

# ANNUAL REPORT 2019-20

DAYALBAGH EDUCATIONAL  
INSTITUTE



## Table of Contents

Serial No.	Details	Page No.
1.	About the Institute	1
2.	Administrative Report	15
3.	Institute's Achievements	21
4.	Staff and Student Strength and Composition	23
5.	Institute Finance	29
6.	Faculty of Arts	33
7.	Faculty of Commerce	48
8.	Faculty of Education	54
9.	Faculty of Engineering	65
10.	Faculty of Science	75
11.	Faculty of Social Science	111
12.	Schools and Colleges	121
13.	Seminars and Conferences	153
14.	Activities at DEI	158
18.	Annexure-I	



दयालबाग एजुकेशनल इंस्टीट्यूट  
(डीम्ड यूनिवर्सिटी)  
DAYALBAGH EDUCATIONAL INSTITUTE  
(DEEMED UNIVERSITY)

DIRECTOR

MESSAGE



The Dayalbagh Educational Institute has a rich tradition of pursuing excellence and has been continually evolving, progressing and adapting to the changing time while remaining strongly pivoted to the DEI education policy 1975. Education at DEI begins at the tender age of three weeks, with infants and their parents participating in daily community activities such as working in the agricultural fields. This programme, called the 'Superman Evolutionary Scheme', is open to all children between the ages of 3 weeks and 5 years. Institute wide core courses at the undergraduate level facilitate interaction with surrounding social, ecological and economic system, which helps in moulding personalities who look for causes and solutions. DEI also follows the systems approach to education and has created an ecosystem that encourages innovative small ideas from young students on socially relevant problems leading to innovative frugal or jugaad solutions which have led to the creation of many student-run on campus enterprises.

Acting upon the quote by Vince Lombardi, "Winners never quit and quitters never win," we made every effort in adapting to the challenges posed by lockdowns during the COVID-19 pandemic without any loss of time and quality. Through the Virtual classrooms set up since 2004 we were able to deliver education practically at the doorstep of its students, following norms of supervised online education without any misuse of ICT. Access to 476 ± 1 centres, 1577 virtual groups on video and 71,000 individuals on audio meant that content created in multiple languages in hard and soft forms could be easily and quickly distributed among students. Development of Bio-diversity parks and agriculture fields proved to be a boon: the wide and open spaces provided excellent platforms for teaching and working in Lab-on-Land activities while maintaining social distancing and other precautions. Admissions also proceeded as scheduled even under the new normal through online, supervised entrance exam, followed by interviews.

Dayalbagh, Agra – 282 005, Uttar Pradesh, India  
e-mail : deidirector@gmail.com; director@dei.ac.in  
Phone : +91 562 2801545 (O) Fax : +91 562 2801226



दयालबाग एजुकेशनल इन्स्टीट्यूट  
(डीम्ड यूनिवर्सिटी)  
DAYALBAGH EDUCATIONAL INSTITUTE  
(DEEMED UNIVERSITY)

DIRECTOR

The philosophy of "Waste nothing" has remained cardinal to our lifestyle that aims at reducing wasteful consumption of all-natural resources viz., energy, water, food and in short, all resources. Through this way of living we curate and scale up DEI-CUM-Dayalbagh MODEL of *Sustainable Modern Healthcare Habitat and Self-defence*.

DEI faculty and students participated in the MIT Hackathon 'COVID-19 Challenge- India: Turning the Tide' and won several awards and recognitions. The Institute was ranked 1<sup>st</sup> in AICTE Utkrisht Sansathan Vishwakarma Award, 2019 for its commendable work in uplifting tribals of Rajaborari. Several new Undergraduate, Postgraduate, Vocational, Certificate and Diploma programmes were introduced during the session. DEI also signed several MoUs with national and international institutions/universities enabling enhancement of research and educational programmes at the Institute, organized the bi-annual Dayalbagh Science of Consciousness Conference on May 22, 2020 and conducted several webinars and organized lectures by several distinguished speakers.

On September 19, 2020, DEI hosted an interaction with Mr. Sam Pitroda, widely acknowledged as the Father of India's Computer and IT Revolution. Overwhelmed by the DEI's commitment to academic activities even during the crisis caused by COVID-19 pandemic, Mr. Pitroda remarked: "There should be a DEI in every district of India". On September 23, 2020 similar sentiments were expressed by the former Deputy Governor, RBI, Prof. Viral Acharya, currently Professor of Economics, NYU Stern School of Business: "Eco-system works not only on education of children at the last mile but also works on vocational training. It is something that I have always felt necessary to meet the needs of employment for the Indian youth".

*Prem Kumar Kabe*

Dayalbagh, Agra – 282 005, Uttar Pradesh, India  
e-mail : deidirector@gmail.com; director@dei.ac.in  
Phone : +91 562 2801545 (O) Fax : +91 562 2801226

## Executive Summary

Dayalbagh Educational Institute (DEI) has been pursuing the mission of evolving a complete man with knowledge, skills, values, attributes, and social sensibilities. It has focused on the development of such desirable traits, sensibilities and attributes from its very inception and has planned activities to target complete development of an individual starting as early as 3 weeks of age. At the University level it comprises of Faculty of Arts, Architecture, Commerce, Education, Engineering, Science, Social Sciences and Integrated Medicine (AYUSH), Homeopathic Medical College and Hospital. There are 23 Departments, which offer 150 programmes that include UG, PG, MPhil and PhD programmes. The Institute was accredited by National Assessment and Accreditation Council (NAAC) with A+ Grade having a CGPA of 3.4 out of 4.0 and has been granted Graded Autonomy as per UGC Regulations 2018. It was ranked No. 82 in the University Category, 102 in the Engineering Category in National Institutional Ranking Framework, 2020. The Institute has taken several initiatives for societal contribution offering a number of core courses with credits in the curriculum as a unique and mandatory instrument leveraged for development of value systems among all undergraduate students. DEI is supporting 443±1 Experimental/Research Centres including centres from tribal areas using ICT and Renewable Energy support. The Institute was ranked 1<sup>st</sup> in AICTE Utkrisht Sansathan Vishwakarma Award, 2019 for its commendable work in uplifting tribals of Rajaborari. The Institute has been actively involved in collaborative programs with national and international organizations/universities to remain at the forefront in scientific and technological developments and to share the knowledge for mutual benefits.

The following new programs were introduced in the session 2019-2020

- ✓ Bachelor of Business Administration (Logistics)
- ✓ Bachelor of Business Administration (Retail)
- ✓ Bachelor of Arts (Cognitive Science)
- ✓ Bachelor of Science (Cognitive Science)
- ✓ Master of Business Administration (Waste Management Social Entrepreneurship)
- ✓ Post Graduate Certificate in Financial Services
- ✓ Post Graduate Diploma in Waste Management and Social Entrepreneurship
- ✓ Bachelor of Vocation in Telecommunication
- ✓ Bachelor of Vocation in Bamboo & Wood Technology
- ✓ Bachelor of Vocation in Recycled Craft Design

The following programmes were introduced at the various Experimental Centres in the session 2019-20. BBA (Hons), Post Graduate Diploma in Theology, Installation & Maintenance of Solar Electrical Systems, Motor Vehicle Mechanic (2 Wheeler), Cutting & Sewing, Textile Designing and Printing, Dress Designing and Tailoring, Office Assistant-cum-Computer Operator, Wireman, Screen Printing, Block Printing, Tie and Dye, Hand Embroidery & Sewing Operations. The Faculty of Education was granted the status of School of Education under the Pandit Madan Mohan Malviya National Mission on Teachers & Teaching (PMMMNMTT) in February 2019 with a funding of Rs. 9.5 crore

In the current adverse situation of COVID-19 pandemic DEI was able to meet the challenge of continuing teaching and evaluation in concurrence with the academic calendar. At DEI, faculty members are actively using platforms like Google Classroom, Google Meet, Google Forms and Moodle

(an open source LMS) and Microsoft Teams for effective teaching and evaluation. Since March 2020, when the country was under the phase of lockdown, there has been no loss to student's academic schedule with continued teaching through these platforms at DEI. Supervised teaching and learning process continued in the form of video lectures, content sharing through these virtual classrooms. Supervised examination and evaluations were conducted with an active use of mix of Google forms and Google classroom, ensuring full adherence to the government orders with respect to preventive measures.

The societal impact of Dayalbagh Educational Institute has attracted premier top-ranking institutions globally for partnership. During the 2019-20 Dayalbagh Educational Institute continued existing collaborative programs with several of its partners and also signed some new agreements for international cooperation with multiple international partners. Dayalbagh Educational Institute and CSIR-Indian Institute of Toxicology Research, Lucknow signed a Memorandum of Understanding (MoU) on 17<sup>th</sup> February, 2020 at DEI main Campus, Dayalbagh, Agra.

During the financial year 2019-2020 the Institute received Rs. 4849.11 lakh as Maintenance Grant from UGC and Rs. 61.17 lakh as UGC Deen Dayal Upadhyaya (DDU) grant and Rs. 588.62 lakhs as Capital Assets and Revenue. The UP Government sanctioned a grant of Rs. 1922.54 lakhs as Regular Salary Grant and Rs.10.28 lakhs for NSS. The income from investment from non-government sources amounted to Rs. 732.27 lakh. The Unit Cost was Rs. 89,585/- (without salary).

During the session the Institute has undertaken 55 sponsored research projects worth Rs. 28.78 Crore sponsored by DST, MHRD, UGC, ICSSR, Ministry of Textiles, ISRO, MNRE, DBT, AICTE and UPSDM, AICTE, Ministry of Tourism. The Ministry of Textiles and Handicrafts had funded the Institute with Rs. 10984380 for training of students of socially and financially challenged class to become entrepreneurs. During the session 2019-2020, 164 students received fellowships in the form of JRF, SRF, PDF and Inspire fellowships.

The 38<sup>th</sup> Convocation of the Institute was held in all solemnity on 18 January, 2020. Director's Medals were given to students attaining highest Grade point in various programmes of study at different levels. Total 110 Director's Medals were awarded and 61 students received the degrees of Doctor of Philosophy (Ph.D.). Pankaj Chaudhary and Kalyani Gupta were awarded the President's Medals for securing highest Grade point in All Under-graduate and Postgraduate Examinations, 2019 respectively. Ritika Swaroop received the Founder's Medal for being the Best All-rounder among the first Degree Students of the Institute graduating in the year 2019. The Distinguished Alumni Award and Citation was conferred to Mr. P.P. Mehta, a renowned and well-accomplished Alumnus of the Institute.

# About the Institute

---

For over 100 years, the Dayalbagh Educational Institute has been sharing knowledge and cultivating the brightest minds. Today, we are one of the best Institutes.

The Dayalbagh Educational Institute is situated at DAYALBAGH, located on the northern outskirts of Agra at a distance of about two kilometers from the city of Agra. Dayalbagh is a self-contained colony well-known for its serene environment, secular establishments, like, the industries, the educational institutions, the agriculture farms, etc.



## Vision and Mission

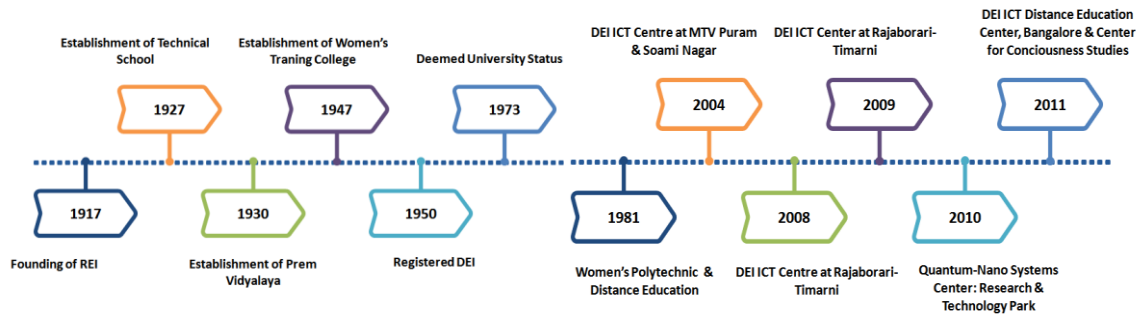
***A leading teaching-cum-research Institute with focus on Entrepreneurial Education and Consciousness Studies***

A model Deemed to be University that believes in excellence with social relevance, imparting values-based and quality education, with the objective of reaching the last, the least, the lowest and the lost; contributing to nation and community by empowering weaker sections, women and children, building the economy through research and frugal innovation anchored in the principle of achieving more with less.

Education in DEI is rooted in its Education Policy (1975) with a focus on the development of all three dimensions of a human being, i.e., physical, mental and spiritual, which can be achieved by undertaking intellectual, physical and social activities. The Institute has implemented a unique scheme of innovative, comprehensive, inter-disciplinary, flexible and value-based education, based on total quality management that fosters academic excellence along with holistic development, from pre-school to university level. The focus has mostly been on developing methods, procedures and technologies that are customized to the needs of Indian conditions that benefit society at large, that are sustainable and cost effective and are aimed at enhancing the overall quality of life of the masses.

## Past: Laying a Foundation for Excellence

## Dayalbagh Educational Institute (Deemed to be University), Agra



After the foundation of Dayalbagh in 1915, the Radhasoami Satsang Sabha, in pursuance of the lofty ideal to evolve the superman of tomorrow, started the Radhasoami Educational Institute, as a co-educational Middle School, open to all, on January 1, 1917. Administered by a Managing Committee registered under the Societies Registration Act XXI of 1860, the Institute, since the very beginning, combined the pursuit of academic studies with sensibilities involving moral and spiritual values. From the modest beginning, the nucleus not only grew breaking the barriers, spawned new institutions, as per the needs of the society and the demands of the time. Within six months, it was raised to the level of a High School; Intermediate classes were started in 1922; it became a Degree College in 1947 with the introduction of B.Com. Classes affiliated to Agra University; BEd (B.T.) classes were added in 1951 and the first batch of BSc students took their final examination in 1955. A Technical School, which later developed into a college, was started in 1927 for imparting training in Automobile, Electrical and Mechanical Engineering, leading to the award of diplomas in the concerned branches of Board of Technical Education, U.P. The Leather Working School which was started in 1930, gives instructions in both theory and practice for the manufacture of leather goods.

To further the cause of women's education, Prem Vidyalaya was started in 1930. It is now an Intermediate College for girls. The Women's Training College was established in 1947 with BA and BEd Programmes. Subsequently, in 1958 MEd, in 1969 MA (Psychology/English/Hindi) and in 1976 MA (Music) Programmes started. It made phenomenal progress to become one of the premier women's colleges in the country. Engineering College, affiliated to Agra University, for the degree of BSc (Engineering) in Electrical and Mechanical Engineering branches, was added in 1950 to the chain of educational institutions in Dayalbagh. A significant development of far-reaching consequence, in the history of education at Dayalbagh, was the establishment of the DAYALBAGH EDUCATIONAL INSTITUTE as a registered body in 1973, which integrated and brought under one umbrella all the educational institutions of Dayalbagh, including the School of Comparative Study of Religions, the School of Languages and the School of Art and Culture.

In 1975, the Dayalbagh Educational Institute formulated an innovative and comprehensive programme of undergraduate studies which received approbation from the Government of Uttar Pradesh and the University Grants Commission, as a result of which, in 1981, the Ministry of Education, Government of India, conferred the status of an institution Deemed to be a University on the Dayalbagh Educational Institute, to implement the new scheme. In 2009, the Dayalbagh Educational Institute was placed in the **First Category** of 38 "Deemed Universities" among 126 "Deemed Universities" reviewed by the Ministry of Human Resource Development (MHRD), Government of India and was adjudged to be at the 8th rank among the 126 "Deemed Universities". In 2013, the National Assessment & Accreditation Council (NAAC) assessed the Institute and placed it in the category of 'A' Grade Universities. Recently, the Institute has been included in the list of "Deemed to be Universities" under section 12B of the UGC Act, 1956. The University has been awarded the ISO 9001: 2015 Certification. According to NIRF Ranking declared by Ministry of Human Resources and Development, the Institute is placed at 63rd rank in the Category of University, 69th rank in the Category of Engineering and 90th rank in the Overall Category out of 957 Institutions.



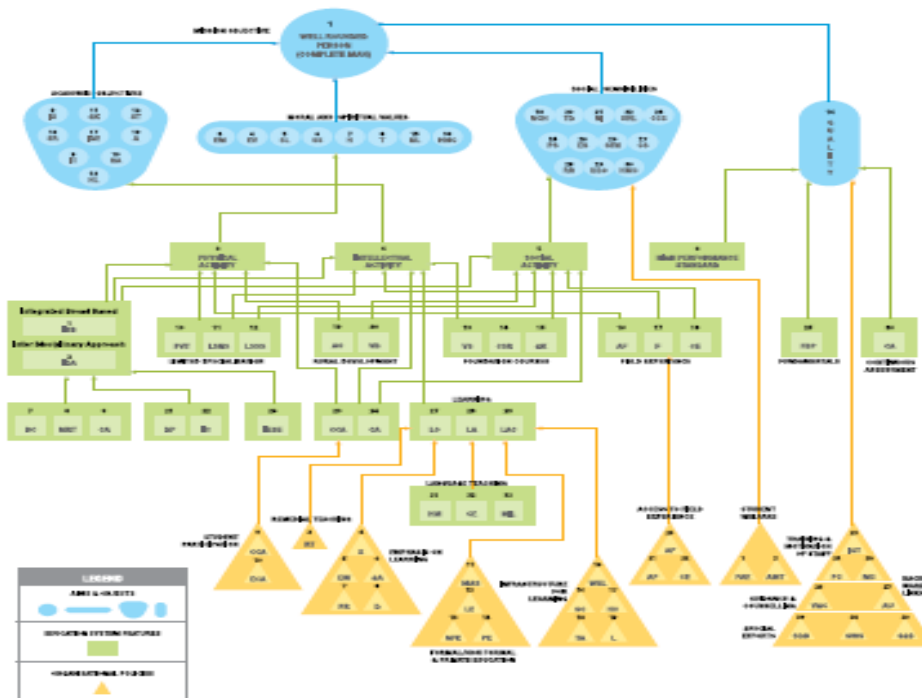
Present: An Institute *sui generis*

The DEI Education Policy

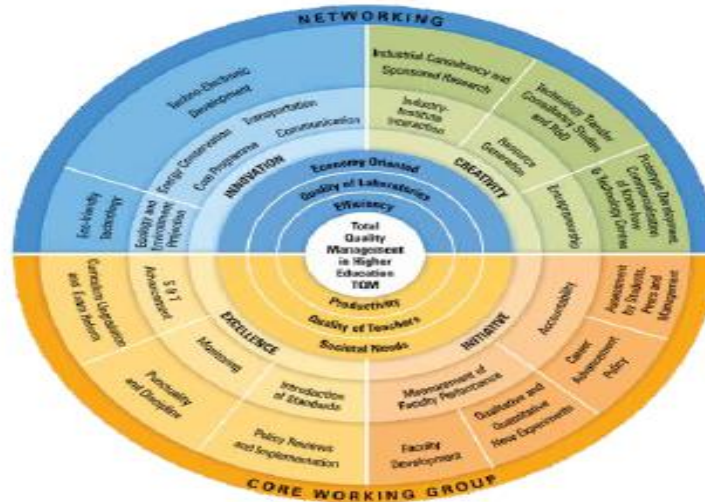
The DEI Education Policy was conceived, planned, formulated, crystallized and executed by the Supreme Teacher Param Guru Dr. MB Lal Sahab and was articulated in 1975. It laid down the following foundational concepts:

- Physical, intellectual, emotional and ethical integration of an individual to help
- Evolve the complete man with values of humanism, secularism and democracy, to better equip him to solve social, economic and environmental challenges.
- Truthfulness, temperance and courage
- Ideals of humility, simple living, selfless service and sacrifice
- Habit of learning by developing the faculties of thinking, analysis and reason
- General awareness and knowledge
- Best in class-relevant education
- Scientific temper
- Respect for 'soiled hands', dignity of labour, and, self-reliance
- Study of the classics, and pride in national culture and heritage
- Shaping each student for a calling suited to his aptitude, skills and the needs of society
- Understanding of various beliefs and faiths, which fosters an attitude of tolerance and national unity
- Engendering the spirit of 'Brotherhood of Man', and promoting the establishment of a classless and casteless society
- Fuller understanding of rural life, to appreciate the polity, economy and the social forces at work in our country
- Democratic values and freedoms which an Indian citizen should be prepared to defend ,, ,, respect for the rights of others and an awareness of duties and obligations to society
- Strong character and high ethical standards

Interpretive Structural Model for Educational Policy of DEI



Committed to providing a high-quality cutting edge academic environment for its students, DEI's educational programmes provide opportunities for creativity and hands-on work experience on live projects, woven in with a strong value system. DEI endeavours to achieve quality in Higher Education through the Total Quality Management framework shown in the figure.



A Conceptual Model for the Total Quality Management (TQM) Framework in Higher Education (Professor P.S. Sothwal, Chairman Advisory Committee on Education, Dayalbagh Educational Institutions and former Director, DEI, 2002, 'TQM in Higher Education and Technical Education')

The DAYALBAGH EDUCATIONAL INSTITUTE was declared as an institution *Deemed to be a University* from the session 1981-82, under Section 3 of the University Grants Commission Act, 1956 (3 of 1956) by the Government of India. The Institute has since been accorded the membership of the Association of Indian Universities. The Institute comprises faculties of Arts, Commerce, Education, Engineering, Science and Social Sciences, twenty two departments and three non-university colleges, the DEI Technical College - a diploma level Engineering Institution for boys and a Women's Polytechnic for girls, the DEI Prem Vidyalaya Girls' Intermediate College, and the REI Intermediate College. DEI also manages both academically and administratively, schools in Madhya Pradesh, New Delhi and Roorkee. The Institute offers several vocational courses a major programme of Distance Education to benefit students residing at urban-suburban interfaces. In the year 2015, Dayalbagh Educational Institute was empanelled as Government Training Partner (GTP) with Uttar Pradesh Skill Development Mission (UPSDM), Department of Vocational Training & Skill Development, Uttar Pradesh State Government to train youth in various vocational skills. Also, a Deen Dayal Kaushal Kendra was sanctioned to DEI by MHRD to offer B.Voc., M.Voc. and PhD degrees in skilling. DEI is the only institute in the country running nine Bachelors program in vocation. These vocational programs integrate student run on campus enterprises. The Institute offers around 75 programmes at Certificate, Diploma, UG Degree, PG Diploma, PG Degree and research degree levels.

DEI believes in shared responsibility and accountability to bring out the best in others. Hence, decentralization has been adopted to take education to the doorstep of the learner. This has resulted in many Off-Campuses being developed at Delhi, Melathiruvenkatanathapuram, Timarni, Bengaluru, Murar, and Amritsar.

