRDO, Delhi on February 13, 2020.

Resource person in student activities:

1. Field visit to Aravalli Biodiversity park, Gurugram, Haryana with the students of B.Sc. (H) Zoology on September 26, 2019.

Name of the Teacher: Ms Pavitra Sharma, Assistant Professor

Papers/Poster presentation in seminars/conferences:

Sharma, P, 2020. Herbal cosmetics and cosmeceuticals : A review. International conference on Natural Products and Human Health: 2020, organized by department of Zoology, Deshbandhu College from February 27 to 29, 2020.

Name of the Teacher: Dr Kiran Bala, Assistant Professor

Papers/Poster Presentation in Seminars/Conferences:

1. Goel. P and **Bala. K.** and Ngasainao, M. R. Interplay Between Nitric Oxide (NO) and Nitrite (NO₂⁻) in Plasticity of Brain Neurons Responsible for Learning and Memory Processes. International Conference on Human Right National and International Issues and Challenges organized by Department of Zoology, Deshbandhu College, University of Delhi, held on February 27-29, 2020.

International/ National Conference/ Workshop Organized

1. **National Conference on Insect Plant Biology in 21st Century**” held on 4-5th November 2019 at Deshbandhu College, University of Delhi. **Organizing Member.**
2. **International Conference on "Human Rights- National and International Issues and Challenges"**, organized by Shaikshik Foundation in association with Deshbandhu College & Dr. Ambedkar International Centre, New Delhi held at Dr. Ambedkar International Centre, New Delhi from February 22-23, 2020. **Organizing Member**
3. **International Conference on Natural Products and Human Health (ICPHH – 2020)** held at University of Delhi, New Delhi, India from, 27th – 29th Feb 2020. **Organizing Member.**

National Conference/ Workshop Attended:

1. Participated in the ICSI Teacher’s Conference/ Faculty Development Programme on the **“Empowering Educators”** held at The Park Hotel, 15, Parliament Street, New Delhi on September 17, 2019.
2. Participated in the **“International Conference on Human Right National and International Issues and Challenges”** Organized by Shaikshik Foundation in association with Deshbandhu College, University of Delhi & Dr. Ambedkar International Centre, New Delhi held on February 22-23, 2020.
3. Participated in the **“International Conference on Natural Products and Human Health-2020”** organized by Department of Zoology, Deshbandhu College, University of Delhi, held on February 27-29, 2020.

Resource Person in Student Activities:

1. **A Visit to the lab of Dr. Navin Khanna, ICGB, September 16, 2019**” was organized for the students of B.Sc. Life Sciences 5th Semester. The Lab visit was a highly enriching experience for all the students (visit was conducted for the Animal Biotechnology Paper).
2. Organized a visit to Regional Centre of Biotechnology, Faridabad to attend "RCB Open Day- Aarohan" for the students of B Sc Hons Zoology, Sem V on October 16, 2019.
3. Organised an educational visit to “National Science Center, Pragati Maidan, New Delhi” for a batch of 52 students of B.Sc (Prog.) Life Science 4th Semester, on 12th February 2020. The visit was conducted for Genetics and Evolutionary Biology Paper.
4. Participated in one day trip to **Okhla Bird Sanctuary(OBS) Noida, Gautam Buddh Nagar district, Uttar Pradesh, India, January 23, 2020**” with B.Sc. (H) Zoology students (Visit was conducted under Biodiversity Club).

Name of the Teacher :Dr Gouri Nandy, Assistant Professor

International/ National Conference/ Workshop Organized

1. **National Conference on Insect Plant Biology in 21st Century**” held on 4-5th November 2019 at Deshbandhu College, University of Delhi. **Organizing Member.**
2. **INSPIRE Internship Programe**, 17th – 21st December 2019, Deshbandhu College, University of Delhi, India. **Organizing Member and Resource Person**
3. **International Conference on "Human Rights- National and International Issues and Challenges"**, organized by Shaikshik Foundation in association with Deshbandhu College & Dr. Ambedkar International Centre, New Delhi held at Dr. Ambedkar International Centre, New Delhi from February 22-23, 2020. **Organizing Member**
4. **International Conference on Natural Products and Human Health (ICPHH – 2020)** held at University of Delhi, New Delhi, India from, 27th – 29th Feb 2020. **Organizing Member.**

National Conference/ Workshop Attended

1. Attended Teacher's Conference on "Empowering Educators" organised by The Institute of Company Secretaries of India (ICSI) held at Park hotel, Delhi, on 17 th September 2019.
2. National Conference on Pharmacovigilance: Advancements in the Safe Drug Development -2020" held at Vivekananda Auditorium, Deshbandhu College, on 16 th and 17 th January 2020, organised by Department of Biochemistry, Deshbandhu College, Kalkaji, New Delhi.
3. Vidyarthi Vigyan Manthan 2019-20, State Level Camp Delhi", held by Deshbandhu College, on 19 th January 2020. **Evaluator**

Resource Person in Student Activities:

1. Mentored and Participated in "Nature Walk" held at Department of Zoology, Deshbandhu College, University of Delhi, on 28 th September 2019; organised by Biodiversity Club, Department of Zoology, Deshbandhu College, under the aegis of DBT Star College and IQAC.
2. Participated in One day Educational trip to Regional Centre for Biotechnology, Faridabad for a batch of 20 students of B.Sc.(Hons) Zoology, final year students of Deshbandhu College, on 16 th October 2019
3. Organised and Participated in an educational trip to "Aravalli Biodiversity Park, Vasant Vihar, Delhi", for a batch of 50 students of B.Sc (Prog.) Life Science Ist Semester on 25 th October 2019
4. Participated in One Day Trip to "Okhla Bird Sanctuary" on 23 rd January 2020, for B.Sc.(Hons) Zoology students; organised by Biodiversity Club, Department of Zoology, Deshbandhu College.
5. Organised and Participated in Educational visit to "National Science Center, Pragati Maidan, New Delhi" for a batch of 52 students of B.Sc (Prog.) Life Science 4 th Semester, on 12 th February 2020

Name of the Teacher: Dr Gajendra Singh, Assistant Professor

Papers/Poster Presentation in Seminars/Conferences:

1. **Singh, G.** Relationship of Vitamin D and Hypertension in children residing at high altitude regions in India' in the 'International Conference on Natural Products and Human Health-2020 (ICNPHH-2020)' held on 27th-29th February, 2020

International/ National Conference/ Workshop Organized

1. **National Conference on Insect Plant Biology in 21st Century"** held on 4-5th November 2019 at Deshbandhu College, University of Delhi. **Organizing Member.**
2. **INSPIRE Internship Programe,** 17th – 21st December 2019, Deshbandhu College, University of Delhi, India. **Organizing Member and Resource Person**
3. **International Conference on "Human Rights- National and International Issues and Challenges"**, organized by Shaikshik Foundation in association with Deshbandhu College & Dr. Ambedkar International Centre, New Delhi held at Dr. Ambedkar International Centre, New Delhi from February 22-23, 2020. **Organizing Member**
4. **International Conference on Natural Products and Human Health (ICPHH – 2020)** held at University of Delhi, New Delhi, India from, 27th – 29th Feb 2020. **Organizing Member.**

National Conference/ Workshop Attended

1. Vidyarthi Vigyan Manthan 2019-20, State Level Camp Delhi", held by Deshbandhu College, on 19 th January 2020. **Evaluator**

Resource Person in Student Activities:

1. Mentored and Participated in "Nature Walk" held at Department of Zoology, Deshbandhu College, University of Delhi, on 28 th September 2019; organised by Biodiversity Club, Department of Zoology, Deshbandhu College, under the aegis of DBT Star College and IQAC.
2. Participated in an excursion trip to Kanyakumari and Trivendrum during 28 th December 2019 - 6 th January 2020. This visit was organized with the aim to aid the students acquire basic knowledge of marine ecosystem.
3. Participated in One Day Trip to "Okhla Bird Sanctuary" on 23 rd January 2020, for B.Sc.(Hons) Zoology students; organised by Biodiversity Club, Department of Zoology, Deshbandhu College.

Invited Talk

1. A talk on Association of Vitamin D with Impaired Fasting Glucose, Hypertension, Obesity and associated risk factors of Vitamin D amongst Children from a high altitude region of Himachal Pradesh, India was delivered in colloquium of the Department of Zoology, Deshbandhu College for motivating and nurturing students in the field of research and higher studies. 6 th September 2019.

Name of the Teachers :Mr Rohit Sagar, Assistant Professor

Paper Published:

Kaustuv Nayak, Vineet Jain, Manpreet Kaur, Naushad Khan, Kamalvishnu Gottimukkala, Charu Aggarwal, **Rohit Sagar**, Shipra Gupta, Ramesh Chandra Rai, Kritika Dixit, Mohammad Islamuddin, Anil Verma, Deepti Maheshwari, Yadya M.Chawla, Elluri Seetharami Reddy, Hare krushna Panda, Pragati Sharma, Priya Bhatnagar, Prabhat Singh, Siva Raghavendhar B, Ashok Kumar Patel, Vinod H Ratageri, Anmol Chandele, Pratima Ray, Kaja Murali Krishna (2020). Antibody response patterns in chikungunya febrile phase predicts protection versus progression to chronic arthritis. Journal of Clinical Investigation insight. doi: 10.1172/jci.insight.130509.

Papers/Poster Presentation in Seminars/Conferences:

Sagar R, Jain V, Hasan W, Chandele A, Kaja M, Ray P, Kapoor N. An Epidemiological, Clinical and Virological study of Acute Febrile Patients From Delhi (2020). International Conference on Natural Products and Human Health-2020.

International/National Conference/ workshop organized:

1. International Conference on "Human Rights- National and International Issues and Challenges", organized by Shaikshik Foundation in association with Deshbandhu College & Dr. Ambedkar International Centre, New Delhi held at Dr. Ambedkar International Centre, New Delhi from February 22-23, 2020. **Organizing Member**
2. International conference on natural products and human health (ICNPHH 2020) University of Delhi, Delhi. February 27-29, 2020. **Organizing Member**

Name of the Teacher :Dr Sushma Sharma, Assistant Professor

Paper Published:

Sushma Sharma and Dileep K Singh (March 2020) Influence of ammonium and moisture on survival and nifH transcription in the diazotroph *Pseudomonas mendocina* S10. *Notulae Scientia Biologicae*. ISSN 2067-3205

International/National Conference/ workshop organized:

1. **International Conference on "Human Rights- National and International Issues and Challenges"**, organized by Shaikshik Foundation in association with Deshbandhu College & Dr. Ambedkar International Centre, New Delhi held at Dr. Ambedkar International Centre, New Delhi from February 22-23, 2020. **Organizing Member**
2. **International conference on natural products and human health (ICNPHH 2020)** University of Delhi, Delhi. February 27-29, 2020. **Organizing Member**

National Conference/ Workshop Attended:

Participated in Science Fellowship Examination Organised by Vidyarthi Vigyan Manthan held at Deshbandhu College in January 2020. **Evaluator**

Resource Person in Student Activities:

1. A visit to Insect toxicology and Environmental Ecology Laboratory, Department of Zoology, University of Delhi for undergraduate students in October 2019
2. Participated in One Day Trip to "Okhla Bird Sanctuary" on 23 rd January 2020, for B.Sc.(Hons) Zoology students; organised by Biodiversity Club, Department of Zoology, Deshbandhu College.

National Service Scheme (NSS)

Deshbandhu College has an active and vibrant NSS Unit that is actively involved in social services. The NSS Unit has organized various events during last academic sessions, such as awareness drive on making our college premises and surrounding area plastic-free in collaboration of Municipal Corporation of Delhi, Electoral verification program, NSS day & Campus to Career workshop for our students in association with Poshac India Foundation and IQAC. The highlighted events and symposiums organized by the NSS Unit emphasizing the role of youth toward community service. Aiming the NSS motto "Not Me But You" and encouraging the young mind toward nationalism and society service are primary goals of the NSS Unit. We engage students in various annually celebrated events such as Deepawali Mela (Pradeepan), NSS annual Fest (Siddhi), Blood donation drives, plantation drives, and disaster management. The NSS Unit is committed to serving underprivileged sections of society and adopted multiple slum areas, where volunteers provide

education, free awareness campaigns throughout the year. This year we organized an online awareness campaign about Covid-19. Mr. Sanjay Kumar (Department of Chemistry) is the Program Officer for Deshbandhu College NSS Unit.

Fiontrai- Entrepreneurship Cell

The Entrepreneurship Cell aims to initiate and promote the entrepreneur culture into the curriculum of the students at Deshbandhu College under the convenorship of Dr. Sangita Singh. Cell, also known as Fiontrai -The Entrepreneurship Cell was founded in 2016. The role of Mr. Anupam Goel, President of the society has been highly commendable to make society vibrant and dynamic. The core members have been diligent in their responsibilities and imbuing the same traits to the recruits. Team Fiontrai organized its first annual entrepreneurship fair under the head B-WALK. This has become a recurring event with the introduction of EQUINOX 2020 in the current year. An orientation programme was organized in August 2019 for the new members of Fiontrai. A panel discussion on “**Recent Liquidity Crisis In Indian Economy**” was conducted on 15th October, 2019 where in Dr. Partha Sen, Dr. Saurabh Aggarwal and Dr. Biswajit Dhar were respected panelists. The Fiontrai team has also worked closely on a project like “**Dropout Magazine**”. The three years journey of Fiontrai has led to creation of a visual of what entrepreneurship truly means.

Women Development Cell

Women Development Cell organized numerous events in the academic year 2019-2020. The committee members of the cell and student members worked hard to plan these events and increased awareness among other college students and faculty members regarding women Empowerment. For the first time, WDC started its own social media handles (Facebook, Instagram, and Twitter) and is covering women related issues and spreading valuable information. Students showed great dedication towards the cell and worked under the guidance of experienced teachers to make the events possible.

Below is the list of events organized in the academic year 2019-2020.

1. On September 23rd, 2019 a session on gender sensitization was organized by ICC, IQAC and WDC collectively... Vijaya Ananta Arya, DCP, Northwest Delhi was invited as a chief guest and key note speaker.
2. On October 6th, 2019 "UNWANTED" an online experience sharing contest was conducted.
3. On January 8th, 2020 WDC, physical education and IQAC cell in collaboration with CSR Research Foundation and Bharat Petroleum Organized a one day workshop/ and awareness program on menstrual hygiene. On the same day Sanitary napkin vending machine and an incinerator was also installed.
4. On 17th-18th February, 2020 – Two –day self-defense workshop was organized. Ms. Anuradha Soni, a taekwondo athlete took the hands on training of self-defense to our participants and faculty members.
5. On May 28, 2020 WDC celebrated for the first time world menstrual Hygiene day and first Series of webinar on "Awareness of good menstrual hygiene management, stigmas and social practices" was held via Google meet platform. Dr. Shreya Jha MBBS MD, AIIMS and Dr Ruby Mishra (member secretary WDC) was the speaker.
6. Regular In-house Monthly discussions were held on various topics viz 'body shaming', 'women safety and security, etc

ENACTUS DESHBANDHU

Enactus Deshbandhu is a student chapter of Enactus India that strives to solve social and economic issues through entrepreneurial action. It was founded in by an undergraduate, 2nd year student along with the support of our faculty advisor, Dr. Savita Singh in October, 2016. It started with with 20 Ordinary teenagers having a goal in mind to uplift the weaker sections of our society. Enactus Deshbandhu is currently running 2 projects- Project TREYA and Project AMARTYA and has organised numerous campaigns till date. TREYA is a Sanskrit word which means walking on 3 paths: Empowerment, Employment and Enrichment. The maiden project of Enactus Deshbandhu started in January 2017 with an aim to set up a bakery enterprise in the name of Human Trafficking survivors by getting them trained in the art of baking and therefore providing them with a sustainable and dignified livelihood under our brand name 'Bakerywaleh'. The beneficiaries are trained by the head chef of D Bakers, Mr Ramesh Joshi. D Bakers is one of the oldest **Bakery, Patisserie and Confectionery** in the city of Delhi. Acid attack is possibly the worst infliction on another human, leading to complete debilitation, loss of income and opportunity and social reclusiveness. Every dark cloud has a silver lining and therefore, there will be a refreshing revival in the lives of the beneficiaries and so we ignited a lamp in profound darkness by starting Project Amartya. Project AMARTYA focuses on the all-round development and upliftment of women who are visually impaired and acid attack survivors, to immortalise their fighting spirit.