The Institute offers a broad spectrum of central facilities to its students. These include Central Library, Computer Centre, Games and Sports facilities, Hostels, Language Laboratories, Medical and Health Care Centre, Multimedia Laboratory, Non-Resident Students' Centres and Canteen. 'Quantum and Nano-Computing Virtual

Centre'(QNCVC), a multi-disciplinary research centre has been set up in the Institute, under Ministry of Human Resource Development, Govt. of India, through its National Mission on Education. The Centre has IIT Kanpur, IIT Delhi and IIT Madras as partners besides several international collaborators. The 'Centre for Consciousness Studies (CCS)' has also been established to undertake research pertaining to this fast-emerging domain of knowledge. CCS hosts on regular basis leading luminaries in the field from across the world for lecture series, focused workshops and seminars/conferences.

The Dayalbagh Educational Institute follows a unique scheme of innovative, comprehensive, inter-disciplinary and value-based education that fosters academic excellence along with holistic development, at university and non-university level for both-general and technical education. A multi-disciplinary approach prepares students for an increasingly techno-oriented society, connecting them with agriculture, and valuing the dignity of labour. Students imbibe basic values of humanism, secularism and democracy through an exposure to the principles of all major world religions, and better understand their own cultural heritage. The educational system aims to provide affordable quality education to all sections of society, irrespective of the student's caste, colour, race, and gender. It aims to prepare individuals with emotional and spiritual strength who can contribute to development of their community and nation.

Dayalbagh Educational Institute's (DEI's) values education-based quality policy is exquisitely configured on its aims and objective of bringing about the physical, intellectual, ethical and emotional integration of an individual with a view to evolving a well-rounded complete person. The education policy of the DEI since its genesis with its long-range vision for the progress of the nation has been delivering excellence without compromising on its relevance in the changing times.

Today DEI integrates six pillars of education from pre-nursery level onwards with skill pathways at all levels of education. DEI's unique dual (conventional and skill based) pathways of education with provision for multiple entry and exit points, providing access to higher education to learners from all walks of life at affordable cost. With 7 faculties, 23 departments and well-equipped laboratories, DEI harnesses its societal connect and actively feeds back its best research outcomes and experiential knowledge to the society and rural communities. DEI strives to develop respect for soiled hands and uphold the dignity of labor in its students. Unique schemes for student welfare like 'Earn while you learn' have sown the seeds of responsibility and self-reliance in the pupils of DEI.

The Institute stresses on combination of excellence in research with relevance to the contemporary needs of society, the nation, and the world at large. At the local level, DEI collaborates with the local community, government and non-government organizations to solve problems, facilitating engagement in experiential learning opportunities for students and scholars, allowing them to return to the community. Internationally, DEI partners with institutions that can help extend its global reach and transfer knowledge in the field where DEI plans to focus its research. DEI has established international collaborations and MoUs with several Institutes in Asia, America and Europe. These collaborations have led to joint conferences/seminars and workshops, exchange visits of faculty and students, shared projects, publications, training of manpower and common curricula / courses. Strong support of alumni and friends of DEI has enabled setting up remote learning centers across 400 centers in India and abroad. Objective of these learning centers is to provide access to education to the least on the last mile.

Skill development and entrepreneurship are integral to the Academic Program of DEI, since inception in 1917. In recent years, DEI has launched several vocational courses, in sync with one of the primary objectives of the Government of India: producing a highly skilled workforce for nation building. DEI now is one of the single largest skill providers in the country. DEI has also been recognized by the MHRD and the Government of UP as a key public sector agency for vocational training. The Sector Skill Council of Green Jobs has certified DEI as the best Solar Skill Training Institute. DEI took a quantum leap in the arena of entrepreneurship development through well-established laboratories and Skill Parks in various fields, viz. Automotive Workshops, Apparel and Toy Manufacturing, Agro & Dairy Business, Consciousness Studies etc. An intelligent marketing network was

Dayalbagh Educational Institute (Deemed to be University), Agra

established, connecting rural and tribal zones to global economies. Setting up e-Portals and Business Advisory Clinics has also opened novel avenues for entrepreneurship to the students of DEI. DEI has set up rural resource centers/ incubators called karkhanas in the rural zones to accelerate entrepreneurial activities:

#### **ATMA (Apparel and Toy Manufacturing Karkhana) :**

In this karkhana well experienced faculty from the DEI visit and train rural women on garment stitching and soft toy making. Rural and tribal women now regularly stitch ready to wear female uniform for the students. The products made while training is marketed by DEI and labour cost / stipend given to the rural / tribal learners.

#### **ADyNaM (Agri Dairy Nano Processing of Multi-products) Foods**

ADyNaM has facility for processing of the agricultural and dairy based raw produce to make secondary products. Women are trained on production of pickles, chutney, amla candy and squashes. Recently, a Level-1 food testing laboratory has been setup to implement quality control and to comply with the food safety standards.

#### **AAM (Automotive and Multiskill) Karkhana**

This karkhana is aimed at developing skills in repair, maintenance of two wheelers, tractors, farm equipment and solar systems.

#### **Future**

**Emerge as one of the leading inclusive, regionally focused Institute with excellence in specific disciplines with strong societal outreach and delivering holistic education to every aspiring learner**

#### **Broadening and Deepening our Discipline Offerings**

##### **Introducing an Audacious New Curriculum**

DEI has always advocated and is practicing 'excellence with relevance.' DEI envisions to be a leading teaching cum research institute in Consciousness studies and Entrepreneurial education with emphasis on agriculture, dairy farming and healthcare. In DEI this pursuit is carried out through study of consciousness which brings together teachers, researchers and students from various disciplines like psychology and cognitive science, physics, mathematics, life science, language studies, Arts and music, engineering management etc. to brainstorm on the complex problem of consciousness and ultimate reality. Rigorous scientific research is being carried out to understand the experiential science through experimental techniques.

#### **Working towards a sustainable world**

##### **The 'SIGMA SIX Q' Approach**

Research and technological advancement benefitting the immediate social fabric is common to the community of DEI. Mostly the research focus has been on developing methods, procedures or technologies that are customized for Indian societies that are cost effective to ensure equal penetration at every social level aiming at the overall enhancement of quality of life of the masses. This approach at DEI termed as the SIGMA SIX Q approach strives to achieve excellence through quality, values, innovation and creativity. This approach weaves the SIX basic yarns important for better livelihood giving emphasis on research towards improving the QUALITY (Q) of life. The six qualities are Innovation, Air Quality, Water quality, Health and Education, Agriculture and Dairying and Values such as Duty, Beauty, humility, courage, Temperance, Wisdom, Loyalty and Justice. The cumulative effect of interaction of all the six components is many times more than their individual effect that leads to a synergistically enhanced impact on the system. The areas of research focus are:



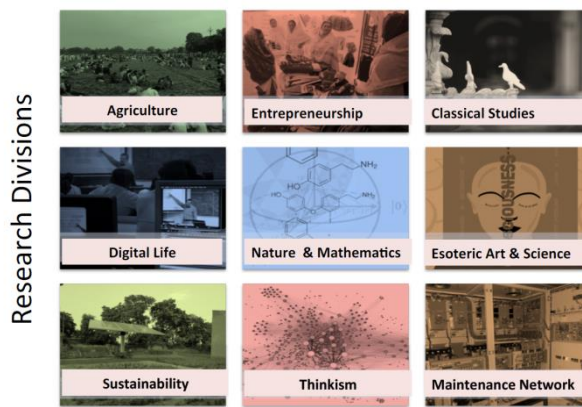
### Research with Impact, Engaging with our Communities

The Institute follows the Living Lab approach that personifies experiential education through skilling in globally relevant and emerging technological areas like Renewable Energy, Internet of Things (IOT), Dairy Technology, Water, Health and Sanitation among others. Based on the distinguished past, present academic wealth and in anticipation of future global challenges, DEI has identified nine emerging multidisciplinary research areas, Agriculture, Entrepreneurship, Classical Studies, Digital Life, Nature and Mathematics, Esoteric Art & Science, Sustainability, Thinkism and Maintenance Network. These areas are globally deliberated by technologists to address the *locus standi* of humans in the era driven by super-intelligent machines and break the traditional boundaries of departments and faculties and create multidisciplinary research divisions to converge diverse expertise from science, humanities, technology and management.

### Committed to Reconciliation, Welcoming Women

DEI has created lab-on-land in the areas of dairy farming, renewable energy, security and surveillance. This concept unfolds the challenges of real life and leads to research and experiments to address these issues. It is proposed that same will be done in agriculture through diversification. Lab-on-land experimentation and research will be carried out at all off campuses and technology interventions will be the prime area where students will be trained on precision agriculture, increased yield (three different crops per year). Diversification of agriculture will build the enterprises around green (agri) and white (dairy) economy across the country.

It is the only Academic Institution in North India with FSSAI and HACCP license to export flavoured milk to the USA. This is reaffirmation of its commitment to become a fore runner in heralding the 2<sup>nd</sup> White revolution and is reminiscent of the 1930s, when the Dayalbagh Dairy was deemed as being the Best in Asia. It is proposed that same will be done in agriculture through diversification. Lab-on-land experimentation and research will be carried out at all off campuses and technology interventions will be the prime area where students will be trained on precision agriculture, increased yield (three different crops per year). Entrepreneurial education in DEI has different flavour. DEI has been engaged in mobilizing the lost youth with least resources to engage purposefully with any of the six pillars of education in DEI. For this DEI regularly organizes medical camps in the rural areas every fortnight through the NSS wing. These medical camps apart from free medical checkups, also offers skilling activities for children. These activities are called 'hole in the wall' experiments. These activities create a hole in the wall of social and economical barriers and allow them to explore and access the world full of opportunity for development and progress. Agricultural counselling, skilling for women is also a part of these medical camps. DEI aspires to engage every applicant with NO-MEANS in education by creating enough opportunities for earning for sustaining themselves to bring many students to the mainstream education and in building their scholarship.



# Organizational Structure

---

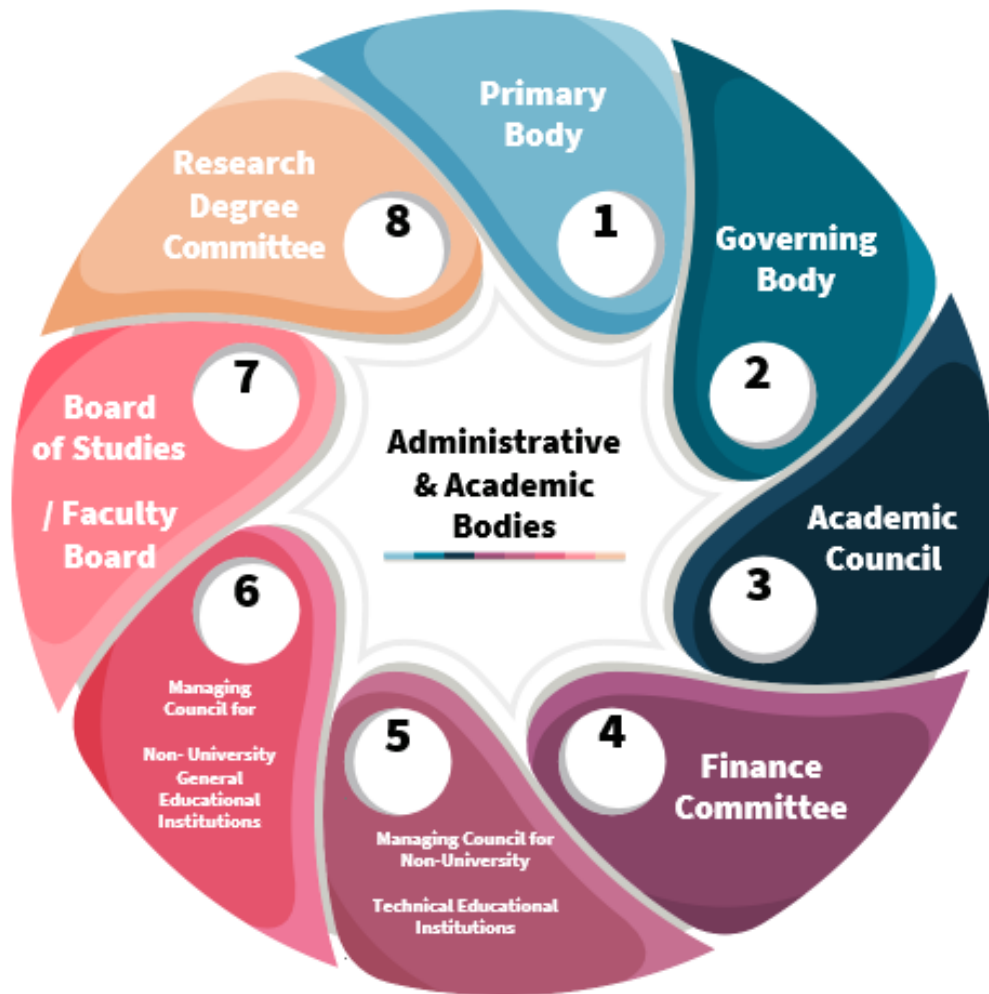
The senior administration of the Institute consists of the following.



## Administration:

- Administrative Officer (Computers): Mr. H. K Khanna, M.Sc.
- Assistant Registrar (Administration): Mr. C.B.S Yadav, M.A
- Assistant Registrar (Academic): Mr. Gur Sewak Singh, B. Com
- Assistant Registrar (Accounts): Mr. S.D Verma, M.A

### Administrative and Academic Bodies



#### Primary Body

The Primary Body of the Institute consists of 25 members, the details of which can be seen from the figure below. Generally, the Primary Body meets once every year.

### Primary Body (25 Members)

President (Chairman)	Director	Treasurer	Deans of Faculties
6 members nominated by the General Body of the Institute	Nominee of the Ministry of Education, Government of India	Secretary Education, U.P	Nominee of the AICTE
1 nominee from DEI WTC, DEI Engineering College Society, and Managing Committee of REI	Nominee of the Dayalbagh Medical Relief Society	Nominated trustee of the Dayalbagh Educational Trust	Two nominees of the President of the Institute
Registrar as the ex-officio Secretary of the Governing Body			

### Governing Body

### Governing Body (15 Members)

Director (Chairman)	Treasurer	Nominee of the Ministry of Education, Government of India	Director, Higher Education, U.P.
Nominee of the Radhasoami Satsang Sabha, Dayalbagh	Representative each of Industry and Agriculture of Dayalbagh nominated by the Institute President	2 Deans from amongst the Faculties of the Institute by rotation	Nominee of the Chairman, UGC
Nominee of the Academic Council of the institute from amongst its members	Nominee of the Managing Committee of REI	Registrar as the ex- officio Secretary of the Governing Body	

The Governing Body of the Institute consists of 15 members as can be seen from the figure below. The Governing Body meets as often as necessary.



### Academic Council

The Academic Council meets as often as necessary. The Academic Council of the Institute consists of the members as shown in the diagram below.



### Finance Committee

The Finance Committee of the Institute consists of the. The Finance Committee meets at least twice a year.



**The Registrar is the ex-officio Secretary of the Finance Committee**

### Managing Council for Non-University Technical Educational Institutions

The Managing Council for the Non-University Technical Educational Institutions consists of the members as shown in the figure below.

<b>Director (Chairman)</b>			
<b>Treasurer</b>	<b>Principals of the Non-University Technical Educational Institutions</b>	<b>1 Teacher from the non-University technical educational institution not below the rank of Lecturer by rotation in order of seniority</b>	
<b>2 Nominees of the Governing Body from its members</b>	<b>Director, Technical Education U.P.</b>	<b>1 Nominee of the Northern Regional Office, A.I.C.T.E.,</b>	<b>1 Nominee of the Managing Committee of the Radhasoami by the President</b>
<b>Registrar as the ex-officio Secretary of the Governing Body</b>			

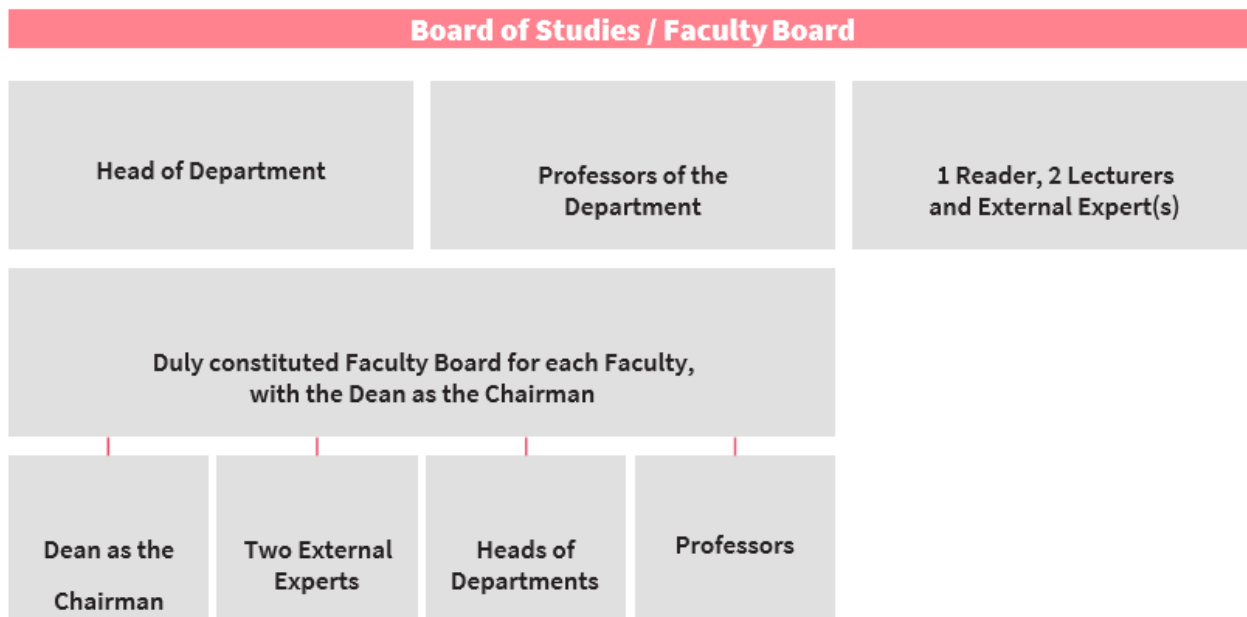
#### Managing Council for Non- University General Educational Institutions

The Managing Council for the Non-University General Educational Institutions consists of the members as shown in the figure below.

<b>Managing Council for Non-University General Educational Institutions</b>			
<b>Director</b>	<b>Treasurer</b>	<b>Principals of Non-University General Educational Institutions</b>	<b>1 teacher of Non-University Genreal Educational Institutions</b>
<b>2 nominees of Governing body</b>	<b>Director, Secondary Education, U.P.</b>	<b>Nominee of Ministry of Education</b>	<b>Nominee of the managing committee of the R.E.I</b>
<b>Nominees of the D.E.I Prem Vidyalaya Society, Agra</b>	<b>Nominees of the D.E.I Higher Secondary School Society, Agra</b>	<b>2 Eminent persons, not members or employees of the Institute nominated by the President</b>	

#### Board of Studies / Faculty Board

The Board of Studies consists of the members as shown in the diagram below. The recommendations of the Board of Studies regarding revision of syllabus and /or new courses approved by the Faculty Board are placed before the Academic Council of the Institute before implementation. The Faculty Boards meet at least once every year.



### Research Degree Committee

The Research Degree Committee closely monitors issues related to research work leading to the award of the Ph.D. degree. The members include the Director, concerned Dean, Head of the Department, and two external experts in the subjects. The supervisor of the candidate is the co-opted member of the Committee.



In addition to Deans of various Faculties, DEI has the following posts:

## Dayalbagh Educational Institute (Deemed to be University), Agra

- ❖ Dean, Post-Graduate Studies & Research
  - ❖ Dean, Under-Graduate Studies
  - ❖ Deans, DEI-ICT Distance Education Centres
  - ❖ Officer on Special Duty (Amenities, Beautification and Core Courses)
- List of members of Governing Body, Primary Body, Finance Committee, Managing Council and Academic Council can be seen in **Annexure-I**

# Administrative Report

---

The major administrative activities of the Institute during the year 2019-2020 were as follows:

## Meetings

- (i) Governing Body- Meetings were held on 7.9.2019, 2.11.2019, 17.1.2020, 17.3.2020
- (ii) Finance Committee - Meetings were held on 5.9.2019, 11.1.2020 and 16.3.2020
- (iii) Research Degree Committee - Meetings were held on 15, 16,17,22 July 2019, 13 August 2019, 11&17 September 2019, 25 October 2019,15-23 November 2019, 5-7 December 2019, 7 February 2020 and 25, 26 March, 2020
- (iv) Results Committee meetings were held in July (05.07.2019, 13.07.2019, 25.07.2019), August (10.08.2019), September (03.09.2019), October (05.10.2019), December (26.12.2019), January (07.01.2020), February (15.02.2020), March (18.03.2020), April (28.04.2020) and June (09.06.2020, 21.6.2020)
- (v) Academic Council - Three Meetings were held on: 9.1.2019, 27.2.2019, 27.4.2019

## XXXVIII Convocation

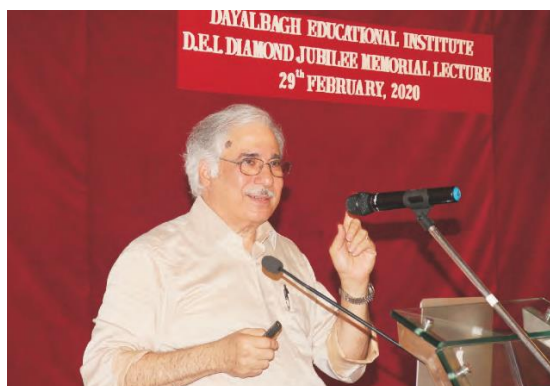


The 38<sup>th</sup> Convocation was held in all solemnity on 18 January, 2020. The event was graced with the August presence of Most Revered Prof. P.S. Satsangi Sahab, Chairman, Advisory Committee on Education, Dayalbagh Educational Institutions and Most Respectable Mrs. Satsangi, Rani Sahiba. Director's Medal was conferred on the students attaining highest Grade point in various programmes of study at different levels. Shri. Ajay Prakash Sawhney (I.A.S.), Secretary, Ministry of Electronics & Information Technology, Govt. of India, was the Chief Guest on this occasion.



Director's Medals were given to students attaining highest Grade point in various programmes of study at different levels. Total 110 Director's Medals were awarded and 61 students received the degrees of Doctor of Philosophy (Ph.D.). Pankaj Chaudhary and Kalyani Gupta were awarded the President's Medals for securing highest Grade point in All Under-graduate and Postgraduate Examinations, 2019 respectively. Ritika Swaroop received the Founder's Medal for being the Best All-rounder among the first-degree Students of the Institute graduating in the year 2019. The Distinguished Alumni Award and Citation was conferred to Mr. P.P. Mehta, a renowned and well-accomplished Alumnus of the Institute. The Chief Guest in his Convocation Address focused on the dimensions of IT scenario in India.