EVENTS ORGANISED AND STALLS

- PLANTATION DRIVE (22nd April, 2019)
- MOVIE SCREENING FOR “PRICE OF FREE” (28th August, 2019)
 - Kailash Satyarthi Foundation aims at reducing child labour and lift the burden on them by educating 100 million students about the given problem and asking for their support by spreading awareness for the same. We first began with the premiere of the film 'The Price of Free' along with the Enactus team as well as other students and faculty of the college which dealt with the sensitive issue of Child Labour and Trafficking. The movie screening as a kickstart for 100 Million Campaign marked the beginning of something greater, something that can change the lives of children.
 - Enactus Deshbandhu organised a plantation drive in college to celebrate Earth Day. The rising level of pollution in the world has been a major concern for many organisations. We intend to impact the life of many not only by making them self sustainable, but also by making this world a better place to live in.
 - Enactus Deshbandhu has always done its share in protecting the environment.

PARTICIPATION IN EVENTS

- **DAAN UTSAV (2nd to 8th October, 2019):** DAAN UTSAV which basically means a festival to create awareness and encourage people to spread joy by giving back to the society. National Organisation for Social Empowerment presented, “Daan Utsav” books for all, 2019 challenge which invited colleges from all across Delhi NCR to run the book donation camp at DMRC station and fundraising drive at Indian oil fuel pumps. Enactus Deshbandhu College showed their commitment towards empowering everyone with education by upholding the legacy of the festival of donation and offering by participating in DAAN UTSAV. Enactus Deshbandhu won a silver medal for collecting the second highest donations.
- **KAILASH SATYARTHI’S 5 YEARS OF NOBEL PRIZE CEREMONY (10th October, 2019):** Enactus Deshbandhu covered the special commemoration of Kailash Satyarthi's 5 years of Nobel Peace Prize and 40 years of Bachpan Bachao Andolan on 10th October, 2019. A photo exhibition whose theme was "From Exploitation to Liberation" covered the milestones and struggles faced by Satyarthi sir over the years, followed by the screening of movie "Price of Free" for the children who were rescued by the team of Bachpan Bachao Andolan. There were children who had been rescued from human trafficking and child labour, who served as a great inspiration for all. The photo exhibition’s magnificence was enhanced by the Nobel Peace Prize Medallion which was honoured to Shri Kailash Satyarthi and Malala Yousafzai on 10th October, 2014 for their pioneering work on promoting child rights in the subcontinent.
- **100 MILLION MARCH (11th October, 2019):** KSCF organises March with schools demanding free and compulsory education for girls till the age of 18. Enactus Deshbandhu also came with KSCF in one such march organised in cooperation with Swastika Public School, Ibrahimpur Extension in October 2019. Many volunteers of Enactus Deshbandhu participated in the rally with the students of the respective school. The participants marched around the area of the school and also chanted slogans like "Beti Bachao Beti Padhao" , and used equivalent posters to make the march more effective.
- **100 MILLION CAMPAIGN (14th November, 2019) :** Enactus Deshbandhu took part in ‘Hundred Million Campaign’ organised by Kailash Satyarthi children’s foundation on November 14, 2019. Enactus Deshbandhu, along with other participants in the campaign, spread awareness by a march around India gate, New Delhi . With thousands of people visiting India gate every day we intended to educate them about the serious implications of depriving children of these necessities.
- **SULABH INTERNATIONAL 50 YEAR ANNIVERSARY (6th March, 2020):** Sulabh International celebrated their 50 years Anniversary on 5th and 6th of March, 2020. It traced the 50 year journey of Sulabh International in public service. Their contributions in health and sanitation has been very significant in our country. Students from Sulabh Public School also attended the event. Our interaction with students was both delightful and informative. Enactus from Shivaji college and Shri Ram College of Commerce also attended the event.

MILESTONES

- A beneficiary from Project Treya was granted a scholarship for a cooking course, specialising in baking at IHM Pusa.
- Enactus Deshbandhu was featured on LBB. LBB also called as Little Black Book helps to discover and share local recommendations and reviews about food, events, lifestyle and more.
- Enactus Deshbandhu won the KPMG Business Ethics Grant 2018. Out of 58 applications , 20 teams were selected and we were one of them. .

FUTURE PROJECTS

Enactus Deshbandhu continues on it’s foundation of giving the underprivileged a platform to prove their standing in the society as equals. With the aim of better standard of living for our beneficiaries and keeping in mind the significance of environment friendly ideas, Enactus Deshbandhu presents, “Project Laal”. Project Laal focuses on two aspect:

1. Entrepreneurship opportunities for the community.
2. Menstrual Health Education.

This Project will help young women reclaim public life which they’re secluded from when they’re menstruating. We are confident that the efforts of our members and faculty will make this insight a trail of success.

No matter where we are from, we all face challenges, but they don’t define us. Enactus inspires us all to write our stories of resilience.

YUVA SOCIETY

- **Diwali Mela:** Diwali Mela is one of the most awaited events of the year. YUVA also decided to put a book stall midst a lot of other stalls. YUVA distributed to students with most amazing books of all time. Our Principal along with others professors came by our stall and appreciated our efforts.

Sanjay Van Trip: More than of 22 members came together to spent the day filled with joy and fun. We all visited temples. There was a sense of peace, away from the traffic honks of the roads of Delhi which refreshed our members to continue their work with more enthusiasm.

OLD AGE HOME: Last year , before Diwali, members of YUVA society planned a visit to an old age home . It's quite tragic that our generation is not able to take care of their old parents. So, in order to share some beautiful moments with them about 23 members went there. They were overwhelmed by seeing the condition of the people living there. Students share some their experiences:

- We communicated to all the old people living there, knowing their stories was quite a heartbreaking moment .Their eyes looked tired and empty, void of all emotions. They greeted us with a faint smile. So we decided to put some efforts to make them smile at least for a day, that's the least we could do.
- Firstly we decorated the place with some beautiful flowers and Rangoli.
- We lit Diyas all over the place.
- Then we gave them the food items that we brought.
- After that we organised a singing session for them, seeing them enjoying was really heart-warming.
- At last we distributed The “Geeta” to all members living there.
- A visit to an old-age home is a life-changing experience as it is filled with emotions and sentiments.

"Life is an echo. What you send out, comes back. What you sow, you reap. What you give, you get. What you see in others, exists in you. Remember, life is an echo. It always gets back to you. So give goodness and care about your Parents then we also will be cared for”.

Essay Writing Competition:- On the occasion of Subhash Chandra Bose Jayanti, YUVA Deshbandhu unit organized an essay writing competition on the Birth anniversary of “Netaji Subhash Chandra Bose” to celebrate the valour of our great nationalist freedom fighter. The event was open to Deshbandhu College students only. We received great response and had over 160+ registrations for the event.