### Diamond Jubilee Memorial Lecture



The Diamond Jubilee Memorial lecture was delivered by Prof. Spenta Rustum Wadia on February 29, 2020. Prof. Wadia is a theoretical physicist who has made important contributions to string theory and quantum field theory over the course of his distinguished career. He has served as Founding Director of the International Centre for Theoretical Sciences, Bengaluru, and as a Distinguished Professor at the Tata Institute of Fundamental Research, Mumbai. He is a Fellow of the Indian National Science Academy, the National Academy of Sciences, and the Indian Academy of Sciences and is the recipient of several international awards, including the prestigious TWAS (The World Academy of Sciences, Trieste, Italy) Physics Prize in 2004 and the Steven Weinberg Prize of ICTP (International Centre for Theoretical Physics, Trieste, Italy) in 1995. The title of Prof. Wadia's talk was "Black Holes: Beacons in our search for a quantum theory of space-time and gravity".

### Founder's Day



31<sup>st</sup> January, was celebrated as the Founder's Day in all educational institutions of Dayalbagh. The staff and students of DEI made the best of this opportunity to showcase the strengths and efficacy of various courses and programmes of DEI. The exhibition included the exhibits by the different Faculties, Colleges and Schools of DEI at Dayalbagh, DEI Schools situated outside Agra and Twenty-Five of the Information Centres/ICT Centres of DEI. The range of the models and exhibits extended from traditional handicraft skills and items to highly innovative futuristic working models aiming at attaining practical solutions to various problems of the world. All the departments and laboratories were also open to the public view to give an idea regarding various facilities at DEI. The students were also provided with a platform to partake in the 'Earn while you Learn' programme as they organized the Kiosks of healthy food items along with the stalls of handicraft articles made by them. Bhakti Sangeet by the staff and students of DEI was also organized on the occasion. The entire campus of DEI was lit up with colourful lights in the evening.



### Independence Day Celebrations

The 73<sup>rd</sup> Independence Day was observed with a gamut of celebration activities in DEI. The ceremony started at 11.00 AM in the science faculty ground with a congregation of guests, staff and students of all faculties, schools and colleges falling under the DEI umbrella. Commemorating the sovereignty of our nation, the Chief Guest, Shri Bablu Kumar, SSP Agra, unfurled the tricolor flag. The National Anthem reverberated the air conveying the spirit of self-determination, sovereignty, freedom and peace. The NCC Cadets



upheld the Guard of Honour and the students from various faculties holding their flags marched in unison displaying pride and glory in the parade escorted by the University band. The colourful presentation received much deserved applause from the audience. Little Supermen (children from 03 months to 03+ years) dressed in army attire led the parade with a line-up marching to win the prize for best performance. The teams of Prem Vidyalaya and Technical College were adjudged to be the best among girls and boys in March past respectively. They were awarded shields by the Hon. Chief Guest. The University choir under the mentorship of Prof. Ravi Bhatnagar enthralled the audience with their patriotic songs. Mr Bablu Kumar admired the quality-based value education of DEI. He delivered an illuminating talk on security provisions for girls and described the methods of defence which could be adopted by them. He ensured his everlasting support in providing security to the girl students of the institution. Hon. Director Prof P. K. Kalra congratulated the students and staff on attainment of A+ grade and enumerated its profits to the University. Other distinguished officers present were Prof. Anand Mohan, Registrar, DEI; Mrs Sneh Bijlani, Treasurer, DEI; Shri Dheeraj Prakash, Controller of Examinations; Deans and Heads of all Departments. The programme was compered by Dr Kavita Raizada. Dr Nishith Gaur delivered the Vote of thanks.





## Republic Day Celebration

The 71<sup>st</sup> Republic Day was celebrated by the staff and students of Dayalbagh Educational Institute with ardent zeal. Shri Vibhuti Narayan Rai, IPS, (Retd.) and Ex-Vice Chancellor, M.G.A.H Vishwavidyalaya, Wardha, was the chief guest on this occasion. Since the wee hours, students and staff set up stalls to display the various commodities, inventions and artefacts developed by students pursuing various courses. The medical camp set up in the campus added to the valued exhibits demonstrating the ethos of DEI. The National Anthem reverberated the air expressing the joy of freedom and peace. The NCC Cadets upheld the guard of honour and the students from various faculties, schools and segments of DEI holding their flags marched in unison displaying pride and glory in the parade escorted by the university band. The chief guest felicitated the winners of athletic events and the March past and reminded the gathering that the youth must uphold the ideals of the Constitution.



## Celebration of 'Shiksha Diwas'

The 1<sup>st</sup> of January, 2020 was celebrated as the 'Shiksha Diwas'. The beginning of the new decade became a memorable one as the celebrations were organized amidst the breathtaking beauty of Dayalbagh's Mansarovar Gardens in the wee hours of dewy winter morning. The combination of cultural performances, devotional renderings, exhibits, food stalls and community service made the event even more magnificent and replete with devotional fervour. The colourful lights, waterfall and fountain at the ansarovar Garden added to the blissful grandeur of the occasion. The exhibits, which were put up by DEI,

showcased the outcome and strengths of various skill-based courses along with the other programmes of different level run by the Institute. Several food stalls were also arranged to give an additional festive touch to the occasion. The DEI students from Pre-nursery to University level, members of Alumni Association of DEI and devotees of Radhasoami Satsang, Dayalbagh had gathered in a large number to render community service and partake in the celebrations to commemorate the historic day when the foundation of education at Dayalbagh was laid.



# Institute's Achievements

---

## NAAC Accreditation

The Institute was accredited by National Assessment and Accreditation Council (NAAC) with A+ Grade having a CGPA of 3.4 out of 4.0 and has been granted Graded Autonomy as per UGC Regulations 2018.

## Ranking by National Institutional Ranking Framework

The Institute was ranked No. 82 in the University Category, 102 in the Engineering Category in National Institutional Ranking Framework, 2020.

## All India Rank 52 Conferred on by Internshala, AICTE

In acknowledgment of its commendable efforts towards internship initiatives for its students, Dayalbagh Educational Institute was invited to partake in the Internship Day event conducted by AICTE and Internshala to honour and reward colleges for building a strong internship culture for their students. The mega event was held on 25 August'19 at the AICTE Headquarters, New Delhi. It is a matter of immense pride that DEI has secured an All India Rank of 52 out of 2830+ Colleges/Universities that participated in the event. The objective of the event was to provide participating colleges with all necessary support from Internshala to help maximum students find an internship. The representing team from DEI, Prof. Shalini Nigam, Dr Poornima Bhatnagar and Dr. Sona Dixit participated in the event and interacted with the industry representatives and AICTE chairman and members.

## AICTE Utkrisht Sansathan Vishwakarma Award, 2019

The Institute was ranked **1<sup>st</sup>** in **AICTE Utkrisht Sansathan Vishwakarma Award, 2019** for its commendable work in uplifting tribals of Rajaborari.

## International Partnerships

The societal impact of Dayalbagh Educational Institute has attracted premier top-ranking institutions globally for partnership. During the 2019-20 Dayalbagh Educational Institute continued existing collaborative programs with several of its partners and also signed some new agreements for international cooperation with multiple international partners. A sample of some of these activities and new partnerships is as follows:

**Fiji National University, Fiji:** DEI entered into an agreement with Fiji National University, Fiji through a ceremony organized via videoconferencing on 13 March 2020. In recognition of DEI's long history to innovate, adopt and adapt technology for taking education to the doorsteps of most marginalized and impoverished communities, Fiji National University has requested help from DEI to strengthen their online education and to take it to the nooks and corners of the Republic of Fiji consisting of several islands.

**Seneca College, Canada:** DEI utilizes its strong technology infrastructure for interactive teaching-learning through multi-way videoconferencing with Seneca College, which is a multiple-campus public college and is one of the largest vocational education providers in Ontario, Canada. A student and a teacher from the DEI Rajaborari tribal campus recently visited Seneca College on their invitation in November – December 2019, based on the collaborative project work. Online ceremonies for distribution of certificates to successful students, including those located in tribal hinterlands, were organized in July 2019 and August 2020 respectively.

**University of Hong Kong, Hong Kong:** DEI has reciprocity-based academic and cultural faculty and student exchange program with the University of Hong Kong, one of the leading Universities in Asia. For the 2020 exchange, while exercising proactive precaution in travel to Hong Kong, DEI has turned the calamity into an opportunity by enabling participation from a larger number of students through an online exchange program. This exchange also includes students from our semi-urban and rural campuses of Timarni and Rajaborari.

### **Liaisoning and Partnership with the Government and its Agencies**

**CodeIndia:** Dayalbagh Educational Institute is playing the leadership and coordination role in the design and implementation of CodeIndia - a recent initiative of the Office of the the Principal Scientific Adviser to the Government of India to promote computer programming skill among school students across India through computational thinking and application-based programming. Through CodeIndia, the students will not only learn programming skills but also gain an aptitude for building applications for diverse areas. This module is taught by a group of specialists with a high level of expertise in this area, drawn from academia as well as industry from across the globe.

**INSA Science Education Workshop for Tribal Students:** A science education workshop sponsored by the Indian National Science Academy was organized on 12 November 2019 in the Rajaborari village cluster in Madhya Pradesh with experts drawn from premier Institutions across the country. More than a thousand students and others participated in the workshop.

**Recognition in Village Development:** The National Education Policy 2020 aims at sensitizing educational institutions towards creating an impact on the society at large with a special focus on the weaker sections. Dayalbagh Educational Institute has already been a frontrunner in this domain and was recognized as the national rank one institute in village development through the inaugural AICTE Vishwakarma Award presented by the hon'ble minister for Human Resource Development. The selection for this award was among hundreds of eligible institutions, through a rigorous multi-stage process.

### **MoU with CSIR-Indian Institute of Toxicological Research (CSIR-IITR), Lucknow**



Dayalbagh Educational Institute and CSIR-Indian Institute of Toxicology Research, Lucknow signed a Memorandum of Understanding (MoU) on 17th February, 2020 at DEI main Campus, Dayalbagh, Agra. Prof. P.S. Satsangi, Emeritus Chairman, Advisory Committee on Education, graced the occasion and spoke about Dayalbagh Science of Consciousness and Dayalbagh Way of Life. Prof. P.K. Kalra, Director, Dayalbagh Educational Institute and Prof. Alok Dhawan, Director, CSIR-Indian Institute of Toxicology Research signed the MoU. Mr. Prem Prashant, President, DEI, Prof. V.B. Gupta, Chairman, Advisory Committee on Education, Prof. Vibha Rani Satsangi, Dean, Faculty of Science, Prof. Sahab Dass, Head, Department of Chemistry were also present. Delegation of CSIR-IITR included Dr. K.C. Khulbe, of Research Planning and Business Development Division and Dr. R. Parthasarathi, Principal Scientist, Centre for Innovation and Translational Research. Under the MoU Dayalbagh Educational Institute and Indian Institute of Toxicological Research will collaborate in research and development, internship and training and other mutual programmes of common interest. Prof. Alok Dhawan, Director, CSIR-IITR suggested framing joint research proposals on local problems with international solutions.

# Staff and Student Strength and Composition



Number of Teaching Faculty	
DEI	267
JRF/SRF	164
Emeritus Professors + Adjunct Faculty	27
DEI (Asstt. Lecturer + Demonstrators + Instructors)	6
Technical College	16
Technical College (Asstt. Lecturer + Demonstrators + Instructors)	25
Prem Vidyalaya & REI Intermediate College	33
Technical College (Temporary)	38
Mentors at Open and Synchronous Learning Centers	1170

**NUMBER OF STUDENTS ENROLLED IN THE DEI CAMPUS & ICT CENTRES (SESSION 2019-2020)**  
**CATEGORY WISE STUDENTS' ENROLMENT IN UNIVERSITY DEPARTMENTS**

CATEGORY	1		U.G.	P.G.	M.PHIL/ M.TECH	PH.D.	PG DIPLOMA/ DIPLOMA/ CERTIFICATE		TOTAL
TOTAL STUDENTS' ENROLMENT	2	M	2822	279	98	220		94	3513
		W	3836	708	89	508		192	5333
		T	6658	987	187	728		286	8846
GENERAL	3	M	1420	134	53	116		46	1769
		W	2140	410	53	310		119	3032
		T	3560	544	106	426		165	4801
SC	4	M	404	42	17	41		11	515
		W	635	121	15	83		22	876
		T	1039	163	32	124		33	1391
ST	5	M	55	2	2	0		2	61
		W	38	3	0	1		3	45
		T	93	5	2	1		5	106
OBC	6	M	943	101	26	63		35	1168
		W	1023	174	21	114		48	1380
		T	1966	275	47	177		83	2548
EWS	7	M	1420	120	52			42	1634
		W	2140	384	19			115	2658
		T	3560	504	71	0		157	4292
PH*	8	M	21	4	1			2	28
		W	14	3	1			0	18
		T	35	7	2	0		2	46
TOTAL (3+4+5+6+7+8)		TOTAL (3+4+5+ 6+7+8)	6658	987	187	728		286	8846

**NUMBER OF STUDENTS ENROLLED IN DIPLOMA, TECHNICAL AND HIGH SCHOOL & INTERMEDIATE CLASSES (SESSION 2019-20)**

ALL DIPLOMA PROGRAMMES (DEI CAMPUS AND ICT CENTRE)											
ALL DIPLOMA PROGRAMMES (DEI CAMPUS AND ICT CENTRE)	FEMALE					MALE					GRAND TOTAL
	BC	GN	SC	ST	TOTAL	BC	GN	SC	ST	TOTAL	
<b>TOTAL OF ALL DIPLOMA (DEI CAMPUS AND ICT CENTRES)</b>	140	303	94	2	539	605	1007	357	28	1997	2536
HIGH SCHOOL AND INTERMEDIATE											
HIGH SCHOOL AND INTERMEDIATE	FEMALE					MALE					GRAND TOTAL
	BC	GN	SC	ST	TOTAL	BC	GN	SC	ST	TOTAL	
<b>TOTAL OF ALL SCHOOLS (PV/REI/RB/SN/TM)</b>	294	340	159	66	859	231	262	107	47	647	1506

TECHNICAL DIPLOMA PROGRAMMES	FEMALE		MALE		GRAND TOTAL
	YES	TOTAL	YES	TOTAL	
<b>TOTAL PHYSICALLY HANDICAPPED (TECHNICAL DIPLOMA PROGRAMMES)</b>	0	0	3	3	3
HIGH SCHOOL & INTERMEDIATE	FEMALE		MALE		GRAND TOTAL
	YES	TOTAL	YES	TOTAL	
<b>TOTAL PHYSICALLY HANDICAPPED (HIGH SCHOOL &amp; INTERMEDIATE)</b>	3	3	0	0	3
<b>GRAND TOTAL</b>	3	3	3	3	6

**LIST OF STUDENTS (2018-19) RECEIVING MEDALS AT THE THIRTY EIGHTH CONVOCATION  
DIRECTOR'S MEDAL**

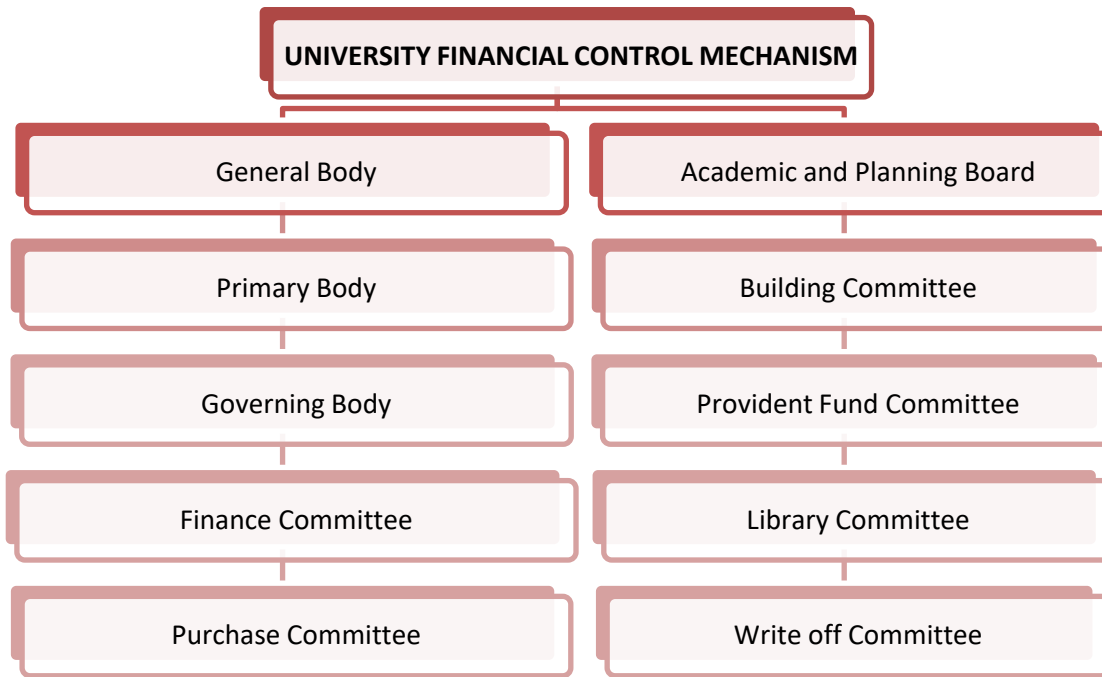
For securing highest grade point in -		Roll No.	Name of Student	CGPA
1.	High School Examination 2019	1700165	Saloni Upadhyay	9.92
2.	Intermediate Examination 2019	1700357	Drishti Goel	9.84
<b>For Securing Highest Grade Point In -</b>				
3.	Technical Diploma Level Examinations 2019	166658	Shivangi Agarwal	9.47
4.	P.G.D.B.L.O.R. Examination 2019	1803641	Abhinav Kulshrestha	7.96
5.	P.G.D.J.M.C. Examination 2019	1801442	Arshi Khanam	9.09
6.	P.G.D.T.D.P. Examination 2019	1801461	Ibra Naseem	8.97
7.	P.G.D.Th. Examination 2019	1853712	Latika	9.73
8.	Diploma in Ayurveda (Up-Vaid) Examination 2019	1702178	Ruby Gaur	9.73
9.	Diploma in Elementary Education Examination 2019	1701712	Shilpi Singh	9.30
10.	P.G.D.C.S.A. Examination 2019	1853481	Konda Venkatalokesh	8.38
11.	P.G.D.B.E. Examination 2019	1801381	Ayushi Kukreja	9.41
12.	P.G.D.U.P.M Examination 2019	1801425	Upasana Jain	9.14
13.	P.G.D.H.R.S.W Examination 2019	1802238	Shipra Jain	9.29
14.	P.G.D.H.R.S.W Examination 2019	1802236	Sakshi Jain	9.29
15.	P.G.D.S.H.E Examination 2019	1801363	Menka Kumari	9.32
<b>For securing highest grade point in Cultural Education &amp; Comparative Study of Religion in -</b>				
16.	Technical Diploma Level Examinations 2019	166237	Pushpa Mani Singh	9.34
17.	Diploma in Elementary Education Examination 2019	1701712	Shilpi Singh	9.30
18.	B.A. Examination 2019	1703853	Surabhi Rathore	9.00
19.	B.Sc. (Home Science) Examination 2019	1703917	Mahima Gautam	8.95
20.	B.Com. Examination 2019	1700421	Apurvi Kulshrestha	9.41
21.	B.Com. (Corporate Accounting & Law) Examination 2019	1702044	Palak Madhukar	6.85
22.	B.Tech. Examination 2019	154142	Hitesh Mulani	9.45
23.	B.Tech. (Part Time) Examination 2019	144263	Meher Kumar	8.21
24.	B.Sc. Examination 2019	1702344	Shreyashi Bansal	9.54
25.	Integrated Dual Dip. -Degree Voc. Dip. In I.T. & B.Sc. Comp. Sci. Examination 2019	165389	Kirti Jain	9.18
26.	B.B.A. Examination 2019	1702749	Shweta Yadav	9.53
27.	B.A. (Social Science) Examination 2019	1703023	T. Mahima	9.38
28.	B.Voc. (Apparel Design) Examination 2019	161244	Ayasha	9.44
29.	B.Voc. (Food Processing) Examination 2019	161292	Kratika Kaushik	9.37
30.	B.Voc. (Textile) Examination 2019	161343	Preeti Kumari	7.23
31.	B.Voc. (Renewable Energy) Examination 2019	164312	Akanksha Singh	9.30
32.	B.Voc. (Dairy Technology) Examination 2019	165347	Praveen Tomar	8.73
33.	B.Voc. (Automobile) Examination 2019	1600463	Pintu Kumar	7.86
34.	B.Voc. (Water Sanitation & Waste Management) Examination 2019	164751	Satyam	8.91
<b>For securing highest grade point in -</b>				
35.	B.A. Examination 2019	1703727	Anushka Mona Mittal	9.13
36.	B.Voc. (Apparel Design) Examination 2019	161244	Ayasha	9.44
37.	B.Voc. (Food Processing) Examination 2019	161292	Kratika Kaushik	9.37
38.	B.Voc. (Textile) Examination 2019	161323	Divya Kumari	8.78
39.	B.Voc. (Renewable Energy) Examination 2019	164312	Akanksha Singh	9.30
40.	B.Voc. (Automobile) Examination 2019	166913	Nonish Jain	8.53
41.	B.Voc. (Dairy Technology) Examination 2019	165313	Ajay Sharma	9.09
42.	B.Voc. (Water Sanitation & Waste Management) Examination 2019	164759	Umang Gupta	9.24
43.	B.Sc. (Home Science) Examination 2019	1703917	Mahima Gautam	8.95
44.	B.Com. Examination 2019	1700406	Akanksha Agrawal	9.49
45.	B.Com. (Corporate Accounting & Law) Examination 2019	1702036	Ayushi Behl	8.52
46.	B.Ed. Examination 2019	1701287	Deepti Yadav	9.35
47.	B.Tech. (Engg.) in Civil Engineering Examination 2019	146210	Rajat Agarwal	9.06
48.	B.Tech. (Engg.) in Electrical Engineering Examination 2019	154061	Aashi Gupta	9.12
49.	B.Tech. (Engg.) in Electrical Engineering Examination 2019	146311	Rahul Sharma	9.12