Nearly 90 students participated and wrote the essay in the given 2 hour duration. It was open to both Hindi and English language and we received great submissions from the students. Result was declared by panel of teachers of Deshbandhu College who were present throughout the duration of the event. The event began by “Bharat Mata Naman and Deep Prajwalan”. The event was successful and it instilled a feeling of courage and patriotism in the students and they were inspired by the great life and struggle of Netaji.

Dr. B. R. Ambedkar International College

Volunteering & Management on International Conference, It was our great experience to work together in disciplined manner, we all given our best to make the college conference successful, The conference was three days where we were working together and coordinate all instructions to make the event successful. Some of us attended the conference. Overall it was great experience & it was a chance to work together outside the college, After completion of Conference we got positive feedback and everyone cheering to us, Everyone also given us blessings for our bright future.

COVID 19 AWARENESS CAMPAIGN

In view of the ongoing deadly Covid-19 pandemic outbreak which has devastated the world and caused a large no of deaths YUVA Deshbandhu organized mass campaign for the fight against Corona virus. In the month of March when the outbreak just started in the country and people came to know about the seriousness of the situation we launched awareness program to sensitize the people about the nature of disease, its cause and spread and how to prevent it. In line with the Government guidelines and measures issued in the public interest against the disease we ensured that everyone is aware of these safety measures and practices. The members of society launched poster campaigns with messages appearing people to stay at home and practise social distancing. Many students came with slogans and paintings spreading the message to stay safe, sanitise you self and avoid mass gatherings and only go out with appropriate safety measures that too if necessary. Below are the pictures of that campaign.

INTERNAL QUALITY ASSURANCE CELL (IQAC)

As a post-accreditation quality sustenance measure as prescribed by the NAAC, the college established the Internal Quality Assurance Cell (IQAC) on 8th september,2016 under the aegis of the Deshbandhu College . The IQAC being an integral part of the college works towards realizing the goals of quality enhancement by developing a system for conscious, consistent and catalytic improvement in different aspects of functioning of the college.

The IQAC assures the stakeholders i.e., students, parents, teachers, staff, Management, funding agencies and society in general - of the accountability and transparency in the quality management system of the institution and its concern for ensuring quality of education being imparted.

Internal Quality Assurance System is a step towards Excellence. The IQAC of Deshbandhu has been largely responsible for conducting the 1st cycle of NAAC accreditation with a **B++ grading** in the year 2016.It also participated in NIRF ranking in 2019 for the first time and secured 96th All India Rank in colleges category.It conducts various conferences , seminars and workshops to enhance the overall quality of teaching – learning process. In the last academic session ,IQAC organised more than 50 seminars,workshops, FDP, conferences and other academic activities.The most notable amongst them were two international conferences and national conferences,they are:

- International Conference in association with ICPR, ICSSR, UGC, Shaikshik Foundation and Chaudhary Bansi Lal University on 22th - 23th February, 2020- “International Conference on Human Rights- National and International issues and challenges.
- International Conference on Natural Products and Human Health”
- National Conference on “Insect – Plant Biology in 21st Century”.
- National conference on “Pharmacovigilance: advancement in the safe drug development.

It conducts valuable feedback for quality sustenance and improvement in teaching, learning and research experiences in the college. It documents and reports various activities of the college for various higher education requirements. A continuous follow up has been made on infrastructural resources of the college to assure adequate, appropriate and better facilities to assure a conducive and enabling environment for teaching, learning and research. Through all these initiatives, IQAC of Deshbandhu is trying to be one of the important components of the college which ensures quality and continuous improvement in all the units / aspects of the college.

DETAILS OF VARIOUS EVENTS OF IQAC-

- Department of Physical Education and Sports and IQAC
 - a) 1st June 2020-21stJune 2020 – International yoga festival – Yog mantrana
 - b) 8 January, 2020- workshop on “Mission AAA- awareness, availability & affordability of sanitary napkins”
 - c) 24th September, 2019- Workshop on Sports & Fitness Development.
- Department of Zoology and IQAC
 - a) 6 June 2020- Webinar on World environment Day 2020
 - b) 13 May, 2020- workshop on “Role of a citizen in biodiversity conservation”.
 - c) 6 May, 2020- webinar on “CoVID 19 pandemic and immunity” & “socio- psychological issues & CoVID 19.
 - d) 27th February- 29 February2020- International Conference on Natural Products and Human Health”
 - e) 4th- 5thNovember, 2019- National Conference on “Insect – Plant Biology in 21st Century”.
 - f) 4 October, 2019- Zoology Society inaugural lecture on “BIRD WATCHING” by Dr. ASAD RAHMANI,EX- Director, BOMBAY NATURAL HISTORY SOCIETY.
 - g) 27th September, 2019- Colloquium: a lecture series by Mr. Arvind Kumar Sirohi,IES on the “Art of knowing SELF:A JOURNEY TO EXCELLENCE “
 - h) 28TH September, 2019- NATURE WALK to explore and document the insect biodiversity.

- Women Development Cell and IQAC
 - a) 28 May, 2020- Webinar on the occasion of World Menstrual Hygiene Day on the theme of "Awareness on good Menstrual hygiene: management, stigma and social practises".
- Department of Biochemistry and IQAC
 - b) 20th & 21st May 2020- Webinar on the theme "Understanding human health and wellness in new perspective".
 - c) 16th-17th January, 2020- National conference on "Pharmacovigilance: advancement in the safe drug development.
 - d) 24th September, 2019- Biochemistry Society inaugural lecture on "BATTLE AGAINST INFECTIOUS DISEASES" by Prof. Yogendra Singh, Department Of Zoology, University Of Delhi & Dr. Kalpana Luthra, Department Of Biochemistry, Aiiims, New Delhi.
- Department of Botany and IQAC
 - a) 5 June 2020- Poster making competition on the occasion of world environment day.
 - b) 12TH AND 13TH May, 2020 – webinar on "Evolution of science seen from historical perspective".
 - c) 20th and 21st March, 2020- workshop on "Plant molecular systematics and bio-informatics.
 - d) 28th January, 2020- organised a talk on "Weather forecasting, climate variability and its impact
 - e) 16th September, 2019- Butterfly campus count
 - f) 13TH August, 2019- Dragonfly campus count.
- Deshbandhu College & Acharya Narendra Dev College together organised a webinar on 5th June 2020 on "Nucleic acid base detection of COVID-19.
- IQAC organized an online learning session of Google Meet and Google Classroom by Dr. Jyoti Trivedi, Deshabndhu College on 9th May, 2020.
- IQAC organized an International Conference in association with ICPR, ICSSR, UGC, Shaikshik Foundation and Chaudhary Bansi Lal University on 22th - 23th February, 2020- "International Conference on Human Rights- National and International issues and challenges.
- Library and IQAC organised a lecture on "Electronic resources in teaching, learning & research on " 24 January, 2020.
- IQAC organised an orientation programme in the form of a motivational talk by Mr. PRATEEK JAIN, IAS on 13TH NOVEMBER, 2019.
- IQAC organised the screening of movie "THE PRICE OF FREE" in collaboration with Kailash Satyarthi foundation on 30th AUGUST, 2019.
- IQAC awareness program & plantation drive on "Youth towards green sustainability" on 19th August, 2019
- Department of Sanskrit and IQAC
 - a) 15 May, 2020- webinar on "PANCHTANTRA – BEYOND THE STORIES"
 - b) 30th January, 2020- lecture by Padam Shri Awardee Abhiraj Rajendra Mishra
- Department of Commerce and IQAC
 - a) 6th May, 2020- webinar on "How to present an idea to an angel investor"
 - b) 2nd May, 2020- webinar on "creativity and innovation in business"
- ❖ State level camp on "Vidyarthi Vigyan Manthan" on 19th January, 2020
- ❖ Department of Physics and IQAC
 - a) 21st October, 2019- One day Seminar on "Advancement of Nano-sciences".
- ❖ NSS and IQAC
 - a) 17th-19th October, 2019- Three day interactive workshop on "Campus to Career "
 - b) 18th September, 2019- An awareness drive on making our college premises and surrounding area plastic free.
 - c) 11 August, 2019 – Swachhata pakhwada 2019.
- ❖ ICC and IQAC
 - a) 23RD September, 2019- organised a seminar "Gender Sensitisation – Fighting crime, Fighting patriarchy.
 - b) 18th September, 2019- a session on "Gender Sensitisation- addressing sexual harassment at workplace"
- ❖ Department of chemistry and IQAC
 - a) 27 September, 2019- RESONANCE 2019, chief guest – Prof. S.M.S CHAUHAN, EMERITUS PROFESSOR, DEPARTMENT OF CHEMISTRY, UNIVERSITY OF DELHI
- ❖ Extension Lecture Committee and IQAC
 - a) Extension Lecture Committee and IQAC organised a talk on 'PRIME MINISTER OVER DECADES' on 19th Sept, 2019 by SHRI SHAKTI SINHA, DIRECTOR, Nehru Museum and Memorial Library.

- b) Extension Lecture Committee and IQAC organised an eye opening lecture on “THE KILLER NO.1” on 4th Sept, 2019 by DR.SHIV CHOUDHARY, CARDIOLOGIST,AIIMS

❖ Placement cell and IQAC

- a) 5th September, 2019- motivational seminar on “laws of attraction and goal setting”
b) 30th August, 2019- talk on “Katha Pratha- Panchtantra And Management Skills”

Placement Cell

The Placement Cell, Deshbandhu College has been actively working for career guidance and recruitment of the students. The Placement Cell serves as a medium of interaction between the students and the corporate world. It has always been a guiding force for the students and helps them to work on their skills, aptitudes, strengths and weaknesses. The vision of the Placement Cell has always been to guide the students for the enrichment of their lives and for the fulfilment of their dreams. This diligent team is supported by our respected Principal Dr. Rajiv Aggarwal. The transcendent success of Placement Cell, Deshbandhu College was only possible through the guidance of our student convenor Dr. Seema Gupta who taught everyone in the team not only how to reach success but also how to do with dignity.

The following teachers in charge also played a huge role in the success of the Placement cell. These are:-

Dr. Sangita Singh

Dr. Ruby Mishra

Dr. Kumar Anand

The session 2019-2020 was a success by the hard work of our Students Co-ordinators, who invested their valuable time in making the session 2019-2020 a success and building it more to become the best in the coming years. These are our bright student coordinators of Placement Cell, Deshbandhu College:

Aman Poiria

Aanchal

Anishka Jain

Prisnita

Suraj Jha

Hansika Bansal

Manan

With the aim of bridging the skill gap between what the companies are looking for and what the students possess, the cell organised an array of knowledgeable and vibrant seminars, workshops & sessions like:

1. Seminar on Panchatantra Stories & Management Skills by Bharat Dashon 30th August 2019:-

The Placement Cell, Deshbandhu College proudly witnessed the commencement of the session 2019-20 with its very first event organised today on 30th August 2019. We wanted to start with something informative, interesting and interactive. The seminar with Mr. Bharat Dash about "Katha Pratha: Panchtantra and Management skills" proved to be the perfect fit for a head start of our session. Our guest speaker, Mr. Bharat Dash, a visiting faculty at Welingkars Institute of Management did an excellent job in relating Panchtantra stories with managerial skills, taking real life examples from current industry scenarios. The participation of over 100+ students, their active involvement in interaction and questionnaire, are evident enough to mark the success of the session. We thank our teacher convenor, Dr. Seema Gupta for mentoring as well as guiding us throughout the event and our principal, Dr. Rajiv Aggarwal for providing the necessary impetus and finally our Placement Cell team that made this possible.

2. A motivational seminar by Neeraj Singh Rathore on Laws of Attraction & Goal Setting on 5th September, 2019:-

Placement cell Deshbandhu college and IQAC organised Motivational Talk of Neeraj Rathore, on Law of attraction and Goal setting on 5th September, Thursday at 10:30 am.

3. Times of India's session on Digital Marketing & trends on 18th sept, 2019

The Seminar was conducted in collaboration with Times of India on Digital Marketing & trends. The seminar was very informational as it captured the basic understanding of Digital Marketing and how it has become a crux to every organisation. During this seminar our speaker discussed various trends in Digital marketing and also introduced the students to various tools that are easy to use and that helps in creating online advertisement, posts and videos. Thus, this was an excellent seminar that discusses the importance of Digital Marketing as a Career options and helped student learn a lot.

4. A detailed session on Tips to crack group discussion on 11th January, 2020

The road to success and the road to failure are almost the same so, in the end, it all depends on how you want to walk down the road. Our Placement Cell Cyfle recently organized a Group Discussion preparation event for students. Our Guest speaker Dr. Shweta Jha who is a Faculty advisor at Apeejay School of Management inspired students with her insights to help students to work on their ability to tackle the Group Discussion round during their interview process.

5. P & G Seminar

The Placement Cell, Deshbandhu College in association with Proctor & Gamble successfully organized a Men Grooming Seminar on 6th Feb, 2020. It was a wonderful opportunity for students to learn about the importance of shaping personality. The Seminar discussed the various situation, students face in their course of life, where they feel less confident. The Seminar discussed the ABCD analysis of body check for students where

- Appearance
- B-BodyLanguage
- C-Content
- D-Delivery

Thus, it was an amazing seminar that possessed amazing opportunities for students in terms of Internships, jobs & grooming personality. Thanks to the teachers and our principal, Dr. Rajiv Aggarwal for providing us with all the required resources and a special thanks to our teacher convener Dr. Seema Gupta for her commendable efforts in making this possible.

CYFLE's Placement success of the year 2020

CYFLE- The Placement Cell, Deshbandhu College has been actively working for career guidance and recruitment of the students. The Placement Cell serves as a medium of interaction between the students and the corporate world. It has always been a guiding force for the students and helps them to work on their skills, aptitudes, strengths and weaknesses. The vision of the Placement Cell has always been to guide the students for the enrichment of their lives and for the fulfilment of their dreams.

Genpact

It is a global professional services firm that makes business transformation real. They drive digital-led innovation and digitally-enabled intelligent operations for their clients, guided by their experience running thousands of processes primarily for Global Fortune 500 companies. They think with design, dream in digital, and solve problems with data and analytics.

Following are the details of the job type:-

- CTC: Upto ₹2.72 Lakhs
- Profiles Offered (Eligible Streams)
 - Finance & Accounting (B.Com/B.Com+MBAonly)
 - Arabic + Urdu (Any Graduate with Arabic as Primary subject)
 - Banking Financial Services and Insurance (Any graduate – Except Technical Graduates)
 - Voice (Customer Services/Collections/TechSales) (Any graduate including Technical Graduate)
- Apprentice Requirements: 15 months of Apprentice program with Stipend Starting from 10,400 to 15,800 per month (B.Com and Non Tech Graduates)

Wipro Pvt. Ltd.

WIPRO is one of the top 10 IT companies in India. It offers excellent career growth opportunities. The Job profiles offered by Wipro provide great exposure to freshers. With guaranteed opportunities of in-job growth in terms of both monetary and skills basis this company offers the best incentives to their employees.