50.	B.Tech. (Engg.) in Mechanical Engineering Examination 2019	154142	Hitesh Mulani	9.45
51.	B.Tech. (Footwear Technology) Examination 2019	154196	Alakh Chand Gupta	8.80
52.	B.Tech. (Engg.) (Part Time) in Electrical Engineering Examination 2019	144263	Meher Kumar	8.21
53.	B.Sc. Examination 2019	1702344	Shreyashi Bansal	9.54
54.	Integrated Dual Dip. -Degree Voc. Dip. In I.T. & B.Sc. Comp. Sci. Examination 2019	165397	Shakshi Gupta	9.33
55.	B.B.A. Examination 2019	1702749	Shweta Yadav	9.53
56.	B.A. (Social Science) Examination 2019	1703023	T. Mahima	9.38
57.	B.A. Honours (Drg. & Ptg.) Examination 2019	161037	Deepti Kumari	9.38
58.	B.A. Honours (English) Examination 2019	161028	Atira Elizabeth Joseph	8.90
59.	B.A. Honours (Hindi) Examination 2019	161090	Neha Kumari	9.50
60.	B.A. Honours (Home Science) Examination 2019	161143	Sandhya Pandey	6.99
61.	B.A. Honours (Music) Examination 2019	161019	Archa Srivastava	9.82
62.	B.A. Honours (Sanskrit) Examination 2019	161120	Preeti Kumari	9.85
63.	B.Sc. Honours (Home Science) Examination 2019	161229	Isha Satsangi	9.20
64.	B.Com. Honours Examination 2019	1650128	Rajbir Kaur	9.53
65.	B.Sc. Honours (Botany) Examination 2019	165044	Himani Yadav	9.36
66.	B.Sc. Honours (Chemistry) Examination 2019	165059	Kritika Kushwaha	9.56
67.	B.Sc. Honours (Computer science) Examination 2019	165095	Sakshi Agarwal	9.21
68.	B.Sc. Honours (Mathematics) Examination 2019	165076	Pankaj Chaudhary	9.88
69.	B.Sc. Honours (Physics) Examination 2019	165117	Swarnima Jain	9.67
70.	B.Sc. Honours (Zoology) Examination 2019	165068	Mayuri Sharma	9.10
71.	B.B.A. Honours Examination 2019	167522	Kritika Malhotra	9.66
72.	B.A. Honours (Social Science) (Economics) Examination 2019	167045	Ritika Agarwal	9.38
73.	B.A. Honours (Social Science) (Political Science) Examination 2019	161067	Komal Rajput	9.30
74.	B.A. Honours (Social Science) (Psychology) Examination 2019	161134	Ritika Jain	9.15
75.	B.A. Honours (Social Science) (Sociology) Examination 2019	161151	Sheetal	9.35
76.	M.A. (Drawing & Painting) Examination 2019	1703942	Anjali Chaudhary	9.17
77.	M.A. (Drawing & Painting) Examination 2019	1703943	Arti Sharma	9.17
78.	M.A. (English) Examination 2019	1703971	Daisy Mathew	9.11
79.	M.A. (Hindi) Examination 2019	1703997	Shweta Kumari	9.20
80.	M.A. (Music) Examination 2019	1704019	Ruby Verma	9.84
81.	M.A. (Sanskrit & Culture) Examination 2019	1704046	Pratishtha Kulshreshtha	9.72
82.	M.A. (Theology) Examination 2019	1650502	Garima Bhatnagar	9.66
83.	M.Sc. (Home Science) Examination 2019	1704070	Priya Awasthi	9.46
84.	M. Com. Examination 2019	1702008	Raju	9.31
85.	M.Ed. Examination 2019	1700537	Anshula Dua	9.63
86.	M.Tech. (Engineering Systems) Examination 2019	1704306	Ashish Kumar	9.59
87.	M.Sc. (Botany) Plant & Microbial Biotechnology Examination 2019	1702439	Pooja Saraswat	9.22
88.	M.Sc. (Chemistry) Examination 2019	1702465	D. Shabd Preeti	9.80
89.	M.Sc. (Computer Science) Examination 2019	1706081	Aishwarya Dubey	9.79
90.	M.Sc. (Mathematics) Examination 2019	1702519	Sarika Sharma	9.66
91.	M.Sc. (Physics) with spl. in Electronics Examination 2019	1702599	Sujal Gupta	9.22
92.	M.Sc. (Zoology) Examination 2019	1702556	Swanti Gupta	9.32
93.	M.B.A. (Business Management) Examination 2019	167687	Shivani Mittal	9.38
94.	M.B.A. (Agricultural Management) Examination 2019	1702957	Sonali Upadhyaya	9.76
95.	M.A. (Social Science) (Applied Economics) Examination 2019	1702809	Simran Makkar	9.62
96.	M.A. (Social Science) (Political Science) Examination 2019	1702873	Kriti	9.50
97.	M.A. (Social Science) (Political Science) Examination 2019	1702871	Deepika Gupta	9.50
98.	M.A. (Social Science) (Psychology) Examination 2019	1703055	Nazm Prasad	9.47
99.	M.A. (Social Science) (Sociology) Examination 2019	1702908	Lucky Chaudhary	9.29
100.	M.Voc. (Apparel Design) Examination 2019	1704102	Samrin	9.53
101.	M.Voc. (Food Processing) Examination 2019	1704133	Rimjhim	9.09
102.	M.Voc. (Dairy Technology) Examination 2019	1702612	Anshika Birla	9.71

103.	M.Voc. (Renewable Energy) Examination 2019	1704391	Abhinav Sinha	8.70
104.	M.Voc. (Textile) Examination 2019	1704151	Akansha Sisodiya	9.65
105.	M.Phil (Music) Examination 2018	1706302	Kalyani Gupta	9.84
106.	M.Phil (Commerce) Examination 2018	1706324	Shivangi Jaiswal	9.39
107.	M.Phil. (Education) Examination 2019	1800528	Neelima Sachwani	9.43
108.	M.Phil. (Political Science) Examination 2018	1706505	Mahima Jindal	9.53
109.	M.Phil. (Management) Examination 2018	1706481	Hans Kaushik	9.73
110.	M.Phil. (Sociology) Examination 2018	1706543	Rinkey Kushwah	9.09
<b>PRESIDENT'S MEDAL</b>				
<b>For securing highest grade point in -</b>				
111.	All Undergraduate Examinations 2019	165076	Pankaj Chaudhary	9.88
112.	All Postgraduate Examinations 2019	1706302	Kalyani Gupta	9.84
<b>D.E.I. Founder's Medal</b>				
113.	Best All-Rounder among the First Degree Students of the Institute Graduating in the Year 2019	167542	Ritika Swaroop	9.04

# Institute Finance



## INSTITUTE FUNDS

### Institute Funds

<b>Endowment Funds</b>	<ul style="list-style-type: none"><li>• Diamond Jubilee Fund</li><li>• Gold Medal Fund</li></ul>
<b>Earmarked Funds</b>	<ul style="list-style-type: none"><li>• Establishment (Pension Fund)</li><li>• Solar Maintenance Fund</li></ul>
<b>Other Funds</b>	<ul style="list-style-type: none"><li>• Employees Welfare Fund</li><li>• DEI Employees Credit &amp; Thrift Society</li><li>• Restricted Funds (Sundries)-AADEIs for Equipment and ICT Amritsar,</li></ul>

Main Source of Income	
1	UGC- Plan & Non Plan (Maintenance Salary and Non salary)
2	UP Government (Salary)
3	MHRD, DST, AICTE, CSIR, DAE, ISSRO, DIT, ADRDE, DRDO, PCRA, ICSSR (Research Grants)
4	Other Sources of Income <ol style="list-style-type: none"> <li>1. Fees</li> <li>2. Income from interest</li> <li>3. Contributions by trust</li> <li>4. Contributions by Alumni Associations</li> </ol>

During the financial year 2019-2020 the Institute received Rs. 4849.11 lakh as Maintenance Grant from UGC and Rs. 61.17 lakh as UGC Deen Dayal Upadhyaya (DDU) grant and Rs. 588.62 lakhs as Capital Assets and Revenue. The UP Government sanctioned a grant of Rs. 1922.54 lakhs as Regular Salary Grant and Rs.10.28 lakhs for NSS. The income from investment from non-government sources amounted to Rs. 732.27 lakh. The Unit Cost was Rs. 89,585/- (without salary). Total budget of the Institute for the year 2020 - 2021 was Rs 128.48 Crore out of which Rs 9.72 Crore have been spent on Infrastructure. Infrastructure Budget for TEQIP grant as on April 1, 2020 was Rs. 1.62 Crore out of which Rs. 1.43 Crore has been spent

#### b. Progress in Research

During the session the Institute has undertaken 55 sponsored research projects worth Rs. 28.78 Crore sponsored by DST, MHRD, UGC, ICSSR, Ministry of Textiles, ISRO, MNRE, DBT, AICTE and UPSDM, AICTE, Ministry of Tourism. The Ministry of Textiles and Handicrafts had funded the Institute with Rs. 10984380 for training of students of socially and financially challenged class to become entrepreneurs. A summary of the Projects is given below:

S.No.	Sanctioning Agency	Amount Sanctioned (in Lakhs)
1	DST	128.02
2	MHRD	85.38
3	ICSSR	3.02
4	ISRO	30.23
5	DBT	1.41
6	AICTE	15.32

### C. Fellowships and Scholarships

During the session 2019-2020, 164 students received fellowships in the form of JRF, SRF, PDF and Inspire fellowships.

<b>S.No.</b>	<b>Sanctioning Agency</b>	<b>No. of students</b>	<b>Payment mode</b>
1	BSR Fellowship	7	Web Portal
2	UGC-NET, Junior Research Fellowship	56	Web Portal
3	Post-Doctoral Fellowship for SC &ST	8	Web Portal
4	Maulana Azad Fellowship	3	Web Portal
5	Rajiv Gandhi National Fellowship	32	Web Portal
6	EMERITUS Fellowship	1	Web Portal
7	Swami Vivekanand Single Girl's Child Fellowship	2	Web Portal
8	National Fellowship for OBC	13	Web Portal
	<b>Total</b>	<b>122</b>	

# FACULTY OF ARTS

2019 - 20



# Faculty of Arts

---

Faculty of Arts was established in 1981. It is an integration of six departments namely Drawing & Painting, English, Hindi, Home Science, Music and Sanskrit. In order to cater to the varied interest of the students, the faculty offers UG/PG/MPhil/PhD and various Certificate as well as diploma programmes. The subjects taught in the faculty help in developing the aesthetic sense and awaken the finer sensibilities. The language courses enhance the eloquence of the students and, at the same time, develop a sense of literary appreciation. The study of Home Science helps the students to acquire various skills, thereby, helping them to get placements in industries and hospitals. The courses in Drawing & Painting and Music inculcate a sense of beauty and harmonious expression. Prof. J.K.Verma is the Dean of the faculty.

## *Department of Drawing & Painting*

The department began its journey as an undergraduate department in 1960 as a part of Women's Training College and was included in DEI in 1981. The department of drawing and painting is headed by Prof. Ragini Roy. Additionally, the department has one professor, one associate professor and 4 assistant professors. It offers B.A. two-year course with Drawing & Painting as major subject in combination with one more subject, B.A. (Hons.) Drawing & Painting, B.F.A. with 3 specializations, B.Voc. in Textiles, Ceramic & Pottery, Commercial Art and Recycled craft design M.A. Drawing & Painting, M.Voc. in Textiles, Postgraduate Diploma in Textile Design & Printing (PGDTDP), M.Phil. and Ph.D., 4 Work Experience courses at UG level, 1 Certificate Course for the graduate students and 1 Advanced Certificate Course for the students of B.A. (Hons.), 3 Modular Courses : Miniature Painting; Photography & Photo Journalism; Block Printing. The department is equipped with a Graphics Lab, Miniature Lab, Textile designing and Textile Printing Laboratories, Digital Laboratory, Sculpture Laboratory that are equipped with high end tools for fine art specialization like i-Mac Systems, Digital Camera, Pen Tablet i-ball, Plasma TVs, Video Equipments, Lithography Machine, Pottery Wheels, Ball mill, Pot mill, Pug mill, Gas Furnace, Electric furnace for Ceramics Design.

## **Seminar/Symposia/Conference Organized**

- An educational tour to explore INDIA ART FAIR 2020 at Okhla, Delhi on February 2<sup>nd</sup> 2020 was organized by the Department. Students got a good exposure to the contemporary art scenario through the exhibits.
- The Department organized a 7 days workshop on Painting with eminent Russian artist Mr. Victor Safranov as the subject expert and resource person from 24<sup>th</sup> February to 1<sup>st</sup> March 2020. Mr. Safranov also gave an informative lecture on 'Elements of Composition' with practical inputs. The workshop was indeed beneficial for all the participants.





### Achievements (Students)

- A team of 6 Research Scholars of the Department won 2<sup>nd</sup> prize in a Wall Painting competition organized by Petroleum Conservation Research Association (PCRA) in the first week of February 2020. They received a cheque of Rs. 10,000/- as award and certificates.
- Jyoti Sharma, (BFA) “untitled” sculpture, material wooden was displayed at the 101 annual Art exhibition, Jahangir Art gallery (The Art Society of India) Mumbai, 2019.
- Jyoti Sharma, (BFA) participated in Finext Awards & International Exhibition at Devlalikar Kala Vithika, M.G. Road, Indore, (M.P.) 2020
- Jyoti Sharma, (BFA) participated in Ancient Buddha, Kala short Art gallery, Lucknow 2019.
- Preeti Gupta’s (BFA) painting “Dreamscapes- A Series” was displayed at the Alliance Française, Lodhi Estate, New Delhi in the “Art Accession” Exhibition. Her painting was sold at the exhibition 2019 (September).
- Preeti Gupta’s (BFA) Painting “Discussion” was selected for the Finext Awards & International Exhibition and exhibited at Devlalikar Kala Vithika, M.G. Road, Indore, (M.P.) 2020 (3rd -6th January
- Preeti Gupta’s (BFA) painting was selected and displayed in the National Postcard Exhibition at the Lalit Kala Academy, Lucknow and Lalit Kala Academy, New Delhi. The exhibition was covered by major newspapers including the Hindustan Times, 2019 (July-August):
- Preeti Gupta (BFA) participated in 27-Art Point National Painting Online Competition- Preeti G.’s painting was selected, displayed virtually and won a merit certificate award, 2019
- Preeti Gupta, (BFA) Certificate of Honor for the Uttar Pradesh Art Summit International Online Art competition, 2019.
- Preeti Gupta, (BFA) Certificate of participation in the National Art Competition “Ora” by Mojarto, an NDTV Venture, 2020.
- Preeti Gupta, (BFA) Ekam Satt World Music League Participation Award, 2020
- Km. Dolly, (BFA) participated in Finext Awards & International Exhibition and exhibited at Devlalikar Kala Vithika, M.G. Road, Indore, (M.P.) 2020
- Km. Dolly, (BFA) participated in Ancient Buddha, Kala short Art gallery, Lucknow 2019.
- Km. Dolly, (BFA) participated in State Lalit Kala Academy, UP, 2019



Dayalbagh Educational Institute (Deemed to be University), Agra

- Km. Dolly, (BFA) participated in Prayas ek koshish, Art Exhibition, Amritsar Punjab.

#### Laboratories and New Facilities Created

- Sculpture Laboratory- Pottery Wheels, Ball mill, Pot mill, Pug mill, Gas Furnace and Electric furnace
- Lithography Machine

#### Publications

- Meenakshi Thakur, MITHILA- A creative expression through colours and line, Shrinkhla ek shodhparak vaicharik patrika, 6(1), 2019.
- Meenakshi Thakur, Playing with letters-in context of graphic design, Journal of International Academic Research, 7(7), 2019.
- Vijaya Kumar, वर्तमान समय में लोक कला के प्रयोगवादी आयाम” -‘Research Colum (A Collection of Articles), Publication- Social Research Foundation, ISBN:978-81-923100-0-8, Page No.-173-187, 2020 First Edition.

#### Participation in Conference/ Workshops/ Seminar/Symposia

- Namita Tyagi participated in Group exhibition, “The Illuminated Canvas” at NIV Art centre, New Delhi, October, 2020.
- Kanchan Kumari participated in National Webinar on Relevance of Indian Communication Traditions, Organized by Dept. of Journalism and Mass Communication, IGNTU, Amarkantak (M.P), on May 31, 2020.
- Kanchan Kumari participated in National Webinar on Art and Artists in new Landscape: Responsibilities and Challenges organized by Sahitya Sanskriti Foundation, New Delhi, on May 31, 2020.
- Kanchan Kumari participated in National Webinar on Visual Art: Skill, Communication and Management, Organized by Dept. of Fine Arts Mahatma Gandhi Kashi Vidhyapith Dr. Vibhuti Narayan Singh Campus, Gangapur, on May 27, 2020.
- Kanchan Kumari participated in National Webinar on “LALIT KALA: ASHA AVAM CHUNOTIYA” organized by Faculty of Fine Arts University of Gangapur, Varanasi, on May 17, 2020.

#### Department of English Studies

The Department of English studies was established as an Undergraduate Department (1947) and Post-graduate Department (1969) as a part of Women’s Training College and finally into DEI in 1981. The department introduced Ph.D. Programme (1984), Certificate Course in Journalism (1998), M.Phil. Programme (2008) and PG Diploma in Journalism and Mass Communication (2009). The department has 4 Professors and 8 Assistant Professors and runs Major as well as Half and Core Courses and Work-experience Courses on Secretarial and Journalistic Skills, Secretarial and Office Management Skills, Journalism and Mass Communication. The department has a State-of-the-Art Language Lab cum Research Centre, a Desktop Publishing Lab, ICT enabled Classrooms and e- Class room with video conferencing facility. The department has active research collaborations with CAU, Kiel University, Germany and Madhubala Julka Institute of Communication and Electronic Media, affiliated to Indraprastha University, New Delhi. The department publishes the DEI News (monthly), the DEI Magazine, DEI- DEP Newsletter (monthly) and DEI-DEP Magazine.

#### Activities

The department of English alongwith the departments of Hindi and Sanskrit organized the Annual Drama Festival of DEI from 24 -26, February 2020 in the Convocation Hall of the Institute. The competition was open for the plays

in English, Hindi and Sanskrit languages. Seventeen plays, five of English, eight of Hindi and four of Sanskrit language, were performed. The members of the Jury for the event were Mr. Vinay Patsariya, Dr. Priyam Ankit and Dr. Beena Gupta. Dr. Sonal Singh, Dr. Dayal Pyari Sinha and Dr. Nandini Raghuwanshi were the conveners of the event.

#### Participation in Conference/ Workshops/ Seminar/Symposia/Webinar

- Dr. Bani Dayal Dhir delivered an invited talk on the topic, "Tagore's Poetic system Gitanjali: A Systemic Devotional Voyage" on 22 May, 2020 at DSC-2020, 2<sup>nd</sup> International Conference on Dayalbagh Science of Consciousness, Dayalbagh, Agra.
- Dr. Sonal Singh made a poster presentation on the topic, "Revisiting the Case of Dr. Faustus as per the Dimensions of Consciousness Studies" on 22 May, 2020 at DSC-2020, 2<sup>nd</sup> International Conference on Dayalbagh Science of Consciousness, Dayalbagh, Agra.
- Dr. Sonal Singh attended the Webinar on "Climate, Health and Sustainability" organized by Department of Chemistry, DEI on the eve of World Environment Day on June 4, 2020.

#### Department of Hindi

The Department of Hindi is headed by Prof. Sharmila Saxena and has 2 Professors, 6 Assistant Professors and 1 Emeritus Professor. Since its inception at the undergraduate level the department offers various languages lab courses on हिन्दी भाषा एवं साहित्य. An optional two semester work experience certificate course is offered for the honors students in जनसंचार एवं पत्रकारिता. At the post graduate level, it also offers courses on अनुवादविज्ञान and ब्रजभाषा and several electives like प्रेमचंद, निराला, मुक्तिबोध, समकालीन हिन्दी विमर्श, समकालीन हिन्दी कविता, स्त्री विमर्श, दलित विमर्श, सन्त साहित्य और हिन्दी नाटक. The thrust areas of research are हिन्दी काव्य, हिन्दी गद्य, काव्य शास्त्र एवं आलोचना.

#### Workshop/ Seminars/Conferences Organized

हिन्दी विभाग द्वारा मातृभाषा दिवस का आयोजन किया गया जिसमें कहानी लेखन, निबंध लेखन, पोस्टर मेकिंग प्रतियोगिताओं के साथ साथ वाद – विवाद प्रतियोगिता का भी आयोजन किया गया। जिसमें छात्र - छात्राओं द्वारा सहभागिता की गई जिसमें अनेक विचार उभर कर सामने आए। वाद विवाद प्रतियोगिता में अनेक छात्र- छात्राओं ने अपनी- अपनी मातृभाषा में अपना परिचय दिया जिसमें बंगला, मैथिल, भोजपुरी, खड़ीबोली आदि भाषाएँ थीं। रचनात्मक लेखन प्रतियोगिता का आयोजन करते हुये रचनात्मक लेखन की विधियाँ, शब्दों का प्रयोग, कविता की भाषा आदि से संबन्धित प्रयोग के विषय में शिक्षको और छात्र – छात्राओं के बीच बातचीत हुई। इस कार्यक्रम की आयोजिका प्रो० शर्मिला सक्सेना ने अपने वक्तव्य में कहा सहज भावों की अभिव्यक्ति मातृभाषा से ही संभव है। प्रो कमलेश रवि, डॉ सुमन, डॉ नमस्या, डॉ प्रेमशंकर, डॉ बृजराज ने मातृभाषा के संबंध में अपने विचार रखे। कार्यक्रम का संचालन डॉ सूरज एवं धन्यवाद ज्ञापन डॉ रंजना ने किया। 15-17 फरवरी 2019 में राष्ट्रीय संगोष्ठी का आयोजन हुआ। जिसका विषय पर्यटन: संस्कृति और कला से संबंध था जो पर्यटन मंत्रालय के सहयोग से सम्पन्न हुआ। जिसमें अनेक विशेषज्ञों ने इस क्षेत्र में ज्ञान का वर्धन किया। डीईआई के विभिन्न संकाय के छात्र - छात्राओं ने प्रतिभागिता की।

## Activities

दयालबाग एजुकेशनल इंस्टीट्यूट की शोध पत्रिका शोधश्री (ISSN-- 0974-7958) का प्रकाशन 2009 में प्रारंभ हुआ था। इन 10 वर्षों में शोधश्री के कई महत्वपूर्ण अंक जैसे- दलित विमर्श एवं स्त्री विमर्श प्रकाशित और बहुप्रशंसित भी हुए हैं। अभी तक इसमें हिन्दी भाषा और साहित्य से सम्बंधित शोध आलेख प्रकाशित होते रहे हैं, 2019- 20के अंक में हिंदी भाषा और साहित्य के साथ-साथ दूसरे अनुशासनों के भी कुछ शोध आलेख शामिल किए गए हैं।

## Hindi Drama Festival

24 से 26 फरवरी 2020 में आयोजित नाट्य महोत्सव कला संकाय द्वारा आयोजित किया गया था जिसमें हिन्दी ,अंग्रेजी के साथ साथ संस्कृत भाषा में नाटको का मंचन किया गया | हिन्दी नाटकों में अनेक संकाय के प्रतिभागियों ने हिस्सा लिया | जिसमें सर्वोत्कृष्ट प्रदर्शन अभियांत्रिकी संकाय के छात्र -छात्राओं ने किया | हिन्दी नाट्य महोत्सव की संयोजिका डॉ दयाल प्यारी सिन्हा ने अपने दायित्व का बखूबी निर्वहन किया।

## Publications

1. प्रो. शर्मिला सक्सेना, सूरीनाम में रहने वाले प्रवासियों का जीवन संघर्ष , अनुसंधान, ISSN.0975.850 अलीगढ़, .प्र. 2019.
2. डॉ. सुमन शर्मा, मुक्तक काव्य सतसई में चेतना के विविध रूप, शोध दिशा ,ISSN.0975.735 बिजनौर,उ.प्र. 2019
3. डॉ . नमस्या, ईश्वर उसी दिन मर गया, ISSN24559113 दिल्ली 2019.
4. डॉ . नमस्या, गालिब आधुनिक चेतना, शोधश्री , ISSN.0974.7958 आगरा 2019.
5. डॉ . नमस्या,भाषा लोक धर्म और संत कवियों का काव्य, सुरभि इम्पैक्ट फैक्टर 2.1 , ISSN2349.4557 दिल्ली 2019.
6. डॉ . रंजना पाण्डेय,हिन्दी कथा साहित्य में ग्राम, शोधश्री ,ISSN.0974.7958, 2019.
7. डॉ रंजना पाण्डेय , हिन्दी नवजागरण और भारतेन्दु हरिश्चंद्र ,आधुनिक साहित्य ISSN 2515-8058, 2019

## Department of Home Science

Home Science education aims at getting maximum satisfaction for the person and their family members through the efficient and scientific use of your resources. Over the years, the Home Science department at DEI has grown leaps and bounds in stature to emerge as a prominent Home Science programme in the country. It offers various programmes like B. Sc., B. Voc, M. Sc., M. Voc, M.Phil. and Ph. D. The syllabus has a practical orientation and renders the requisite knowledge and skills required for the specializations offered. The department is headed by Prof. Sangita Saini and has 1 Professor, 2 Associate Professors, 6 Assistant Professors and 1 Emeritus Professor.