Following are the details of the job type:-

- Position: Customer Service Specialist
- CTC: 3,08,000 (salary-upto 25,600 per month)
- Drive Date: 10th February, 2020
- Selection Process: Group Discussion>Interview

Iconic Fashion

Iconic Fashion is a lifestyle retail concept which offers a wide range of products from renowned international sources. They have grown from 8 brands to more than 130 brands of which 80+ are international brands. Iconic stores offer a luxuriant and contemporary shopping vibe across all their 17 stores in cities like Delhi, Gurgaon, Noida, Bangalore, Hyderabad, Ahmedabad, Bhubaneswar, Jaipur, Udaipur and many more. Following are the details of the job type:-

- Position: Fashion Consultant
- CTC: 3.5 LPA (salary-upto 29,000 per month)

Amazon

Amazon.com, Inc is an American multinational conglomerate technology company based in Seattle, with 750,000 employees. It focuses on e-commerce, cloud computing, digital streaming, and artificial intelligence. It is considered one of the Big Four tech companies, along with Google, Apple and Microsoft. It has been referred to as one of the most influential economic and cultural forces in the world. Amazon is known for its disruption of well established industries through technological innovation and mass scale. It is the world's largest online market place, AI assistant provider, and cloud computing platform as measured by revenue and market capitalization. Amazon is the largest Internet company by revenue in the world. Following are the details of the job type:-

- Profile: Associate customer support

- CTC: Upto 3 LPA (salary-upto 25,000 per month)

Acadecraft

Acadecraft Inc. is a US-registered KPO company specialized in academic content development. The company has operations in Noida/Indore (India). The company has helped hundreds of Ed-Tech companies by offering online academic services as well as to students. Following are the details of the job type:-

- Position: Subject Matter Expert
- CTC: The compensation would range between INR 2.16 LPA to 3.5 LPA depending on the skills of the candidate.

College Dunia

Collegedunia.com. is an extensive search engine for the students, parents, and education industry players who are seeking information on the higher education sector in India and abroad. One can rely on Collegedunia.com for getting the most brief and relevant data on colleges and universities. Following are the details of the job type:-

- Position: Subject Matter Expert
- CTC: The compensation would range between INR 2.16 LPA to 3.5 LPA depending on the skills of the candidate.

Densat

Densat is a professionally run organization having 3 main service offerings: Facility Management Solutions; HR Solutions & Trainings. They provide complete customer satisfaction and work with customer centricity on all their service offerings. Following are the details of the job type:-

- Positions: 1) Business Development Personnel
2) Marketing Executive
- CTC upto Rs.2.4 LPA + incentives and reimbursements.
- Students will be placed as Management trainees (MT) till the time they are able to perform on your own (which is usually 3-4 months depending on person to person.)
- Job Description: 1) BD Personnel
2) Marketing Executive
- Only for Female Volunteers

NCC

The college has two senior division N.C.C. (Army wing) with strength of 160 cadets each for girls and boys wings, respectively. In addition, Naval wing and Air wing vacancies are also available in open. The N.C.C. which was introduced in the University and the College in 1948 through an Act of Parliament under the chairmanship of Pt. H.N. Kunjru, aims to shape up youth and unveil their hidden potential to face challenges and be winners in life as also to have semi-army manpower to deal with natural calamities, assisting army from rear in wars and the war casualties.

Some Glimpses Of our Awareness Drives:

- ✓ CLEANING OF COLLEGE
- ✓ CLEANING OF PLAY GROUND
- ✓ MASS AWARENESS RALLY
- ✓ RALLY ON ROADS
- ✓ CLEANING OF PUBLIC PARKS
- ✓ AWARENESS RALLY
- ✓ SWACHHATA PAKHWARA
- ✓ YOGA DAY
- ✓ KARGIL DIWAS

1. Mega Pakhwara was held from 1 July 2019 to 11 July 2019. Various Events of social concern and other awareness rallies were held. Events Like Painting Competition, Cycle Rally, Nukkad Natak, Awareness Rally, guest lecture, Foot Policing were held during this Mega Pakhwara.

2. **Kargil Vijay Diwas** named after the successful **Operation Vijay** is celebrated on 26th July every year. On this day in 1999 India successfully took command of the high outposts in kargil district of J&K which has been lost to Pakistan. Kargil Vijay Diwas is celebrated every year in honour of Kargil War Heroes.

On 26 July 2019, Deshbandhu NCC organised guest lecture, to remember the supreme sacrifice of war heroes.

3. **International Yoga Day** celebrated annually on 21st June since 2015, following its inception in the United Nation General Assembly in 2014. Yoga is a physical, mental and spiritual practice which originated in India. Deshbandhu NCC also celebrated this day full enthusiasm. Deshbandhu College was made the Regional Yoga Centre. Cadets and students from all the nearby schools participated in this three day long event. Not only students but residents, professors and all other college staff also participated in this event.

4. It is a health mission of India. It was launched by Union Health Minister **J.P. Nadda** on 25th december 2014. The ultimate goal of Mission Indradhanush is to ensure full immunization with all available vacancies for children upto two years of age and pregnant women.

5. 2019 World Environment day was Marked By Campaign to fight air pollution around the world. In Support of this event Deshbandhu NCC organised mass awareness rally and cleanliness campaign. During this event the cadets of Deshbandhu NCC held an awareness rally, telling people the side effects of air pollution and the method to eradicate it. For the preparation and guidance towards SSB, seminar was organized by Deshbandhu NCC on 25th October 2019. **Col. SBS. Yadav**, Ex- Board member as Psychologist was the speaker of the Event. Cadets from different colleges took part in this event. They were guided about GTO section, Psychology Section and the whole procedure of SSB.

6. **All India Thal Sainik Camp**

All India Thal Sainik Camp (AITSC) is held at Directorate General Of NCC, New Delhi from 16 September 2019 to 29 September 2019 every year. The Camp was Inaugurated by Lt. General Rajeev Chopra PVSM, In this camp various competition like Health And Hygiene, Map Reading, Best Cadet and Firing Competition etc are held. After very rough and tough selection process 1500 selected NCC Cadet from all 17 directorate.

Following Cadets were selected from Deshbandhu College NCC for this Prestigious Camp:

1. **J.U.O Abhishek Mishra** was selected as the Delhi Directorate Best Cadet during AITSC 2019. The selection was made on the basis of firing, interview, personality test and drill test.

2. **CPL. Ankur kumar** was selected as the Delhi Directorate Best Cadet during AITSC 2019. The selection was made on the basis of firing, interview, personality test and drill test

3. **CPL. Subhanshu Saman** was the part of Map Reading Team of Delhi Directorate. He also won Bronze medal in Inter Battalion Competition.

7. **NCC Republic Day Camp** is the culmination of all NCC Training activities. RDC is held at Garrison Parade Ground, Delhi Cantt. from 01 to 29 Jan. 1850 Selected NCC Cadets from 17 directorates attend the Camp. The Camp is inaugurated by the Vice President of India and culminates with Prime Minister's Rally on 28 Jan. During the camp, visit of Raksha Mantri, Cabinet Ministers, Chief Minister of Delhi, three Service Chiefs and various State Ministers/VIPs are also organized.

1. **CDT. Shikha** was the part of All India Guard Team for Prime Minister's Rally. She was bestowed with the rank of JUO during the camp.

2. **SGT. Narendra Tomar** was selected for Rajpath Contingent Of Republic Day Parade 2020. He was bestowed with the rank of J.U.O and he was the training J.U.O of Delhi Directorate Team. Rajpath Contingent consist of 140 cadets from all 17 Directorate.

3. **SGT. Kuldeep Bisht** was selected for Rajpath Contingent Of Republic Day Parade 2020. He was bestowed with the rank of J.U.O. Rajpath Contingent consist of 140 cadets from all 17 Directorate

4: **CPL Shubhantika Nayak** participated in cultural events of Prime Minister's rally held in KM Cariappa Parade Ground, Delhi CANTT. The Camp is inaugurated by the Vice President of India and culminates with Prime Minister's Rally on 28 Jan. During the camp visit of Raksha Mantri, Cabinet Ministers, Chief Minister of Delhi, three Service Chiefs and various State Ministers/VIPs are also organized.