The scope of Home Science in present day context has widened and it has taken its turn towards extension and outreach activities, skill development and entrepreneurship. The recent additions to the list of programmes include vocational programmes such as B. Voc and M. Voc programmes in Apparel Design and Food Processing and Preservation. This is also in line with the objectives of Ministry of Skill Development and Entrepreneurship, Government of India.

The department conducts state-of-the-art research in the various fields of Home Science. The major thrust areas of the department include Development of Occupational/Functional Clothing, Zero Waste Designing Techniques, Upcycling of Textile and Apparel Waste, Processing of Minor Millets, Processing and Development of Herbal products, Green Diet practices, Family Finances, Consumer Education, Community Development and women enterprise, Children with special needs, Development across the life span and family studies.

The department has signed a MOU with Department of Biotechnology in connection with a foldoscope project and the Food Processing & Preservation Lab of the department received “fssai” Certificate from the Department of Food and Drug Administration, Government of Uttar Pradesh under Food Safety and Standards Act 2006, License Number: 12718001000446.

### Workshop/ Seminars/Conferences Organized

- A three-day fevicryl workshop on art and craft was conducted by the department home science from 8<sup>th</sup> August to 10<sup>th</sup> August 2019. The students of B.Voc. Apparel Design 1<sup>st</sup> semester participated in training of stencil painting, Shibori (tie and dye) techniques, dry brush painting, ikkat effect painting and batik painting with fabric colors.



- A two-day seminar on Indian apparel Industry: Present Scenario was organized on 16 and 17 November 2019 to bridge the gap between real industrial working and what is taught to the students and to enlighten students about the prospects and opportunities in this sector. The seminar was organized in collaboration with ADEIS-APAC, DEI. Various experts from different regions delivered lectures on merchandising, sourcing, pre- production planning, garment sampling, compliance, sustainability, self-employment etc. A total of about 100 students from B. Voc and M.Voc. Apparel Design attended the seminar.



- World Food Day was celebrated by the faculty of Food Processing & Preservation of on Oct. 16, 2019. Competitions like Poster making, Quiz, Speech, Rangoli and non-fire cooking were organized for the students of Arts Faculty. Around 70 students participated with great enthusiasm in various events. The Events were judged by Prof. Sangeeta Saini, HOD, Home Science and other staff members of the department. The following winners of different events were felicitated with prizes.



**Winners of Various Competitions:**

<b>Quiz</b>		<b>Non- Fire Cooking</b>	
<b>Name</b>	<b>Position</b>	<b>Name</b>	<b>Position</b>
Shagun Rao (B.Sc. 2 <sup>nd</sup> Year)	First	Divya Kumari (B.A. 1 <sup>st</sup> Year)	First
Anushka (B.A. 1 <sup>st</sup> Year)	Second	Shabnam (B. Voc. FPP 2 <sup>nd</sup> Year)	Second
Shabnam (B. Voc. FPP 2 <sup>nd</sup> Year)	Third	Bharti (B. Voc. FPP 2 <sup>nd</sup> Year)	Third
<b>Poster Making</b>		<b>Speech</b>	
Shabnam (B. Voc. FPP 2 <sup>nd</sup> Year)	First	Atishya Maheshwari (B.A. 1 <sup>st</sup> Year)	First
Vartika (B.Tech. 1 Year)	Second	Nandini Saraswat (B.A. 1 <sup>st</sup> Year)	Second
Tanishka (B.Tech. 1 Year)	Third	Anchal Dubey (B. Voc. FPP 2 <sup>nd</sup> Year)	Third
<b>Rangoli</b>			
Chanchal (B. Voc. FPP 3 <sup>rd</sup> Year)	First		
Shikha Singhal (B.A. 1 <sup>st</sup> Year)	Second		
Karishma (B. Voc. FPP 2 <sup>nd</sup> Year)	Third		



- The Department also organized one month Skilling Course to promote Zardozi Embroidery. It is funded by Ministry of Textiles wherein skilled crafts master person are imparting the training.
- A visit to the Tears Institute for the mentally handicapped and Ram Lal Old Age Home was organized for students of B.Sc. Honors, M.Sc. Home Science (Human Development) and PhD Scholars to develop insight among the students regarding the functioning of special need institute and role of old age home as a family substitution institute.
- Home Science Department in association with Networks of Professionals Food and Nutrition (NetProFaN) and FSSAI coordinated a National Webinar on “Food Safety is Everybody’s Business” on World Food Safety Week on June 13, 2020.



### Achievement

- Dr. Richa Verma Invited lecture in Seminar on the topic “Carriers and Opportunities in Home Science” held on 19.11.2019 by Institute of Home Science, Dr B.R. Ambedkar University, Agra.

### Participation in Conferences/Workshops/ Seminars

- Dr. Seema Kashyap participated in two days online virtual conference on “Recent Advances in Biochemical and Material Sciences 2020” Nov.2020, Annai Violet Arts & Science College, University of Madras.
- Dr. Seema Kashyap participated in International Webinar on Upscaling Food Science and understanding Food Product regulations in Global Markets. June 2020 Dept. of Food & Nutrition, Faculty of Family & Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodra.
- Dr. Seema Kashyap participated in three days Webinar series and virtual Conference on ‘Food Forensics: Investigating Food Crimes and Frauds’ May 2020 Institute of Research & Development, Gujarat Forensic Science University, Gandhinagar, Gujarat.
- Dr. Seema Kashyap participated in COVID-19 Awareness Quiz, Received Appreciation Certificate. May 2020.Faculty of Integrated Medicine (AYUSH), DEI (Deemed University), Dayalbagh, Agra.
- Dr. Seema Kashyap participated in Scheme for Promotion of Academic & Research Collaboration Orientation Workshop, June 2019, University Grant Commission, New Delhi.
- Dr. Seema Kashyap participated in Online Faculty Development Programme on ‘Evaluation from Offline to Online Teaching’. Duration: 30th May 2020 to 3rd June 2020, University of Mumbai.
- Dr. Seema Kashyap participated in Online Orientation Programme on How to Approach Research in Social Science-Conceptualization & Methodological Intervention, Duration: July to December 2020Savitri Bai Phule Mahila P.G. Mahavidyalaya, Sikar (Rajasthan) in association with Pt. Deendayal Upadhyay Shekhawati University, Sikar and others.
- Dr. Charul Chaudhary attended one-week webinar on "Role of Technologies and Automation in Food Processing and Preservation" from 14 to 19 May 2020 organized by the Centre for Advanced Agricultural Science and Technology (CAAST) for Centre of Excellence for Digital Farming Solutions for Enhancing Productivity by Robots, Drones and AGVs (DFSRDA) Vasant Rao Naik Marathwada Krishi Vidyapeeth, Parbhani (MS) under the World Bank aided the National Agricultural Higher Education Programme (NAHEP) of the Indian Council of Agricultural Research (ICAR), New Delhi.
- Dr. Charul Chaudhary participated in International Webinar on ‘Nurturing Physical, Mental and Social Health: During and Post COVID 19’ held on 16th May, 2020 organized by Institute of Home Science Dr. Bhimrao Ambedkar University, Agra.

- Dr. Charul Chaudhary participated in virtual workshop on “How to setup food processing industry” held on 23<sup>rd</sup> May, 2020 organized by AFSTI (I) NIFTEM chapter and ALABHYAM-NIFTEM Technical society (NTS), NIFTEM, Sonipat.
- Dr. Charul Chaudhary participated in webinar on "Preparing and Management of Research Projects in Food Technology and Allied Sectors" organized by NIFTEM on 26th June 2020.
- Dr. Richa Verma attended Online Faculty Development Program on ‘Research Among Youth 2020’ from May 28 to June 03, 2020 conducted by Department of Mechanical Engineering, Vardhaman College of Engineering, Hyderabad.
- Dr. Richa Verma participated in One Week online Faculty Development Programme on ‘Effective Online Teaching Methods’ from June 8 – 14, 2020 organized by Dr. N. G. P. Institute of Technology, Coimbatore.
- Dr. Richa Verma completed One Week National Level Faculty Development Program and Online Training on ‘Moodle – Learning Management System’ from June 15 – 20, 2020 organized by Vaagdevi Engineering College, Warangal, in association with Spoken Tutorial, IIT Bombay.

### Publications

1. Ajita Gupta & Seema Kashyap, 2020 Growing up in a Single Parent Family; A Determining factor of Adolescent’s Well-being Advance Journal of Social Science, 7(1), 138-144.
2. Suman Madan, Seema Kashyap, Gul Mathur, 2019. *Glycyrrhiza glabra*: An efficient medicinal plant for control of periodontitis – A randomized clinical trial, Journal of the International Clinical Dental Research Organization, 11(1), 32-35.
3. Suman Madan, Seema Kashyap, Gul Mathur, 2019. Amla: A boon in cure of Periodontitis, Journal of Emerging Technologies and Innovative Research, 6(5), 1-5.
4. Ajita Gupta & Seema Kashyap, 2019. Rural Consumers: Awareness regarding the Legal Provisions of Consumer Interest, Indian Journal of Social Research, 60 (3), 329- 339.
5. Annu Singh & Richa Verma, 2020. Peer Relationship and Socialization: A Pathway for Future Adjustment among Children with Different Ability, International Journal of Creative Research Thoughts (IJCRT), 8 (5), 3835-3844.

### Department of Music

The Department of Music was established in the year 1950 as a department of Women’s Training College affiliated to Agra University with only graduate course in vocal music. Gradually graduate courses in Tabla and Sitar were also introduced. Prof. Ravi Bhatnagar is the Head of the department and has 4 Professors, 1 Associate Professor, 2 Assistant Professors and 1 Guest Faculty. At present the department offers graduate and postgraduate programmes in Vocal, Sitar and Tabla and a Post Graduate Diploma in Folk and Devotional Music. In the theory courses the department also includes the Study of Classical संस्कृत ग्रन्थ like नाट्य शास्त्र, संगीत रत्नाकर, बृहद्देशी, musical references from Vedas, Ramayana and Mahabharat, Jain Granthas and Baudha Granthas and analyses of theories propounded by our ancient musicologists like Bharata, Pt. Sharangdeva, Acharya Brihaspati, Matang Muni, and theories propounded by modern musicologists like Jairajbhoy, Fox Strangways etc. The department also stresses on study of Western music and music of other nations, Science of Music, History of music, theories propounded by western musicologists and imparts knowledge of Carnatic, Rabindra and Folk Music.

The department has also introduced ancillary courses for B.Sc., B.Tech. and B.A (Social Sciences) and introduced modular courses on: -

1. Folk Music of India
2. Repair and Maintenance of Musical Instruments
3. Gayaki of Agra Gharana

The Music department organizes cultural programmes for all the important events of DEI. The students of this department have won several prizes in Youth Festivals, as Voice of Agra and Sangeet Natak Academy. Under 'SAP' Scheme of UGC, the Department had an opportunity to develop archives of Music with almost more than 50 Ragas by eminent and Graded Artists of AIR and Doordarshan like – Pt. Devvrat Chaudhary, Prof. Pt. Yashpal, Prof. Vidyadhar Vyas, Vidushi Suhasini Koratkar etc. The Department has also invited eminent music and Musicologists and Music Artists from India for Seminars and Workshops such as Prof. Devvrat Chaudhary (Delhi), Prof. Sanjay Banerjee (Rabindra Bharti), Prof. Anil Beohar, Prof. Mukund Bhale (Tabla) IKSUV Khairagarh, Pt. Gohadkar (Gwalior), Ustad Sayeed Zafar (Traditional Artist), Vidushi Suchaita Gupta (Varanasi) and many more. The thrust areas of research of the department are Music Education, Folk Music, Comparative Study of Western and Indian Trends, Analysis of the Contribution of Individual Musicians, Effect of Music on Prisoners, Aesthetics and Analysis of *Ragas* and *Talas*.

### Achievements

- Prof. Neelu Sharma received 'Academy Puruskaar' in Tabla Vadan from Uttar Pradesh Sangeet Natak Academy, Lucknow, 2020.
- Saraswati Vandana rendition by Prof. Ravi Kumar Bhatnagar and Collaborated by Internationally acclaimed Kathak Maestro Mrs. Kajal Sharma from U.K. was uploaded on youtube channel on May 28, 2020.

### Resource Persons Invited

#### International

S. No.	Name	University/City	Topic	Dates
1.	Vidushi Kajal Sharma Traditional artist	U.K.	Basic techniques and Bhaav-Paksh in Kathak	20-21 Jan.2020

#### National: - Lec. Dem.

S. No.	Name	University/City	Topic	Dates
1.	Anoop Banerjee (Traditional artist)	Prayagraj	Basic Techniques of Tabla-Vadan	29 <sup>th</sup> -30 <sup>th</sup> Mar.2019
2.	Dr. Namrata Mishra	Agra University	Banaras ki Holi mein nihit sangeetatmak Tatv	27 <sup>th</sup> Mar. 2019
3.	Prof. Rajesh Shah	B.H.U. Varanasi	Techniques of Sitar- Vadan & Bandishein	14-15 Nov. 2019



4.	Prof. Praveen Uddhav	B.H.U. Varanasi	Techniques of Tabla-Vadan	14-15 Nov. 2019
5.	Prof. Ram Shankar	B.H.U. Varanasi	Voice-Culture & Raag Gyan	14-15 Nov. 2019
6.	Mr. Bhagwan Das (Traditional artist)	Mathura	Haweli Sangeet	6 <sup>th</sup> Nov. 2019
7.	Pt. Damodar Sharma (Traditional artist)	Mathura	Folk Songs g Braj Sangeet	13 <sup>th</sup> Nov. 2019
8.	Mr. Saleem Khan (Traditional artist)	Agra	Traditional artist	13 <sup>th</sup> Nov. 2019
9.	Mr. I. S. Khinchi (Traditional artist)	Agra	Rajasthani Folk Songs	13 <sup>th</sup> Nov. 2019
10.	Mr. Gauri Shankar (Traditional artist)	Kolkata	Techniques of different Gharanas of Tabla	21 <sup>st</sup> -22 <sup>nd</sup> Jan.2020

#### Participation in Conference/ Workshops/ Seminar/Symposia

- Dr. Shivendra Pratap Tripathi gave performances at Shivaji University Kolhapur, Maharashtra on 11 February, 2020 and was an expert in a workshop on Tabla of Banaras Gharana organized by Shivaji University Kolhapur, Maharashtra on 10-11 February, 2020.
- Prof. Neelu Sharma gave lecture Demonstrations on Lay-Taal Pragma Prabha at Kashi Hindu University, Varanasi on 28 June, 2020.
- Prof. Ravi Kumar Bhatnagar was the Resource Person in the webinar on Classical Ragas in Light Music organized by G. S. College of Commerce & Economics, Jabalpur on 17 June, 2020.
- Prof. Lovely Sharma was the Resource Person in the webinar on Covid-19, Lock Down ke Pashchat Tanav Door Karne Mei Sangeet ki Bhumika organized by Rajya Lalit Kala Academy UP/Dharm Samaj Mahavidyalaya, Aligarh on 21 and 22 May, 2020. She was also the Resource Person in the webinar on Art, Artist and the Community Post Covid-19 Scenario organized by Manglaytan University & Himalayan University on 29 May, 2020. She was invited as an Expert by Rashtriya Sangeetgya Parihar for Contribution of Women in Indian Classical Music on May 7, 2020.
- Dr. Gautam Tiwari gave Online Performances at Pt. Mukund Vishnu Kalvant Sangeet Utsav on 28 June, 2020.
- Ms. Gaytri Kumari gave a facebook live performance under the Rashtriya Sangeetgya Pariwar on April 13, 2020.

#### Publications

1. Shivendra Pratap Tripathi, स्वं निरमित ताल शिवगंगा एवम उनकी रचनाएँ, E- journal Swaranjali Magazine Jan 2020
2. Shivendra Pratap Tripathi, ताल प्रदोष (13 मात्रा) एवम उसमे रचनाएँ, E- journal Sangeet Magazine Feb, 2020

3. Shivendra Pratap Tripathi स्वर-ताल-लय का चर अचर जगत प्रभाव, E- journal Purakala June 2020.
4. Ravi Kumar Bhatnagar, युवा पीढ़ी में उपेक्षित हो रहा शास्त्रीय संगीत व उसको लोकप्रिय बनाने हेतु कतिपय सुझाव, Parisheelan Research, Suruchi Kala Samiti Varanasi.
5. Ravi Kumar Bhatnagar राग व समय सिद्धांत, Wisdom Herold International Multidisciplinary Refereed Research Journal, Society of Indo-Tibetan Buddhist Studies, Delhi.
6. Ravi Kumar Bhatnagar शास्त्रीय संगीत में बंदिशों का महत्त्व Navnikash, Kanpur.
7. Sudha Sahgal, Trio of Hori Gaayan in North Indian Hindustani Music, Swaranjali Magazine.
8. Sudha Sahgal, Exploring the effect of Musical compositions on value awareness among adolescent students, International Journal of Advanced Research and Review. Galore knowledge Publications, Vadodara, Gujrat.
9. Sudha Sahgal, Dhruvad composition in Raag Nat Bhairav, Sangeet Patrika.
10. Sudha Sahgal, Dhamaar Composition in Raaga Shyam Kalyan, Sangeet Patrika.

### Projects

The department has a grant of Rs. 87 Lakhs as SAP II (DRS II) by UGC for the period 2018-2023 on the project entitled Multidimensional Approaches to Music Education.

### Department of Sanskrit

The Dept. of Sanskrit was established in the erstwhile Women's training College offering Sanskrit language and literature courses at the undergraduate level in 1968 and became a part of Faculty of Arts with the establishment of the Dayalbagh Educational Institute as a Deemed University in 1981. In 1986, regular post graduate degree classes started with course offered in 'Sanskrit and Culture'. From the session 2013-14 the department also offers specialization in Grammar at the post graduate level. M.Phil. in Sanskrit started from January 2009. Integrated programme in Theology (P.G. Diploma, M.A., M. Phil & Ph. D.) are also being run by the department since 2009-10. The PG diploma on Theology is run internationally through its Centres at New York, Chicago, Toronto, San Francisco, London and Waterloo, Canada. The department also offers two Core Courses 1) Indian Culture and 2) Comparative study of religion, each of one semester duration. These courses are compulsory for all Undergraduate students as well as students pursuing technical education (Technical College). The department also offers six semesters Work Experience course on Applied Sanskrit which tends to impart basic knowledge of Computer's to the students of Sanskrit. The department is making efforts to facilitate spoken Sanskrit and incorporation of Ethics and Indian Culture in the Curriculum. The department has also published the book on Indian Culture and Comparative study of Religion which is the textbook for these Core Courses of the Institute. The department is headed by Prof. Agam Kulshrestha and at present there are 3 Professors, 1 Honorary Professor, 2 Emeritus Professors and 5 Assistant Professors and 2 Technicians.

The research areas of the department are Sanskrit literature (traditional and Modern), Puranas, Ethics, religion, Indian Philosophy, Grammar and Interdisciplinary topics related to Sociology, Economics, Management and Science. The members of the department have also authored several chapters like many सुश्लोक-कलापम्, आरुण्या, मेघा, संस्कृत-शिक्षणम्, वर्णोच्चारणम् in the I.C.N.C Tall (Information communication Neuro cognitive Technologies Assisted language lab). Since 2016 the department publishes a research journal, "शोध-प्रतिभा" and two volumes: शिक्षा-विशेषांक और आर्ष-संत-साहित्य-विशेषांक have been published. The department has also acquired two copyright (A) Test Tube Baby in Sanskrit Literature Copy Right No - L30372/2008 and (B) संत कबीर साहिब कृत अनुराग सागर Copyright No.- L-66071/2017.

### Conference/ Workshops/ Seminar/Symposia

- Sanskrit Diwas' and 'Sanskrit Sandhya' were organized on 4 September 2019 at Sanskrit Department. In this programme all UG and PG students were present. The students of Sanskrit shared their views and composition related to Sanskrit language and importance of Sanskrit Diwas by reciting 'mantras', 'shlokas' as well as Sanskrit songs. Prof. Agam Kulshreshtha, Head, Department of Sanskrit, explained the significance of 'Sanskrit Diwas' (generally celebrated on 'Shravani Poornima') and discussed about the importance of holding 'Sanskrit Sandhya' in every three months.



- The Department of Sanskrit alongwith the departments of Hindi and English organized the Annual Drama Festival of DEI from 24 -26, February 2020 in the Convocation Hall of the Institute. The competition was open for the plays in English, Hindi and Sanskrit languages. Seventeen plays, five of English, eight of Hindi and four of Sanskrit language, were performed. The members of the Jury for the event were Mr. Vinay Patsariya, Dr. Priyam Ankit and Dr. Beena Gupta. Dr. Sonal Singh, Dr. Dayal Pyari Sinha and Dr. Nandini Raghuwanshi were the conveners of the event.