- Lt. Basant Kundu our alumni is set to perform his Duty as a commissioned officer in Indian Army. He is from 2012-14 NCC Batch of Deshbandhu College. Lt. Basant Kundu got commissioned from Indian Military Academy, Dehradun in June 2018
- Our Former SUO VARUN PRATAP SINGH got recommended in 32 SSB from KAPURTHALA. After rigorous training at OFFICERS TRAINING ACADEMY, CHENNAI he will be passing out as Lieutenant on 7th march 2020. After tremendous achievements in NCC [Parasailing 2016, TSC 2016 (Gold Medal in MC), RDC 2017 (Delhi DTE BC, YEP KAZAKHSTAN), DG COMMENDATION 2018 and once again proved himself after cracking 32 SSB.

STAFF COUNCIL COMMITTEES

CANTEEN COMMITTEE

A canteen committee was constituted in the month of May, 2018; and following were the members.

Dr. Manisha Sengar, Dr. Deepti Gupta, Dr. Naveen Chandra, Mr. Sanjay, Dr. Shalender Singh Chouhn, Mr. Jagmohan Kaushik, Mr. Ramesh (Phy.), Mr. Satender (Phy.), Balwan Singh Ahlawat (office), Mr. Gagandeep (Zoology) and **Dr. Sunil Kayesth (Convenor)**.

Since 2107, Mr. Ashok was running the canteen. As the committee received repeated complaints and on-site verification, Mr. Ashok was asked to vacate the canteen and committee decided to open a new tender.

Retendering of the canteen was done on 9-8-2018, and 12 company/ firm had applied for the canteen. After verification of the technical specification, nine were shortlisted and were screened by onsite evaluation on the basis of taste, oil quality, waste disposal, cooking cleaning practices, infra-structure, staff services, No. of workers, worker uniform, safety, maintenance, item brands etc.

After On-site verification and screening the documents, four were called for the interview and Saint Marry Caterer was selected for running the canteen.

A letter to Mr. Ashok, who was running the canteen earlier was given on 9-10-18 and canteen was given to Mr. Razi, Saint Marry Caterer, for some civil work to be done for the smooth running of the canteen. After renovation and civil work done, he started the canteen from the month of November 1, 2018.

Mr. Razi operated the canteen for approximately one year but his quality and quantity was compromised after some times. Also, on the basis of repeated complaints, and his inability to fulfill college terms and condition, Mr. Razi was asked to vacate the canteen till the new allotment of tender. The committee opened a new tender for the canteen with some strict terms and conditions. On 18-06-2019 meeting, six tenders were opened by the committee and after verification of technical bids all were called for the interview. In the same meeting, the committee also recommended the opening of a coffee house in the campus. A tender for the Coffee house was also floated. After complete screening of the canteen and coffee house bids, a comparative statement was formed, in which, Diya Enterprises and Jay caterers were the firms who were fulfilled all the terms and conditions. On the basis of technical bids, financial bids and interview, the committee awarded Diya Enterprises for the Coffee house and Jay Caterer for the canteen to run in the college campus for three and one year subjected to the annual satisfaction of the canteen committee respectively. Both, the Diya Enterprises and Jay Caterer are successfully running the coffee house and canteen. Canteen Committee on the basis of regular on-site evaluation, feedback from students, teachers, and Non-teaching members recommended the extension of the tenure till 2020.

In the last, I would like to thank all the members of the canteen committee 2018-2019 and 2019-2020 session for full cooperation and working together as a team; and special thanks to Mr. Jagmohan Kaushik, (AO) Dr. Deepti Gupta, Dr. Manisha Sengar, Dr. Shalender Singh Chauhan, (Librarian), Mr. Gagan deep, (Zoology Lab. Staff), Mr. Satender Singh, (Phy. Lab. Staff), Mr. Ramesh Singh (Phy. Lab. Staff), and Mr Balwan Ahlawat (office staff) for their outstanding work. A special Thanks goes to Principal, Dr. Rajiv Aggarwal for showing confidence and guiding us during all the way.

Dr. Sunil Kayesth
Convener
(Canteen Committee, (2018-2020 and 2019-2020).

EDITORIAL BOARD (DESH)

The college publish an annual magazine DESH, which includes articles, poems and short stories written by students and faculty members. It also reviews the academic, cultural, sports and social activities of the college. It contains sections in six languages, English, Hindi, Sanskrit, Bengali, Punjabi and Sindhi.

FINANCIAL ASSISTANCE COMMITTEE

College is providing financial assistance to economically weaker section students who want to achieve academically height. In the financial year 2019-20, applications are invited for financial assistance and 625 students applied for the same. Members of financial assistance committee conducted interview to screen genuine needy students and out of 625, 356 were appeared for the same. Finally, committee members selected 178 students on the basis of their financial and academic background. College financially assisted all selected 178 students @Rs 5200/- each.

Thanking you.

Dr. Umesh Kumar
Convener, Financial Assistance Committee

GARDEN COMMITTEE

The Garden Committee of the college for the session 2019-2020 started functioning with the following members:

1. Dr. Manoj Singh
2. Dr. Aparna Nautyal
3. Dr. Vaishali Thukral
4. Dr. Deepti Gupta

Various meetings of the Committee were held during this academic session with the Principal and following steps were initiated and completed during this tenure with the cooperation of the committee members and gardeners of the college

1. Purchase of Petrol-operated Lawn Mower
2. Purchase of seasonal plant saplings
3. Purchase of pots for plants
4. Purchase and maintenance of garden equipment/items
5. On request, saplings and flowering potted plants for decoration for various functions held in the college was provided from time to time.
6. Plantation of 300 saplings was taken up within the campus in collaboration with NSS unit and NGO- Integrated Volunteers Network (IVN), under the Green College Project.

7. All the lawns in the college were bordered with hedge plants.
8. Pavement area was opened and grill work done bordering the pavement which connects Science block to Cafeteria.
9. Abandoned grills lying the central lawns were removed and relocated and the gardens were beautified with seasonal flowering plants.
10. New pipeline was established for the front lawn near gate.
11. The new garden areas created in front of New Science block and cafeteria were activated by supplementing soil and flowering plants were established.
12. The garden areas in front of Canteen and Porta cabin were activated by supplementing manured soil and flowering plants.
13. Tiling of the surface of the water harvesting underground tank was initiated and completed.
14. Meetings with experts were held to develop the garden near main gate. Manured soil was procured and filled in this garden area which was ruined during construction work and now, is made ready for development of lawn.
15. Pruning of all overgrown trees/ plants and mowing of lawns were done timely to maintain all the garden areas including the Botanical Garden.

Dr. Roshni Rajamohan Mathur

Convener, Garden Committee (2019-2020)

LIBRARY COMMITTEE

The Deshbandhu College Library has added following new facilities/features in the year 2019-2020:

- E-library section- The library has established E-library section for Teachers and students for facilitating their specific research requirements.
- Teachers' Reading Zone- The library also developed a new Teachers' Reading Zone with 50 seating capacity and new Seminar Room in the library.
- User Orientation Programme- In the beginning of the academic session 2019 – 2020, the library organised a User Orientation Programme for the First Year students.
- Electronic Resources in Teaching, Learning and Research- The library organized a lecture on 'Electronic Resources in Teaching, Learning and Research' for the faculty members of the college.
- New Books- The library added 2088 new books during 2019 - 2020 to strengthen the library collection.