- A one-day workshop on Yoga Education was organized by the Sanskrit department on 9 September 2019 at Faculty of Arts, DEI. Prof. Agam Kulshreshtha, HOD Sanskrit was the convener of the workshop. She discussed on the need of establishing the Yoga Department and took expert's views for under graduate and post graduate syllabus on Yoga Education. Various experts from related fields participated in the workshop and shared their feedback. The external expert, Dr. Beena Gupta shared knowledge on Yoga Philosophy. Mr. Yogesh, who is running Yoga and Naturopathy classes successfully, is also Yoga Instructor at Kendriya Hindi Sansthan, Agra. He gave important knowledge about Yoga and Fundamentals of Naturopathy and various Asanas, Pranayama, Mudras etc. Prof. P. Sriramamurty, Coordinator Theology Courses, DEI, explained the benefits of Yoga therapy to raise consciousness states. He also discussed on Surat Shabda Yoga and stressed to merge it in the syllabus. Dr. Siddharth Agarwal, Medical Doctor and Coordinator AYUSH, explained various health benefits by Yoga exercises. He talked about the treatment of various diseases through Yoga therapy. He also suggested including Yoga Labs of AYUSH DEI for conducting experiments. Principal AYUSH, Dr. Rajneesh Sharma discussed about the importance of Ayurveda.



### Conference/ Workshops/ Seminar/Symposia/ Special Lectures Organized

- A special Lecture was delivered by Dr Rajendra Dave of Kendriya Hindi Sansthan, Agra on the topic संस्कृत व्याकरण- कृदन्त एवं तिङन्त एवं आत्मनेपद
- A workshop on yoga was organized with Mr. Yogesh Kumar of Kendriya Hindi Sansthan, Dr Siddharth, Dr Beena Gupta & Dr Rajneesh, Ayush as experts.

### Conference/ Workshops/ Seminar/Symposia attended

1. Dr. Abhimanyu presented भाषा का वैज्ञानिक चिन्तन- व्याकरणशास्त्र के परिप्रेक्ष्य में in Sanskrit Bharti Vishva Sammelan organized by Sanskrit Bharti, ICCR-Indian Council for Cultural Relations & ICPR-Indian Council of Philosophical Research, 09-11 Nov 2019, New Delhi.
2. Dr. Abhimanyu presented “शैलचित्र एवं वैदिकसाहित्य में रथ- एक अध्ययन” in 24<sup>th</sup> Congress of Rock Art Society of India organized by Dr V.S. Wakankar Archaeological Research Institute, Archaeological Museum, Government of Madhya Pradesh, Shamla Hills, 27-29 Feb 2020, Bhopal.
3. Dr. Nandini Raghuvanshi presented, “शैलचित्र एवं वैदिकसाहित्य में रथ- एक अध्ययन” in 24<sup>th</sup> Congress of Rock Art Society of India organized by Dr V.S. Wakankar Archaeological Research Institute, Archaeological Museum, Government of Madhya Pradesh, Shamla Hills, 27-29 Feb 2020, Bhopal.

### Recognition

- Prof Agam Kulshrestha is the Member of Editorial Board of International Shodh Sanchar Bulletin, Lucknow.
- Dr Abhimanyu delivered invited talks at KMI Agra and Swami Samarpanan and Vedic Shodh Sansthan, Meerut

### Publications

1. Kulshresth Agam, संत कबीर साहिब की सांगीतिक चेतना, स्वरांजलि ISSN 2394-7608, Vol 1, page 5-12, ISSN 2394-7608
2. Kulshresth Agam, हिन्दू विधि की रूढिया, शोध संचार बुलेटिन (To be published)
3. Gaud Nishith, शग्ले आवाज एवं आध्यात्म, स्वरांजलि ISSN 2394-7608, Vol 1, 43-46 (ISSN 2394-7608)
4. Abhimanyu, The Roots of Indian Culture: Perspectives of Rock Art and Vedic Literature, Purakala, Vol.29, 21-27 2019, ISSN No. 0971-2143
5. Raghuvanshi, Nandini, 2019. The Roots of Indian Culture: Perspectives of Rock Art and Vedic Literature, Purakala, Vol.29, 21-27, ISSN No. 0971-2143
6. Kumari Sangeeta, साधना में भक्ति योग, स्वरांजलि ISSN 2394-7608, Vol 1, 115-117.
7. Bharadwaj Shobha, मिश्रोभिराजराजेन्द्रप्रणीते चित्रपर्णिकथा संग्रहे जीवन मूल्यानि, स्तुति-प्राच्य-विद्या-समिति ISSN 2321-6581
8. Bharadwaj Shobha, संस्कृत जैन महाकाव्य- एक समीक्षात्मक दृष्टि, अनन्ता, International Journal of Sanskrit Research, ISSN 2394-7519

### Student Achievements

Niharika Dhakad won prize for Vyangya lekhan, Himanshi, Anjali Yadav and Gunjan Yadav won the first, second and third prize respectively for translating from Sanskrit to English and English to Sanskrit. Ayushi Verma, Akanksha Gupta and Anjali Yadav won the first, second and third prize respectively for संस्कृत श्लोकगायन. Shruti Tyagi, Akanksha Gupta and Varsha Rani won the first, second and third prize respectively for सूत्र अन्त्याक्षरी.

# FACULTY OF COMMERCE 2019-20



# Faculty of Commerce

---

As a part of erstwhile REI Degree College, Commerce faculty has the honour of being the oldest faculty of Dayalbagh Educational Institute (Deemed University). B. Com Education in Dayalbagh started in 1947. The faculty with two departments; Applied Business Economics and Accountancy and Law, is catering to the needs of ever-growing economic setting of the country since its inception.

Since July 2008, the faculty is offering the B.Com. (Hons.) in different parts of the country including some remote tribal areas through the Open and Synchronous Learning program of the Institute. Commensurate with the Education Policy of DEI to bring about overall development of the student, the curriculum extensively focuses not only on the updated conceptual dimensions of various subjects offered by the two departments but also the students are required to carry out real-life project work. The latest curriculum design was introduced through the National Workshop on Commerce Curriculum in Changing Scenario organized by the faculty in the month of March 2008. Different forums of the faculty facilitate the placement and personality development programs for the benefit of the students. Over a period of time, faculty placement cell has made remarkable achievements in terms of on-campus and off-campus placement of students in companies of repute (IBM Daksh, American Express Bank, HDFC etc.) With regular participation in National and International conferences, seminars, workshops and contribution to various journals of national and international repute, faculty members of both the departments continue to upgrade their knowledge. The faculty comprehensively focuses on research in the areas of Macro Economic Analysis, International Trade, Financial Reporting practices, Accounting Standards and Corporate Governance. Three major research projects have been sanctioned by UGC and some more proposals are submitted for approval. In the time to come, Commerce faculty will continue to move on consistent growth path and provide the updated theoretical and practical knowledge to its students and scholars.

Programmes offered by the Faculty are:

1. B.Com. (Hons.)
2. B.Com. (Corporate Accounting and Law)
3. B.Voc. Accounting and Taxation
4. M.Com. (General) (jointly with Dept. of Applied Business Economics)
5. M.Com.(International Business) (jointly with Dept. of Applied Business Economics)
6. M.Phil. (jointly with Dept. of Applied Business Economics)
7. Ph.D.

The nucleus of Commerce Education is the accounting and financial analysis and modeling of real-life decision situations. Department of Accountancy & Law and Department of Business Administration cater to this ever-growing area under the aegis of Faculty of Commerce, with 5 Professors, 3 Assistant Professors. The department offers

- B.Com. (Hons),
- B.Voc. (Accounting and Taxation),
- M.Com (General)
- M.Com. (International Business),
- M.Phil and
- Ph.D.

Department is contributing significantly to impart most up-to-date and quality education to its students. To impart relevant quality education considering the present day needs, the department offers various work based vocational courses in the area of Tax Planning and Management, Computer Applications in Accounting etc. The highly innovative value-based education system of the institute and well qualified, dedicated faculty members of the department attract meritorious and knowledge seeking students from all over the country. The department enjoys wide recognition which enables the graduating students securing admission in the higher degree/ professional courses within the institute as well as other renowned universities/ institutions of the country and abroad. Students also enjoy a distinct advantage in the matter of employment in government and many reputed corporate organisations and a good number of them are offered positions through campus recruitment, even before their results are declared.

Different forums and learning resources of the institute, such as, Institute-Industry Participation Cell (IIPC), DEI Alumni Placement Assistance Cell (DEIAPAC), DEI Computer Centre, Faculty Library, DEI Central Library, DEI Multimedia Centre, University Scientific Instrumentation Centre (USIC), INFLIBNET, PROWESS, PROQUEST database, and statistical softwares (e.g., SPSS, STATA) etc. facilitate the placement and personality development programs for the benefit of the students. Over a period of time, Faculty Training and Placement Cell has made remarkable achievements in terms of on/ off-campus placement of students in the companies of high repute. The students of the department have been performing remarkably well in all spheres of life. They have won many prestigious scholarships including UGC JRF. They have been toppers of ICSI, rank holders of ICAI, ICSI, and also qualified civil services examinations. The alumni of the Department occupy distinguished positions in almost all spheres of society, government, bureaucracy, banking, insurance, finance, general management, civil services, academics, business, journalism and mass media. Many of them are also successfully managing their own business / professional establishments in India and abroad.

The faculty places high degree of importance to research activities as well. So far, 45 Ph.D. have been successfully completed in the department and 68 Ph.D. are ongoing. The department has undertaken and successfully completed 2 Major UGC Projects (one completed and one ongoing) and 3 Minor UGC Projects. 8 Research Scholars of the department are qualified JRF, 19 have qualified UGC-NET and 10 research scholars have been awarded the Rajiv Gandhi Fellowship. Alumni of the department are placed in Multinational Corporations, placed at higher positions abroad, are rank holders in Chartered Accountant Examinations, Company Secretaries Examinations and other Competitive Examinations.

### Seminar/Symposia/Lecture/Workshop/Conference Organized

1. Prof. Pravin Saxena and Dr. Sanil Kumar participated as Coordinator in the One Day Workshop for Review and Developing Curriculum of B.Com. (Corporate Accounting and Law) Organized by Department of Accountancy and Law, Faculty of Commerce, Dayalbagh Educational Institute (Deemed University) Dayalbagh Agra held on January 12, 2020.



### Participation in Seminar/Symposia/Workshop/Conference

1. Dr. Rakesh Kumar presented Paper “Impact of First Time Application of IND AS on Profitability of Selected Indian Information Technology Companies” in International Conference on Recent Trends and Innovations in Multidisciplinary Research (ICRTIMR) organized by IEC University and Globally Multidisciplinary Research and Education Association (GMREA) held on 14<sup>th</sup> March, 2020.
2. Dr. Rakesh Kumar presented Paper “Impact of IND AS First Time Application on Financial Performance of Indian Metal Sector Companies” in 42<sup>nd</sup> All India Accounting Conference & International Seminar on Accounting Education & Research organized by Faculty of Commerce & Management Studies, Jai Narain Vyas University, Jodhpur and Indian Accounting Association (Jodhpur Branch) held on 28<sup>th</sup> & 29<sup>th</sup> December, 2019.
3. Dr. Rakesh Kumar presented Paper “Impact of First Time Application of IND AS on Profitability of Selected Indian Information Technology Companies” in International Conference on Recent Trends and Innovations in Multidisciplinary Research (ICRTIMR) organized by IEC University and Globally Multidisciplinary Research and Education Association (GMREA) held on 14<sup>th</sup> March, 2020.
4. Dr. Rachna Gupta attended 42<sup>nd</sup> all India accounting conference & International Seminar on Accounting & Research during December 28-29, 2019 and presented paper entitled Corporate Reporting Practices of Infosys and Wipro Ltd: A comparative study organized by Jay Narain Vyas University, Jodhpur.
5. Dr. Rachna Gupta attended International Conference on commerce, Mgmt, Economics & Social studies on April 17, 2019 and presented paper entitled Emotional Intelligence: A new dimension of Human resource mgmt. Strategy organized by DEI.
6. Dr. Rachna Gupta attended one day Online workshop for Enhancing Research Communication skills through Science Direct and Mendeley on May 3<sup>rd</sup>, 2020 organized by Internal Quality Assurance Cell (IQAC), Faculty of Education, DEI.
7. Dr. Rachna Gupta participated in One-week online Faculty Development Programme on “Learning Management system- MOODLE” organized by St. John’s College Agra in association with Spoken Tutorial, IIT Bombay from 8<sup>th</sup> June 2020 to 14<sup>th</sup> June, 2020.
8. Dr. Rachna Gupta attended 15 days Online Faculty Development Programme on “Life with Covid-19: Roadmap for Self-Reliant Bharat” from 25<sup>th</sup> May 2020 to 08<sup>th</sup> June 2020 organized by Chaudhary Charan Singh University, Meerut, U.P.
9. Dr. Sanil Kumar participated in National Conference on “Recent Trends and Innovation in Multidisciplinary Research” (ICRTIMR-2020) organized by IEC University, Baddi, HP, India in associated with Globally Multidisciplinary Research and Education Association (GMREA) on 14<sup>th</sup> March 2020 and presented a paper titled “Value Relevance and IND AS a study of before and after convergence of Accounting Standards”.
10. Prof. Pramod Kumar attended one day International Webinar on -Impact of Covid-19 on Financial Services in Global Era-Certificate of Appreciation, organized by Navyug Arts and Commerce College, Jabalpur- June 10, 2020.



11. Prof. Pramod Kumar attended as Session Chairman in 42nd All India Accounting Conference in Technical Session on- Artificial Intelligence in Accounting, Jodhpur December, 28-29, 2019

12. Prof. Pramod Kumar attended Three Days Online National Faculty Development Programme on Financial Reporting and Taxation Scenario Post Covid-19, Organized by M. S. University, Vadodara and Vadodara Branch of WIRC, ICAI, -May 14-16, 2020.

13. Prof. Pramod Kumar attended as Session Chairman, 3rd National Finance Seminar on Inclusive Finance Strategies Fostering Growth & Development, organized by Prestige Institute of Management, Gwalior May 25, 2019

14. Ms. Priyanshi Saraswat (Research Scholar) participated in International Webinar on “Self-Reliant India: New Dimension Opportunities and Challenges. Organized by NSS, University of Allahabad, Prayagraj, 20 June, 2020.

### Students Achievements:

Name	Activity	Date	Organisation	Position
Niharika Singh	Poetry competition	March, 2020	Hindustan college	2nd
Muskan Mohan	Dancing	September, 2019	Dance comp. at COSMOS mall	1st
Niharika Singh	Poetry competition	March, 19	Kafila Kaviyon ka in GLA	2nd
Niharika Singh	HDF	February, 2020	Dayalbagh Educational Institute	Best script writer award
Sunidhi Puri	Envision International Fest	March 2020 – May, 2020	St. Stephen's College, Delhi University	4th

### Publications

1. Kumar, R., Ayushman, & Agarwal, R. (2020). Impact of Financial Variables on Share Price of Selected Indian Automobile Companies. International Journal of Management and Humanities (IJMH), 4(6), 146–149. <https://doi.org/10.35940/ijmh.f0648.024620>

2. Agarwal, R., & Kumar, R. (2020). Impact of First Time Application of IND AS on Profitability of Selected Indian Information Technology Companies. Studies in Indian Place Names, 40(56), 448–460. <https://archives.tpsindia.org/index.php/sipn/article/view/4052>.

3. Kumar, R., & Agarwal, R. (2020). Impact of IND-AS First Time Application on Financial Performance of Indian Metal Sector Companies. Pacific Business Review International, 12(12), 48-56. [http://www.pbr.co.in/2020/2020\\_month/June/5.pdf](http://www.pbr.co.in/2020/2020_month/June/5.pdf).

4. Kanojia Shikha and Kumar Sanil (2020). Value Relevance and IND AS A study of before and after convergence of Accounting Standards, Journal- Studies in Indian Place Names (SIPN), ISSN 2394- 3114, Volume-40, Issue-56.

Dayalbagh Educational Institute (Deemed to be University), Agra

5. Kumar Sanil and Prasad Saurabh (2018). A Contrast between Accounting Standard -17, Indian Accounting Standard -108 & International Financial Reporting Standard-8, International Journal of Research In Commerce & Management, ISSN: 0976-2183, Volume No. 9, Issue No. 9.

6. Pramod Kumar, Will Goods and Services Tax make it easier to do Business in India? A Discussion, published in Integral Review-A Journal of Management-(Indexed at J-Gate and EBSCO), issued by Department of Management, Integral University, Volume 10 Issue 1 & 2, July 2019-June 2020.



# FACULTY OF EDUCATION 2019-20



# Faculty of Education

---

With the merging of the Departments of Education of the erstwhile Women's Training College and the REI Degree College, the Faculty of Education came into existence in the year 1981 as one of the Faculties of DEI. The faculty offers UG/PG/MPhil/PhD as well as Diploma Programme. The faculty aims at preparing dedicated, skilled, knowledgeable and creative quality teachers possessing high standards of professional ethics to stand up to the evolving demands of the educational system and the society at large. The faculty also aims at preparing quality teacher educators who perform complex duties ranging from effective classroom teaching to moulding the value system of pupils and undertaking administrative responsibilities with sincerity. It thus prepares teacher educators and researchers to play a leading role in their profession. Prof. Archana Kapoor is the Dean of Faculty of Education and also Head, B.Ed. Professor Nandita Satsangee is the Head of D.El.Ed. and Prof. N.P.S. Chandel is the Head of M.Ed., M.Phil. and Ph.D. programmes.

The faculty has been granted the status of School of Education under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, MHRD (GoI) in Feb 2019.

## Achievements

### Projects Sanctioned

- Faculty was granted a project of School of Education under PMMMNMTT, on 18 Feb 2019, with an amount of 9.5 crores for the duration of 1 year which is extended for one more year (till March 2021).
- Dr. Amit Gautam, was sanctioned a Research Project entitled "Development of Flipped Classroom based Instructional Material in Pedagogy of Science for pupil Teachers from School of Education, (Under PMMMNMTT), Banaras Hindu University, Varanasi from Sept, 2019 to till date.
- Dr. Neetu Singh and Mrs. R. Jeyam were sanctioned a project entitled "Effectiveness of folklore based digital content as a strategic tool for developing concept formation ability mental imagery and moral values among primary students of the album schools" from DEI on 6th May 2020.
- Dr. Parul Khanna and Mrs. Jyotika Kharbanda, were sanctioned the Research Project entitled "Developing Teaching Learning support material for conceptual understanding in mathematics at in English at primary level" from DEI on 6th May 2020.
- Dr Preeti Saini has been sanctioned a project entitled "Preparation of edible cutlery by using different flours" from DEI on 6th May 2020.
- Mr Bajrang Bhushan has been sanctioned our research project entitled "Integrating local sustainability in social science curriculum of DEI primary school" from DEI on 6th May 2020.
- Dr Anjana Verma and Dr. Neha Jain have been sanctioned a project entitled "Development of frugal innovation based educational games packages and its impact on scholastic achievement of upper primary students" from DEI on 6<sup>th</sup> May 2020.
- Dr Shweta Agarwal been sanctioned a project entitled "Effect of brain-based learning on Educational Aspiration and Logical Thinking of students at upper primary level" from DEI on 6th May 2020.

### Invited Talks and Session Chair

- Prof. Archana Kapoor participated in the National Consultative meet on Critical Role of Central Universities in Transforming Teacher Education organized by the Department of School and Non formal Education,

National Institute of Educational Planning and Administration (NIEPA) during Jan 20-21 Jan 2020 at IHC New Delhi. She was Invited speaker and delivered a talk on “e Education and its tools: A step towards Digital India” in National Faculty Development Programme organized by Department of Zoology, Agra College Agra and Ministry of Electronics & Information Technology, GOI on 9 Jan.2020.

- Dr Amit Gautam was Invited Speaker in the Session entitled “Continuing Professional Development of Teachers through Blended Learning Approach” in National Faculty Development Programme on e-Education and its tools: A step towards digital India organized by Department of Zoology, Agra College Agra and Ministry of Electronics & Information Technology, GOI on 9 Jan.2020.
- Dr. Amit Gautam acted as resource person in the TIER-II National workshop on Teaching Learning Resources for Science and Social Science Teachers in Higher Education organized by the National Resource Centre for Education, National Institute of Educational Planning and Administration (NIEPA) during January 15-16,2020 at NIEPA, New Delhi.
- Prof. Savita Srivastava was invited as a resource person to deliver a talk on the new initiatives of New Education Policy 2019 draft on 18<sup>th</sup> Feb 2020 at St. John’s college Agra.
- Dr Amit Gautam was Invited as resource person to deliver lectures on Mobile Application and Blended Learning in teaching and Learning in 2<sup>nd</sup> National Workshop on “Blended Learning approach for Teacher Educators” and “One-month Faculty Development Programme (FDP) for Assistant Professors” organized by School of Education, Mahatma Gandhi Antarrashtriya Hindi Vishwvidyalaya, Wardha, Maharashtra under the scheme of Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNTT), MHRD, Govt of India on 27 Feb 2020.
- Dr Amit Gautam acted as Resource Person for two sessions on “Tools for Online Teaching” and “Online Evaluation Software’s” in the one-week online Faculty Development Programme for Assistant Professors organized by University School of Education, Guru Gobind Singh Indraprastha University (GGSIPU) on the theme Design and Development of MOOCs and e- Learning Technologies on 15 May 2020. He acted as Keynote Speaker and Delivered a lecture on Relevance of online Education in COVID 19 Pandemic in one day National Webinar organized by Department of Teacher Education, Shri Lal bahadur Shastri Degree College Gonda UP on 17<sup>th</sup> May 2020.
- Ms. Mugdha Sharma, Faculty of Education acted as a resource person for a session on ‘Planning Your Virtual Classroom ‘in Faculty Development programme organized by FICCI Future-X Professional From 25<sup>th</sup> May to 29<sup>th</sup> May 2020
- Dr. Sona Dixit acted as resource person in Webinar on Assessment. A 15 Hour Program for learning Assessment. She discussed the cognitive skills, Blooms taxonomy and High cognitive tools on May16, 2020. She acted as resource person in National webinar on Effective Progressive Lifestyle in period of Covid-19 Pandemic organized by Dayanand Women’s Training College, Kanpur on June 3, 2020 and delivered a lecture on psychological wellbeing and progressive lifestyle in the present time.

#### Participation in Conference/ Workshops/ Seminar/Symposia attended

- Ms Mugdha Sharma completed 25 days Summer Training course on Artificial Intelligence and Internet of Things at IIT Kanpur from 3 to 27 June, 2019.
- Dr. Amit Gautam participated in Faculty Development Programme to Design, Develop & Deliver MOOC Courses through SWAYAM (MHRD) Platform organized by National Institute of Educational Planning and Administration (NIEPA), New Delhi during August 05-10,2019 at NIEPA, New Delhi.
- Dr. Sona Dixit participated in National Seminar on E-Content, MOOCs and ARPIT by GAD- TLC of MHRD And AICTE at Master Tara Singh Auditorium, SGTB Khalsa College, University of Delhi on 31 August, 2019.
- Ms. Jyotika Kharbanda attended one day workshop “Manthan- Impeccable Academia” held at Ramoji Film City, Hyderabad on 23<sup>rd</sup> September, 2019

- Dr Sona Dixit, Dr Anjana Verma and Ms Mugdha Sharma attended Pre-Conference Masterclass organized during 15<sup>th</sup> FICCI Higher Education Summit 2019 on 26 November 2019 in New Delhi.
- Dr Anjana Verma presented paper entitled 'Gandhian Philosophical Perspective: Basic Spirit and Relevance on the Present Educational Scenario' in the International Conference on 'Relevance of Mahatma Gandhi in present Global Perspective', sponsored by ICSSR, New Delhi, organized by Department of B.Ed., LSM Govt. P.G. college, Uttarakand, 17th-18th November, 2019.
- Dr. Shweta Agarwal presented a paper entitled 'Mahatma Gandhi – Basic Education to development the Nation' in the International Conference on '*Relevance of Mahatma Gandhi in present Global Perspective*', sponsored by ICSSR, New Delhi, organized by Department of B.Ed., LSM Govt. P.G. college, Uttarakand, 17-18 November, 2019.
- Ms R Jeyam and Ms Mugdha Sharma attended IEEE RO-MAN 2019 Conference on 15 October 2019.
- Ms Mugdha Sharma attended Artificial Intelligence Conclave: Augmenting Human Capabilities organized by CII on 20 November 2019 in New Delhi.
- Ms Mugdha Sharma participated in NGT Workshop on Educational CSR Outcomes on 28<sup>th</sup> February 2020 organized at DEI, Agra.
- Dr. Shweta Agarwal participated in the online State Level Faculty Development Program on "Online Teaching Methods and Pedagogy" organized by the Department of Electronics and Communication Sciences, MAR Gregorios College of Arts & Sciences in Association with BETA Technology on 7<sup>th</sup> May,2020.
- Dr Sona Dixit successfully completed the Online Refresher Course in Skills for New Educational Architecture organized by Sant Gadge Baba Amravati University; Maharashtra conducted through Swayam.
- Dr. Neha Jain and Dr Sweta Agarwal participated in ongoing NSSTC Faculty Development Programme for Teacher Educators– An online short-term course organized by NSS Training College Changanachery and NSS Training College Pandalam from 25 to 30 May 2020.

#### Conferences /Workshops/Seminars/ Scouting Guiding Camp Organized

- Five-day workshop on 'Art Integrated teaching learning' was organized for in-service teachers in Rajni Public Senior Secondary School, Dibai district Bulandshahr, UP from 8 to 12 June 2019. Total 36 teachers participated and learned skills of teaching learning through puppetry, mime, role playing, calligraphy, masks, posters etc.
- Five Day Workshop on 'Calligraphy and Poster Making' was organized from August 1-5, 2019 to orient the participants with the art of calligraphy and poster making and its integration in teaching learning. The workshop was attended by 154 participants. The experts of the workshop were Dr. Anand Sharma from Government College of Art, Chandigarh, Dr. Manoj Kumar and Dr. Arvind Rajpoot from Lalit kala Sansthan, Dr. Anand Jaiswal from Kurukshetra University. Dr. AbdurRehman, Department of Fine Arts, Aligarh Muslim University and Dr. Kumar Jeegishu, Delhi College of Arts.



- Two Day Lecture cum Demonstration on 'Education through Performing Arts (Music)' was organized from 28-29 August, 2019 by C-KART, School of Education, Faculty of Education, DEI, Agra, under the PMMMNMTT,

MHRD. The theme of the lecture cum demonstration was integration of the Music with the Education. Dr. Goutam Ghose, Dr. Keshav Talegaonkar, Dr. Gautam Tiwari, Emeritus Prof. Vibha Nigam, Dr. Chaitanya Kunte and Ms Jyoti Khandelwal were the experts. Total 170 teachers benefitted from this programme.



- One Day Lecture Cum Demonstration on 'Integration of Music in Education' for the interns was organized on 30<sup>th</sup> August 2019. Dr. Chaitanya Kunte, Asst. Prof. in the first technical session discussed the aims and pedagogy of lessons based on music with the help of some clips. Dr. Gautam Tiwari, Asst. Prof. from DEI introduced the basics of Music- Rhythms, Tunes, Swaras, Ragas and demonstrated how different combination of swaras help to tune the content material. Around 200 students from Faculty of Education participated in the event.



- An in-house Lecture cum Demonstration Programme was organized in Prem Vidhyalaya on 18<sup>th</sup> September 2019. Experts from Faculty of Education, Dr. Parul khanna, Dr. Anjana Verma, Dr. Manu Sharma and Mrs. Jyotika Kharbanda presented Art integrated demo lessons in Hindi, English, Science and Social Studies .The workshop was attended by total 78 participants including teacher educators, school teachers, pre-service teachers and students.

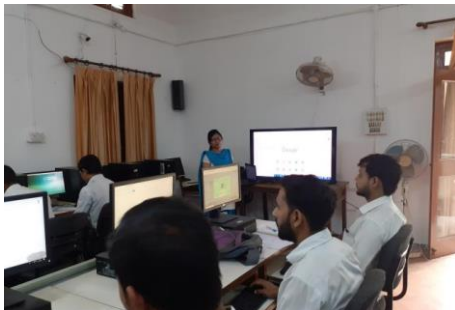


- A Two-Day Lecture cum Demonstration on 'Neuroscience & Brain Based Learning' was conducted by School of Education, Faculty of Education, DEI, Agra, under the PMMMNMTT, MHRD from 21-22 September, 2019. The theme of the workshop was Brain based learning and its implications in learning. Dr. Vibha Sharma, Associate Professor IHBAS, New Delhi, Prof C.M. Markan, Prof. S.P Sinha (Prof. Emeritus.

D.E. I), Dr. Amla Chopra, Associate Professor, Faculty of Science DEI, Prof. Shikha Dixit Head, Dept. of Humanities and Social Studies, IIT Kanpur, Prof Ira Das (Emeritus) Dr. Ashok Sahai, Retd. Professor & Head, Department of Anatomy, King George Medical University, Lucknow were the Resource persons.



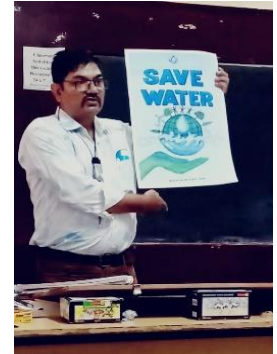
- A One-day Workshop on Contemplative Practices was organized on 26.10.2019. The theme of the workshop was Neuroscientific study of Self-Consciousness and meditation. Dr. Aviva Berkovich Ohana, Faculty of Education, University of Haifa, Dr. Kalpana Gupta, Dr. Sangita Sinha, Dr. Dayal Pyari Srivastava, Prof. C.M. Markan, Dr. Amla Chopra and Dr. Sona Ahuja were the experts for the workshop.
- A five-day workshop on Fundamentals of Artificial Intelligence in Education was held from 22-27 November, 2019 to make the participants aware about the fundamental concepts of Artificial Intelligence, Machine learning, Natural Language Processing, Data Analysis and Robotics. The content of the workshop was designed on the basis of the new course “Fundamentals of Artificial Intelligence in Education” which has been implemented in B.Ed. from session 2019-20. The objective of the workshop was to expose the participants to the underlying process of these fundamental concepts and making them aware of the applications of AI in various fields and to develop a positive attitude for further exploration.



- A Two-day Workshop on “Fundamentals of Artificial Intelligence” was organized by the School of Education (SoE) Project under the aegis of Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNTT) scheme of MHRD on 27<sup>th</sup> and 28<sup>th</sup> November 2019 at SS Educational Institute, Malpura, Agra.
- A 3-day National workshop on clay modeling, sculpture and pottery and their integration in teaching learning was organized by the Faculty of Education on 19<sup>th</sup> December to 21<sup>st</sup> December 2019. The theme of the workshop was to aware participants about clay modelling, sculpture and pottery and their integration in teaching and learning. The first session was conducted by Mr. Mahesh Kumar, Ms. Priyanka Gupta, Dr. Lucky Tonk, Professor Rajeev Nayan, Dr. Sakuntala Misra were the resource persons.
- Two Day Workshop on “Fundamentals of Artificial Intelligence for Teachers” was held on 21<sup>st</sup> and 22<sup>nd</sup> December 2019. 30 primary school teachers from 8 villages participated in a two-day workshop on Artificial Intelligence to tap the potential of AI in enabling ICT use by teachers. The teachers understood how machine learns and how AI systems can simplify access and use of ICT. From creating their first



email account to using face recognition systems, teachers were motivated to use AI applications for improving their teaching in classrooms and managing their school work. The workshop was convened by Ms. Mugdha Sharma.



A Two-Day workshop on Fundamentals of Artificial Intelligence in Education was organized by Centre for Artificial Intelligence, School of Education under Pandit Madan Mohan Malviya National Mission for Teachers and Teaching, MHRD, Govt. of India at Agra Public Teachers Training College, Artoni, Agra on 3<sup>rd</sup> and 4<sup>th</sup> Jan 2020. Total 97 participants (Teacher Educators, University Teachers, School Teachers and Pre-service Teachers) attended this workshop. Mr. Mahesh Chandra Sharma was the chief guest for the inaugural session.



- A one-day Workshop on Science and Art of Teaching through Puppetry was organized by the School of Education (SoE) Project under the aegis of Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNTT) scheme of MHRD on 6<sup>th</sup> January 2020. The experts in the workshop were faculty members of Education Faculty. The workshop was organized for a delegation visiting DEI from Hong Kong University. After training, they gave wonderful performances displaying their understanding of the art of Puppetry. The workshop was attended by 43 participants.



- A lecture was organized by the centre of KART, School of Education (SoE) Project under the aegis of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) scheme of MHRD on 6<sup>th</sup> January 2020. The chief speaker of the programme was Prof. Dhaneswar Harichandan, Principal Investigator, e-PG Pathshala project of UGC in Adult Education, Institute of Distance and Open Learning, University of Mumbai, Vidyanagari, Mumbai. Prof. Harichandan talked about the expansion of open and distance learning in last few decades and the need of e-content preparation.



- A one-day International Workshop entitled 'Trauma Informed Care: Implication for Educators and helping professionals' was organized by the CKART, School of Education, Faculty of Education on 10.01.2020 under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching scheme Ministry of Human Resource Development. Dr. Charles V. Lindsey Associate Professor, Department of Professional Counselling, University of Wisconsin, Oshkosh, USA and Dr. Tulsi Das, Clinical and Rehabilitation Psychologist, Banaras, U.P. and Prof. Kamaljeet Sandhu, Professor & Head, Dept. of Psychology, DEI were the invited guests. Prof. NPS Chandel convened the workshop and it was attended by 94 participants.



- A Two-Day workshop on "Fundamentals of Artificial Intelligence in Education" was organized by Centre for Artificial Intelligence, School of Education, DEI under Pandit Madan Mohan Malaviya National Mission for Teachers and Teaching, MHRD, Govt. of India at Anand Engineering College, Keetham, Agra on 10-11 January, 2020. Total 98 participants (Teacher Educators, University Teachers, School Teachers and Pre-service Teachers) attended this workshop.



- A Two-Day workshop on "Fundamentals of Artificial Intelligence in Education" was organized by Centre for Artificial Intelligence, School of Education under Pandit Madan Mohan Malviya National Mission for Teachers and Teaching, MHRD, Govt. of India at Faculty of Education, St. John's College, Agra on 16th and 17th Jan 2020. The total number of participants was 80. Prof. S. P. Singh, Principal, St. John College, Agra, was Chief Guest in the inaugural session and the workshop was coordinated by Dr Rajiv Philip, Coordinator, Faculty of Education.



- On 24.01.2020 & 25.01.2020 a two-day workshop on Fundamentals of Artificial Intelligence in Education was organized under PMMMMNMTT scheme (SoE) of MHRD at District Institute of Education & Training (DIET), Balrampur. Workshop was inaugurated by Principal DIET Balrampur Shree Vishnu Shyam Dwivedi. Mr. Bajarang Bhushan (Assistant Professor) from Dayalbagh Educational Institute, Agra, Dr. Saurabh Dixit (Assistant Professor) and Professor A.K. Dwivedi from Central Institute of Plastic Engineering & Technology (CIPET), Lucknow were the resource persons. Total participation in the workshop was 109. Dr. Nagendra Nath Yadav, SDM (Sub District Magistrate), Sadar, Balrampur was chief guest of the valedictory session.
- On 27.01.2020 & 28.01.2020 a two-day workshop on Fundamentals of Artificial Intelligence in Education was organized under PMMMMNMTT scheme (SoE) of MHRD at City Academy Degree College, Lucknow. Workshop was inaugurated by Director City Academy Degree College, Lucknow Dr. Mamta Srivastava. Mr. Bajarang Bhushan (Assistant Professor) from Dayalbagh Educational Institute, Agra, Dr. Saurabh Dixit (Assistant Professor) and Professor A.K. Dwivedi from Central Institute of Plastic Engineering & Technology (CIPET), Lucknow were the resource persons for the workshop. Total participation in the workshop was 165. Prof. Dinesh Kumar, Professor, Chief Proctor & Superintendent of Works, University of Lucknow, Lucknow chaired the closing session.



- A Webinar on ADOBE Spark was organized on 30<sup>th</sup> April 2020 by the School of Education, DEI to help educators learn Adobe Spark to foster Digital Literacy and Creativity Skills of the students and learn the art of Digital Storytelling. 82 In-Service and Pre-Service teachers learnt and practised use of Adobe Spark tools under the guidance of Jatin Vashisht, Microsoft Certified Trainer. Mr Vikrant Satsangi, Senior Program

Manager - Education and Skill Development Programs at Adobe was present to answer all the queries of the participants and introduce them to Adobe Education Exchange platform and its resources. All the participants made creative posts and shared with the group.

- The Internal Quality Assurance Cell (IQAC) and the School of Education (PMMMMNMTT), in collaboration with ELSEVIER organized One Day Online Workshop on the theme entitled 'Enhancing Research Communication Skills through ScienceDirect and Mendeley' on 3<sup>rd</sup> May, 2020. The expert of this online workshop, Mr. Vishal Gupta, South Asia ELSEVIER introduced the teachers and scholars with the scientific process along with services and functioning of Science Direct and Mendley. The inaugural lecture was given by Prof. Sanjeev Swami, Faculty of Social Science, DEI. Over 2000 participants practiced the skills required.
- A Webinar on Online Teaching Platforms was organized on 7<sup>th</sup> May 2020. Twenty-Five in-service school teachers and Principals from Delhi, Agra, Timarni and Rajaborari participated. The participants were exposed to Google Classroom and Big Blue Button for sharing content in asynchronous and synchronous mode respectively.
- A Two Day National Online Workshop on 'Cognitive and Meta Cognitive Strategies of Knowledge Acquisition' was organized on 2<sup>nd</sup> and 3<sup>rd</sup> June 2020 under the patronage of School of Education. Prof. Nandita Babu, Cognitive Psychologist, Department of Psychology, University of Delhi acted as resource person. Over 500 participants from all over the country were given information and hands-on experience in Cognitive and Meta cognitive teaching learning techniques.

### Staff Achievements

- Prof. NPS Chandel was nominated as Member of working Group for Curriculum of existing Teacher Education Programmes constituted with in National Council for Teacher Education (NCTE) New Delhi and attended its first meeting on 19th June 2019 at NCTE New. Delhi
- Dr Sona Dixit represented DEI in AICTE and Internshala' s event - Internship Day on 25th August 2019 at AICTE Headquarters, New Delhi.
- Dr Sona Dixit represented DEI in Innovation Summit & Exhibition from 10<sup>th</sup> -11<sup>th</sup> September 2019 at Dr. Ambedkar International Center, 15, Janpath New Delhi – 110001.
- Dr Sona Dixit represented DEI as Lady Team Manager in Zonal Youth Fest at GNDU, Amritsar from 25-29 December 2019 and Amity Utsav AIU 35th National Youth Festival 2020 from 2-7 Feb, 2020.
- Prof. NPS Chandel attended the 2<sup>nd</sup> meeting of working group for curriculum of existing Teacher Education Programme constituted with in NCTE on 9-10 July 2019 at NCTE Head quarter, New. Delhi
- Prof. NPS Chandel attended a meeting of Board of Studies B.Ed./M.Ed. MJP Rohilkhand University, Bareilly on 9 December 2019.
- Prof. Nandita Satsangee and Ms. Mugdha Sharma attended National Consultation Meeting organized by NITTTR Bhopal from 5th Sep to 6<sup>th</sup> Sept, 2019 in Bhopal
- Ms. Jyotika Kharbanda and Ms Mugdha Sharma were invited as Judge for Science Exhibition organized by Shri Ram Centennial School, A.gra on 10<sup>th</sup> July 2019.
- Dr Kalpana Gupta was honored with 'Vidhya Vibhuti Samman' for her contribution in the field of Education by Akhil Bhartiya Sarva Bhasha Sanskrit Samanvaya Samiti during Andaman Sahitya Mahotsav on 13<sup>th</sup> June 2019.
- Dr. Neha Jain organized CTET (Dec 2019) preparation class through online mode for the students of B.Ed., M.Ed. and D.El.Ed. The content based on different topics of CTET syllabus was prepared by Dr. Neha Jain, Mrs. Pallavi Dubey, Dr. Neetu Singh, Dr. Anjana Verma, Dr. Shweta Agarwal.

- Prof. Archana Kapoor, acted as an invited speaker in National Workshop (Faculty Development Programme in e-Education and its tools A step towards Digital India from January 7- 13, 2020.
- Prof. NPS Chandel was invited as a special guest in two-day conference on Teacher Education Journey: Local to Global on the occasion of the Silver Jubilee Year celebration of NCTE.
- Prof. NPS Chandel has delivered two lectures on Classroom Communication Skills on 27<sup>th</sup> November 2019 in Induction Training Program organized by Faculty Development Centre, School of Education, Banasthali Vidyapith, Rajasthan, India.
- Dr Sona Dixit was invited as speaker in Indo-US workshop on 'Climate Resilience' organized by Dept. of Chemistry, DEI from 14-15 June, 2019.
- Dr Sona Dixit acted as resource person in one month mandatory Faculty Induction programme organized by Teaching Learning Centre, Shri Lal Bahadur Shastri Sanskrit Vidyapeeth, New Delhi under PMMMNMTT scheme, MHRD, Govt. of India from 5 November to 4 December, 2019. She conducted three sessions on activity based lesson planning and Sustainable development and value inculcation through classroom teaching on 7 November, 2019.
- Dr Sona Dixit acted as resource person in National Seminar on-“Mahatma Gandhi: A Lesson for Contemporary Society’ organized by Indian Economics and Allied Sciences Association in Symbozia Girls College, Agra on December 2, 2019.
- Dr Amit Gautam, was invited as resource person in the tool development workshop (Under IUCTE) from 18-20 Nov.2019 organized by School of Education, Mahatma Gandhi Antarrashtriya Hindi Viswavidyalaya (A Central University), Wardha, Maharashtra.
- Dr Kalpana Gupta acted as resource person in a Five-day Yoga Camp organized by Bharat Vikas Parishad and Mahila Samiti, Dibai, Bulandshahr from 8 to 12 June 2019. She taught Asanas, Pranayam and different yogic kriyas to participants.

### Publications

- Laxmi, V. & Chandel, N.P.S. (2020). A Study of Relationship Between time Spent on Internet and Creativity, Study Habits, Academic Achievement, Educational and Occupational Aspirations of the Undergraduates. *Studies in Indian Place Names*, Vol 40(70), 1121- 1126.
- One paper entitled as “Massive Open Online Courses: Meeting Point of Knowledge and Network” published in Shodh Samiksha Aur Mulyankan, International Double Blind Peer Reviewed Research Journal, ISSN(PRINT)-0974-2832, E-ISSN-2320-5474, March 2020.
- Gupta, K. (2019). New methods and techniques for Teaching and Learning Drawing at Secondary Level, In Dr Archana Rani, *Method and Techniques of Indian Art*, (pp 250-256) ISBN-978-81-923100-4-6.
- Verma, A. (2019). ‘Gandhian Philosophical Perspective: Basic Spirit and Relevance on the Present Educational Scenario’ in 'गाँधी दर्शन और भारतीय समाज' (pp102-106), Sahitya sanchay, Delhi. Conference Paper Proceeding held on 17-18 Nov. 2019 'Relevance of Mahatma Gandhi in present Global Perspective.
- Bansal, S. & Lajwanti (2020). स्नातक स्तर के विद्यार्थियों के शैक्षिक आकांक्षा स्तर एवं शैक्षिक उपलब्धि में सहसंबंध का अध्ययन. *भारतीय आधुनिक शिक्षा* 40(3), pp.139. ISSN 0972-5636.

### Facilities Created

Under School of Education 4 labs of C KART, a Yoga lab and an AI lab were established.

# FACULTY OF ENGINEERING 2019-20



# Faculty of Engineering

---

Faculty of Engineering, Dayalbagh Educational Institute was founded in 1950 as Dayalbagh Engineering College in response to the country's needs for trained technical manpower. It became a part of the Dayalbagh Educational Institute (Deemed University) in the year 1981. The Faculty has four departments, Civil Engineering, Electrical Engineering, Footwear Technology and Mechanical Engineering that offer a number of programmes at the undergraduate, postgraduate and doctoral levels. The faculty offers Full-Time Four-Year Bachelor of Technology in Civil Engineering, Electrical Engineering, Footwear Technology and Mechanical Engineering and Full Time Five Year Bachelor of Architecture. In addition, the faculty also offers Integrated Dual Degree Courses like BCom /BBA integrated Footwear Technology Dual Degree and a Part Time Bachelor of Technology in Electrical Engineering. At the postgraduate level the faculty offers Full Time Master in Technology in Engineering Systems, Full Time Master in Technology in Engineering Systems with specialization in Computer Science, Part Time Master in Technology in Engineering Systems. The faculty also offers Doctor of Philosophy: PhD (Fulltime) and PhD (Part Time) and Integrated BTech, MTech and PhD programmes. Prof. V. Soamidas, the Head of Civil Engineering department is the Dean of the Faculty.

## *Department of Electrical Engineering*

### **Achievements /Recognitions**

Dr. Rajiv Chauhan developed Video Lecture Series on "Digital Logic Design" for MOOCS Initiative by the Dr. A.P.J. Abdul Kalam Technical University (AKTU), Lucknow.

Dr. Rajiv Chauhan was selected as IEEE IAS Young Professionals and Alumni of CMD, USA.

Dr. Rajiv Chauhan was the Member of Project Panel, The Institution of Engineers (India), Kolkata.

Dr. Rajiv Chauhan was the Editor of the journal Electronics Science Technology and Application.

Dr. Rajiv Chauhan was selected as Hon'ble Member of Judging Panel, "Internal Hackathon: SMART INDIA HACKATHAN 2020" IET Khandari Campus, Dr. Bhimrao Ambedkar University, Agra (January 25, 2020).