PROSPECTUS COMMITTEE

Prospectus Committee successfully completed all the prospectus related work on time for the academic session 2019-20. Following is the brief report

- Quotation were invited by college for printing of Prospectus. The printer was selected by Purchase Committee based on lowest price quotation.
- System was installed by Printer in College and all the work was done in College under the supervision of Prospectus Committee.
- Prospectus Committee met time to time to make prospectus more informative and student oriented.
- To show our gratitude , a photograph and brief introduction of Lala Deshbandhu Gupta was given in the beginning.
- All the admission related necessary information was included both in Hindi and English language to meet the needs of all students. The main ordinances of University of Delhi were also given bilingually as in previous academic session.
- Subject combinations for BA (Prog) and seat distribution for various courses was incorporated as received from College office.
- Department in-charges were requested to send their updated information and course structure. All the information was appropriately incorporated in prospectus as received.
- There were dedicated pages for each department for the updated information and course structure of Honors Courses. The Course structure of Programme Courses was given separately as was in previous year Prospectus. A table of Course structure of BA (Prog) was included to make it easy to understand for students.
- A brief about the facility and resources of Deshbandhu College was given with details of library facility. Students Guide was updated highlighting the Attendance Rules and Internal Assessment Scheme to make students aware of academic requirement. NCC, NSS and other cultural activities were included under the head "Life at Deshbandhu"
- A page comprised of Notable Alumni of Deshbandhu College was added. More Alumni may be added in forthcoming prospectus.
- Admission related FAQ were incorporated. Further University help desk contact was included along with important helpline numbers.
- A comprehensive proof reading and corrections was done by committee members to minimize the errors to maximum extent possible.
- All the admission related forms of UG and PG were updated and printed
- A disclaimer was added stating that the information given in the prospectus informative and should not be used for legal purposes.
- Printer worked satisfactorily and delivered the order on time. The bill submitted by printer was checked and approved for payment by Prospectus Committee.

All the Committee members, Dr. Savita Singh, Dr. Aparna Shekhar, Dr. Pratibha Kumari, Dr. Rakesh K. Singh and Dr. Manish Kumar worked hard and gave their precious time during summer vacation to accomplish the task . Dr. Varsha Singh guided us whenever required. Without team work the timely completion of work was impossible.

Dr. Parul Singh
Convener
Prospectus Committee
2019-20

UNION ADVISORY COMMITTEE

The Students' Union Advisory Committee worked closely with the students' union under the leadership of "Dr. Sangita Singh" to ensure a holistic student development which was inclusive and collaborative in nature. Students worked on multi-dimensional activities. The Student Union was encouraged to innovate and explore new areas. The student union activities started with the oath taking ceremony which happened in the month of October. As a social responsibility initiative, a Clothes Donation Drive organised by the union in association with an NGO, "PEHLI AASHA" in the month of January 2020. Another important event "DESH KI BAAT" was organized by Student Union to spread awareness among youth in the nation building. Similarly, the Student Union organized a candle march in Kalkaji area to pay tribute to Dr. Priyanka Reddy, the Hyderabad rape victim in the month of December. The union for the benefit of girl students worked for the installation of sanitary pad vending machine in GCR and other girl's washroom of college campus along with incinerator. The union worked towards improving sitting arrangement in GCR, and better drinking water availability in the canteen. To improve college brand the union printed T-shirts and Hoodies as "Deshbandhu College". To encourage girl's participation in sports, the union helped in forming Volleyball and Cricket teams in the college. In the annual cultural event "SABRANG 2k20" of the college two well-known stars performed and other cultural activities were organized successfully in the month of March. The union members proactively addressed the issues brought to their attention by the students and dealt with them to the best of their abilities and satisfaction of the students.

WEBSITE COMMITTEE

The website committee was constituted in year 2017 to work on website design that is user friendly and an appropriate reflection of college activities besides providing important information to stakeholders. The website committee carries out updates of the website as well as coordinates with the vendor for the website maintenance.

For effective coordination with various departments/committees the website committee regularly takes input of TICs and other faculty members of all the departments in the college. Recently the committee facilitated design and development of google sites for individual departments to be linked and embedded in the main website.

There is a detailed access to Academics section including department wise sections. The CVs of all the faculty members were updated. New heads for AQAR, NIFR (National Institutional Ranking Framework) have been incorporated. A new link for Examinations directing to Delhi University portal is functional under Academics now.

The Research section was restructured and updated and has been augmented with new head for Abstracts & Articles and Books.

The Library section which consists of links to Delhi University Library System and DELNET was restructured and updated. College magazine Desh was also added in there as well as the Library rules made up to date. Webopac, which is the Online Public Access Catalogue which allows users avail the services of the library using Internet was made functions after the library software was updated. Page under the head 'Electronic Resources in Public Domain' was reviewed and scaled up.

Students section has been enhanced with various new heads, E-resources, Time table being the most significant. Time tables of all the courses are available in the Time table page of the Student section.

For the OBE exam a google site was designed and maintained by the website committee for having all OBE related information segregated and available at one click. IQAC and ICC sections were created.

Other updates include but not limited to Notices for faculty and students and events, IQAC page, NCC/NSS/Sports. Video and photograph gallery is regularly updated as well as 'Discover More' section was redesigned.

In the last semester when online teaching started website committee maintained and updated the e-resources page of all the departments. Regular posting of lecture notes and other reading materials was made available to the students at the e-resources page.

For online admissions new items have been added to Students section specifically keeping in mind the online admissions. Admission cut off lists are regularly updated.

All this work has been possible due to efforts and cooperation of all the members of the Committee. The web committee would like to express gratitude and thanks to our Principal, Dr Rajiv Aggrawal for his constant support and direction.

Dr Jyoti Trivedi
Convener
Website Committee

Extension Lecture Committee

1. Extension Lecture Committee and IQAC organised a talk on 'PRIME MINISTER OVER DECADES' on 19th Sept, 2019 by SHRI SHAKTI SINHA, DIRECTOR, Nehru Museum and Memorial Library. The session was extremely enriching. We all get enlightened as professor took us through the historical journey of the evolution of the institution of the prime minister's office through the corridors of power-The prime minister's secretariat, PMO.

2. Extension Lecture Committee and IQAC organised an eye opening lecture on "THE KILLER NO.1" on 4th Sept, 2019 by DR. SHIV CHOUDHARY, CARDIOLOGIST, AIIMS.

"Prevention is better than cure", said by, Desiderius Erasmus is the most widely used quote in almost every field, especially medical. Extension Lecture Committee of Deshbandhu College had organised a lecture on the topic "Killer No. 1" on 4th September, 2019 in the college premises. The committee invited Dr. (Prof.) Shiv Choudhary, Cardiologist, AIIMS. The programme began with the lighting of lamp and Saraswati Vandana. After that, Convener of the committee, Prof. T.S. Rao felicitated the honourable speaker. After a short welcome speech by the Convener, Dr. Choudhary started his presentation. He enlightened the students regarding heart failure and heart attack, its symptoms, preventions and cure. He presented statistics and various short videos using the projector.

While concluding the session, he cleared the doubts of students. The day ended with the national anthem leaving the audience with a lovely resonance lasting in their minds. The entire programme was applauded by all.

3. National/International MOUs signed: NA

4. Other Inter Institutional Collaborations: NA

5. Students Under Exchange Programme : NA

6. Faculty strength

- Permanent faculty: 109
- Ad hoc faculty: 104
-

7. Financial Allocation and Utilization

- Grants Sanctioned : Rs 87.60 + (6.26 previous) cr
- Utilized : Rs 74.81 cr

8. Other Significant Information

This year our College has continue taking grant from “STAR College” scheme by the Department of Biotechnology DBT, Govt. of India.

9. Contact details of Co-ordinators for Annual report 2019-2020 of College:

Dr. Aditya Saxena
Assistant Professor
Department of Physics
Email- asaxena@db.du.ac.in
Contact : +91-9810505144

Mr Saswata Bhattacharya
Assistant Professor
Department of English
Email: saswata14@gmail.com
Contact : +91-9910363959

Principal, Deshbandhu College