Dr. Rajiv Chauhan was selected as Hon'ble Member of Judging Panel, "Internal Hackathon: SMART INDIA HACKATHAN 2020" Dayalbagh Educational Institute, Agra held on February 07, 2020 and he has been selected as the Member of Organizing Committee, International Conference on Electronics and Electrical Engineering (ICEEE) to be held on June 8-10, 2021 in Seoul, South Korea. He was the TPC Member of International Conference on Contemporary Computing and Applications organized by Dr. A.P. J. Abdul Kalam Technical University, Lucknow in collaboration with Madan Mohan Malviya University of Technology Gorakhpur and Dr. Babasaheb Ambedkar Technological University, Maharashtra held on February 05-07, 2020. He has opened an IEEE IAS Student Branch Chapter at DEI Agra.

Dr. Subo Upadhyaya was the Program Committee member of Electric Power and Renewable Energy Conference-2020" NIT Jamshedpur held on 29-30<sup>th</sup> May 2020.

- Prof. D.K. Chaturvedi delivered a lecture in webinar on Virtual Power Lab in FOP on e-learning and Recent Trends in Electrical Engineering on 20th May 2020 at Amity School of Engineering and Technology, Amity University, Noida. He also delivered a webinar on Covid19 and virtual Labs at Hindustan College of Science and Technology, Farah, Mathura on 2 June 2020.

Dr. Rajeev Kumar Chauhan delivered an Invited Talk in Webinar on Smart DC Micro-grid Solutions for Remote Areas Electrification organized by Central University of Haryana, Mahendargarh and developed a Video Lecture Series on Power Sources and Loads in Microgrid.

Mr. Rishabh Singhal secured first rank in “Quantum Winter hackathon 2020”. It is a world's first Knowledge Series & Hackathon on Multiphysics Simulations using Quantum Computing organized by BosonQ Psi Pvt. Ltd., Quantum Computing India, International Society for Computational Fluid Dynamics | ISCFD and IBM Qiskit.

### Conferences/Seminars/Workshops Organized

The department organized a faculty Development Program on Microgrid Opportunity: Renewable Energy Resources and Buildings--DEI Agra 16-20 June 2020 under TEQIP 3 with Dr. Subo Upadhyaya as its Coordinator

### Participation in Conferences/Seminars/Webinars

Dr. Subo Upadhyaya participated in the following Webinars

- 1) Webinar: Basics of COVID-19 (Participated)
- 2) Webinar: Research Areas in Energy Audit and Conservation (Participated)
- 3) VI International Yoga Day (Participated)
- 4) Webinar: Recent Initiatives in Renewable Energy Systems (Participated)
- 5) Webinar: Mental Well Being and Emotional Wellness of Students during Corona19 Pandemic Crisis (Participated)
- 6) Webinar: Smart Battery Energy Management and Health-Conscious Fast Charging for Future Transport, IEEE (Participated)
- 7) Webinar: Energy Storage and Electric Vehicle Technology, IEEE (Participated)
- 8) Webinar: New Trends in Fuzzy and Rough Set Theory and its Applications (Participated)
- 9) Webinar: Role of Solar Energy in Clean Global Environment (Participated)
- 10) Webinar: Research Areas in Energy Audit and Conservation (Participated)
- 11) Webinar: Unlocking the Lockdown Through E-Examination (Participated)
- 12) Webinar: “Interactive Teaching and Experiential Learning using MATLAB and Simulink” (Participated)

### Research Projects

- ✓ DST Mission Innovation R&D project  
The DST Mission Innovation R&D project is a collaborative effort of D.E.I., IIT Roorkee and University of Tromso, Norway that envisages multi-pronged RD and demonstration of Solar Agriculture Farm Ecosystem (SAFE). The project has been raised to contribute to the Government’s two major targets by the year 2022, i.e., to increase the capacity of solar power plants to 100 GW and to double the income of farmers. The major takeaways of the project include the following:

1. Solar-Agriculture Farm with multiple land-use to increase the farmer’s income.
2. Hybrid AC/DC Smart Microgrid for integration of diverse renewable energy resources with utility grid and rational end use of renewable energy in the microgrid Development of solar powered value chain machinery for agriculture and dairying for empowering farmers.
3. A DST R&D Project titled “Diverse Energy Vectors Integration for Energy Storage” was awarded to Prof. G. S. Sailesh Babu (PI), Prof. D. Bhagwan Das (Co-PI) and Prof. A.K. Saxena (Co-PI) by The European Joint Programming Platform ERA-Net Smart Energy Systems and the global Mission Innovation Initiative.



4. A project titled "Smart Energy Management System for Solar-Hydro-Battery based Microgrid to Empower Future Low-Carbon Indian Society" under UGC Start-Up Grant, Govt. of India was sanctioned to Dr. Rajeev Kumar Chauhan.

## Publications

1. Kumar, S., Kaur, T., Upadhyay, S., Sharma, V., & Vatsal, D. (2020). Optimal Sizing of Stand-Alone Hybrid Renewable Energy System with Load Shifting. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 1-20.
2. Chauhan, A., Upadhyay, S., Srivastav, A., & Khan, M. T. (2020, February). An Intelligent Load Management Technique for Remotely Located Areas powered by Grid Connected Solar/Diesel Generator Based System. In *2020 International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control (PARC)* (pp. 320-324). IEEE.
3. Upadhyay, S., & Chauhan, A. (2020, February). Design of Power Distribution Network for an Isolated Hybrid Energy System Located in a Hilly Area. In *2020 International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control (PARC)* (pp. 252-256). IEEE.
4. Vuppuluri, P. P., & Chellapilla, P. (2020). Serial and parallel memetic algorithms for the bounded diameter minimum spanning tree problem. *Expert Systems*.
5. Prakash, V. P., & Patvardhan, C. (2020). Novel Heuristics for the Euclidean Leaf-Constrained Minimum Spanning Tree Problem. *SN Computer Science*, 1(2), 1-19.
6. Prakash, V. P., Patvardhan, C., & Srivastav, A. (2020). A novel Hybrid Multi-objective Evolutionary Algorithm for the bi-Objective Minimum Diameter-Cost Spanning Tree (bi-MDCST) problem. *Engineering Applications of Artificial Intelligence*, 87, 103237.
7. Yadav, M., & Prakash, V. P. (2020). A Comparison of the Effectiveness of Two Novel Clustering-Based Heuristics for the p-Centre Problem. In *Advances in Data and Information Sciences* (pp. 247-255). Springer, Singapore.
8. Dhar, A., Ahmad, G., Pradhan, D., & Roy, J. N. (2020). Performance analysis of c-Si heterojunction solar cell with passivated transition metal oxides carrier-selective contacts. *Journal of Computational Electronics*, 1-9.
9. Chauhan, R. K., Chauhan, K., Mehrotra, A., Agarwal, A. K., Subrahmanyam, B. R., Singh, A. G., & Singh, D. (2020, February). Droop Control Based Battery Management System for Automated DC Microgrid. In *2020 International Conference on Contemporary Computing and Applications (IC3A)* (pp. 81-86). IEEE.
10. Rana, V., Ahmad, G., Ramesh, A. K., Das, S., & Singh, P. (2020). Diameter-Dependent Piezoresistive Sensing Performance of Junction less Gate-All-Around Nanowire FET. *IEEE Transactions on Electron Devices*, 67(7), 2884-2889.
11. Gupta, Y., & Saini, A. (2020). A New Hybrid Document Clustering for PRF-Based Automatic Query Expansion Approach for Effective IR. *International Journal of e-Collaboration (IJeC)*, 16(3), 73-95.
12. Dev, N. K., Shankar, R., & Qaiser, F. H. (2020). Industry 4.0 and circular economy: Operational excellence for sustainable reverse supply chain performance. *Resources, Conservation and Recycling*, 153, 104583.
13. Yadav, M., & Prakash, V. P. (2020). A Comparison of the Effectiveness of Two Novel Clustering-Based Heuristics for the p-Centre Problem. In *Advances in Data and Information Sciences* (pp. 247-255). Springer, Singapore.
14. Yadav, H., Kumari, A. C., & Chhikara, R. (2020). Feature selection optimization of software product line using metaheuristic techniques. *International Journal of Embedded Systems*, 13(1), 50-64.
15. Kashyap, N., Kumari, A. C., & Chhikara, R. (2020). Multi-objective Optimization using NSGA II for service composition in IoT. *Procedia Computer Science*, 167, 1928-1933.
16. Singal, P., Kumari, A. C., & Sharma, P. (2020). Estimation of software development effort: A Differential Evolution Approach. *Procedia Computer Science*, 167, 2643-2652.

17. Maan, P., Singh, H., & Kumari, A. C. (2020). Symmetric cryptosystem to secure images utilizing chaotic deterministic phase mask in Fresnel transform domain employing singular value decomposition. *Procedia Computer Science*, 167, 860-869.
18. Sagar, L. K., & Das, D. B. (2020). Development of Decision Support System by Smart Monitoring of Micro Grid. In *Intelligent Computing in Engineering* (pp. 117-126). Springer, Singapore.
19. Kumar, A., & Singh, B. P. (2020). Toward the Semantic Data Inter-processing: A Semantic Web Approach and Its Services. In *Social Networking and Computational Intelligence* (pp. 741-753). Springer, Singapore.
20. Kashyap, N., Kumari, A. C., & Chhikara, R. (2019, September). Service Composition in IoT-A Review. In *International Conference on Intelligent Data Communication Technologies and Internet of Things* (pp. 287-291). Springer, Cham.
21. Kashyap, N., Kumari, A. C., & Chhikara, R. (2020). Service Composition in IoT using Genetic algorithm and Particle swarm optimization. *Open Computer Science*, 10(1), 56-64.
22. Prakash, V. P., Patvardhan, C., & Srivastav, A. (2020). A novel Hybrid Multi-objective Evolutionary Algorithm for the bi-Objective Minimum Diameter-Cost Spanning Tree (bi-MDCST) problem. *Engineering Applications of Artificial Intelligence*, 87, 103237.
23. Bhardwaj, S., Sharma, A., Malik, A., & Khan, K. L. A. (2020). Performance Assessment of Dual Fuel Engine Operated with Agricultural Waste and Diesel. In *Reliability and Risk Assessment in Engineering* (pp. 231-240). Springer, Singapore.
24. Sharma, A., Kankar, P. K., & Amarnath, M. (2020). Investigations on Nonlinearity for Health Monitoring of Rotor Bearing System. In *Reliability and Risk Assessment in Engineering* (pp. 241-252). Springer, Singapore.
25. Mani, A., Mani, N., & Bhattacharyya, S. (2020). Towards a Framework for Performance Testing of Metaheuristics. In *Intelligence Enabled Research* (pp. 13-19). Springer, Singapore.
26. Kaushik, S. C., Arora, A., & Dixit, M. (2020). Hybrid Absorption Cycles for Solar Cooling. *Advances in Energy and Built Environment*, 223-239.
27. Chauhan, R. K., & Chauhan, K. (2019). Battery Monitoring and Control System for Photovoltaic based DC Microgrid. *International Journal of Emerging Electric Power Systems*, 20(6).
28. Kumar, S., Kaur, T., Arora, M. K., & Upadhyay, S. (2019). Resource estimation and sizing optimization of PV/micro hydro-based hybrid energy system in rural area of Western Himalayan Himachal Pradesh in India. *Energy sources, part a: Recovery, utilization, and environmental effects*, 41(22), 2795-2807.
29. Satsangi, K. P., Das, D. B., Babu, G. S., & Saxena, A. K. (2019). Real time performance of solar photovoltaic microgrid in India focusing on self-consumption in institutional buildings. *Energy for Sustainable Development*, 52, 40-51.
30. Krishna, S. V., Kumar, P. K., Verma, K., Bhagawan, D., Himabindu, V., Narasu, M. L., & Singh, R. (2019). Enhancement of biohydrogen production from distillery spent wash effluent using electrocoagulation process. *Energy, Ecology and Environment*, 4(4), 160-165.
31. Gupta, Y., & Saini, A. (2019). A novel term selection based automatic query expansion approach using PRF and semantic filtering. *International Journal of Engineering and Advanced Technology*, 8(C), 130-137.
32. Satsangi, K. P., Babu, G. S., Das, D. B., & Saxena, A. K. (2018, September). Performance Evaluation of Grid Interactive Photovoltaic System. In *2018 International Conference on Computing, Power and Communication Technologies (GUCON)* (pp. 691-695). IEEE.
33. Gupta, Y., & Saini, A. (2019). A new swarm-based efficient data clustering approach using KHM and fuzzy logic. *Soft Computing*, 23(1), 145-162.
34. Satsangi, K. P., Babu, G. S., Das, D. B., & Saxena, A. K. (2019). Performance Indicators for Assessing Solar Photovoltaic Microgrids in Grid-Connected Mode. In *Applications of Computing, Automation and Wireless Systems in Electrical Engineering* (pp. 1213-1222). Springer, Singapore.

### **Department of Mechanical Engineering**

### **Recognitions**

1. Prof. K. Hans Raj visited university of Kiel, Germany as a Visiting Scientist, in June 2019.
2. Prof. SK Srivastava, delivered a talk on the topic "Healthcare in students' community", Institute of Engineering & Technology, Dr. Bhimrao Ambedkar University, Khandari Campus, Agra, February 17, 2020.
3. Prof. SK Srivastava delivered a talk Plenary Talk on the topic "Neuroplasticity to comprehend the scientific manifestation of chronic shoulder pain of occupational workers", International Conference on Parkinson's, Huntington's & Movement Disorders, Frankfurt, Germany, April 17-18, 2019.
4. Prof. SK Srivastava, delivered a talk on the topic "How EMG analysis has been helping solve problems in occupational health", Neuromuscular Research Lab, Faculty of Human Motricity, University of Lisbon, University of Lisbon, April 29, 2019.
5. Prof. SK Srivastava, delivered a talk on the topic "How EMG analysis and neuroplasticity have been helping solve problems in occupational health", Physical Therapy Department, University of Valencia, Valencia, Spain, May 6, 2019.
6. Prof. SK Srivastava was the External Expert in the Selection Committee of Professors, GLA University, Mathura, 2019.
7. Prof. SK Srivastava delivered an Invited Lecture titled Role of Ergonomics in Industries, at Aligarh Muslim University, Aligarh, 2019.

### Patents

1. Prof. Rahul Swarup Sharma, K Hans Raj, A Dayal from Mechanical department acquired a patent on Process and apparatus for 3D circular equal channel angular pressing, Government of India Patent Office 3318/CHE/2013 2019 Granted
2. A patent has been granted to Prof. Devendra Kumar Chaturvedi and Vishal Pengoria of Electrical Department, Faculty of Engineering, DEI, for their invention entitled "CONTINUOUS GAS FIRED ANNEALING FURNACE" for the term of 20 years from the 4th day of July 2012 in accordance with the provisions of the Patents Act, 1970.

### Participation in Conferences/ Seminars /Workshops

1. Pushpendra Yadav, Ishant Singhal, Dheeraj A Angazala, Ankit Sahai, Rahul Swarup Sharma, Evaluating Mechanical Strength of Three-Dimensional PLA printed parts by Free Form Fabrication, International Mechanical Engineering Congress (IMEC-2019), 29th Nov- 1st Dec 2019, NIT Tiruchirappalli, India.
2. Himanshu Chaturvedi, Anurag Gupta, Kumar Ratnakar, and D. Ganeshwar Rao, Potential of Non-Edible Straight Vegetable Oil (SVO) as a Substitute Fuel for Diesel Engine 2nd International Conference on New Frontiers in Engineering, Science and Technology, 18-22 Feb, 2019, NIT Kurukshetra, India.
3. Anurag Gupta, Kumar Ratnakar, D. Ganeshwar Rao, Performance and Emission Characteristics of Diesel Engine Fuelled with Preheated Straight Vegetable Oil International Mechanical Engineering Congress (IMEC-2019), 29th Nov- 1st Dec 2019, NIT Tiruchirappalli, India.
4. Ashok Yadav, Nonihal Dhakry, Interpretive Structural modelling approach for key recommendations for implementing renewable energy policies in Indian context, The proceedings of the NSC-2019, organized by IIT Roorkee during Dec 7-11, 2019, Roorkee.

### Publications

1. Bhardwaj, S., Sharma, A., Malik, A., & Khan, K. L. A. (2020). Performance Assessment of Dual Fuel Engine Operated with Agricultural Waste and Diesel. In *Reliability and Risk Assessment in Engineering* (pp. 231-240). Springer, Singapore.
2. Aditya Sharma, M. Amarnath, P.K. Kankar Nonlinear dynamic analysis of defective rolling element bearing using Higuchi's fractal dimension, *Sadhana*, 2019.
3. Girish Kumar Srivastava, Sanjay Srivastava Grip strength of occupational workers in relation to carpal tunnel syndrome and individual factors *International Journal of Occupational Safety and Ergonomics* 26(2), 296- 302,2020.
4. Mukesh Kumar, Sanjay Srivastava, Electromyographic analysis of VMO and VL across straight leg raise, short arc quad, medial tibial rotation and hip adduction in normal individuals *WORK: A Journal of Prevention, Assessment & Rehabilitation* 65(1) 153- 159, 2020.
5. Dev, N. K., Shankar, R., & Qaiser, F. H. (2020). Industry 4.0 and circular economy: Operational excellence for sustainable reverse supply chain performance. *Resources, Conservation and Recycling*, 153, 104583.
6. Dev, N. K., Shankar, R., & Swami, S. (2020). Diffusion of green products in industry 4.0: Reverse logistics issues during design of inventory and production planning system. *International Journal of Production Economics*, 223, 107519.
7. Kumar, M., & Srivastava, S. (2020). Electromyographic analysis of VMO and VL across straight leg raise, short arc quad, medial tibial rotation and hip adduction in normal individuals. *Work*, 65(1), 153-159.
8. Suri, A., Setia, R., & Raj, K. H. (2019, July). Pre and post annealing effect on dissimilar friction stir welding of Al 5083/6063 using new pedal shape pin tool. In *Journal of Physics: Conference Series* (Vol. 1240, No. 1, p. 012167). IOP Publishing.
9. Sharma, A., Amarnath, M., & Kankar, P. K. (2019). Nonlinear dynamic analysis of defective rolling element bearing using Higuchi's fractal dimension. *Sādhanā*, 44(4), 1-29.
10. Kumar, D., Singh, R., & Yadav, A. (2019). Effect of Oxygen Enrichment on the Performance of a Rotary Furnace: A Harbinger to Ecological Sustenance and Pollution-Free Castings. In *Advances in Interdisciplinary Engineering* (pp. 481-499). Springer, Singapore.

### Laboratories / New facilities created

Prof. Rahul Swarup Sharma Developed 3D Printing Virtual Simulation Lab.

### Research Projects – Completed/ Ongoing/ Sanctioned

1. Prof. Rahul Swarup Sharma was sanctioned a project entitled “3D Printing Virtual Simulation Lab” worth Rs. 16 lakhs MHRD for the period 2019-2021
2. Prof. Rahul Swarup Sharma was sanctioned a project entitled “Virtual Labs - Phase III worth Rs. 15 lakhs by MHRD for the period 2019-2021.
- ✓ A Consultancy Project was sanctioned to Prof. K. Hans Raj by ADRDE (DRDO) for Rs. 9, 93,300.
- ✓ AICTE has sanctioned Dr Ankit Sahai and Prof. Rahul Swarup Sharma a Research Project under RPS scheme for grant of Rs 18, 00,000 for three years.
- ✓ AICTE has sanctioned Prof. K. Hans Raj Rs. 14, 34,000 under the Modernization and Removal of Obsolescence (MODROB) for Department of Mechanical Engineering.

**Department of Footwear Technology**

**Publications**

1. Chaudhary, A. S., & Chaturvedi, D. K. (2020). Video-Transmission-Based Condition Monitoring of Solar Panels Using QR Code. In *Advances in Data and Information Sciences* (pp. 317-327). Springer, Singapore.
2. Mishra, R. N., Chaturvedi, D. K., & Kumar, P. (2020). Recent Philosophies of AGC Techniques in Deregulated Power Environment. *Journal of The Institution of Engineers (India): Series B*, 1-17.
3. Chaturvedi, D. K., Karimpour, A., & Singh, M. P. (2020, February). Health Monitoring of Induction Motor Using Sound Signals. In *2020 International Conference on Contemporary Computing and Applications (IC3A)* (pp. 221-224). IEEE.
4. Chaudhary, A. S., & Chaturvedi, D. K. (2020). Video-Transmission-Based Condition Monitoring of Solar Panels Using QR Code. In *Advances in Data and Information Sciences* (pp. 317-327). Springer, Singapore.
5. Chaudhary, A. S., & Chaturvedi, D. K. (2020). Effects of Activation Function and Input Function of ANN for Solar Power Forecasting. In *Advances in Data and Information Sciences* (pp. 329-342). Springer, Singapore.
6. Srinath, V., Agarwal, M., & Chaturvedi, D. K. (2020). Design and Simulation of a Single-Phase SHEPWM Inverter-Fed Induction Motor Drive Using Generalized Hopfield Neural Network. In *First International Conference on Sustainable Technologies for Computational Intelligence* (pp. 515-526). Springer, Singapore.
7. Rastogi, R., Chaturvedi, D. K., Satya, S., Arora, N., Gupta, M., Verma, H., & Saini, H. (2020). An Optimized EMG and GSR Biofeedback Therapy for Chronic TTH on SF-36 scores of Different MMBD Modes on Various Medical Symptoms. In *Hybrid Machine Intelligence for Medical Image Analysis* (pp. 197-236). Springer, Singapore.
8. Rastogi, R., Chaturvedi, D. K., Satya, S., Arora, N., Singhal, P., & Gupta, M. (2020). Surveillance of Type-I & II Diabetic Subjects on Physical Characteristics: IoT and Big Data Perspective in Healthcare@ NCR, India. In *Internet of Things (IoT)* (pp. 429-460). Springer, Cham.
9. Rastogi, R., Chaturvedi, D. K., Satya, S., Arora, N., Trivedi, P., Singh, A. K., & Singh, A. (2020). Intelligent analysis for personality detection on various indicators by clinical reliable psychological TTH and stress surveys. In *Computational Intelligence in Pattern Recognition* (pp. 127-143). Springer, Singapore.
10. Rastogi, R., Chaturvedi, D. K., Satya, S., Arora, N., Trivedi, P., Singh, A. K., & Singh, A. (2020). Intelligent Personality Analysis on Indicators in IoT-MMBD-Enabled Environment. In *Multimedia Big Data Computing for IoT Applications* (pp. 185-215). Springer, Singapore.
11. Rastogi, R., Chaturvedi, D. K., Satya, S., Arora, N., Trivedi, P., Gupta, M., & Gulati, M. (2020). MM Big Data Applications: Statistical Resultant Analysis of Psychosomatic Survey on Various Human Personality Indicators. In *Advances in Computational Intelligence* (pp. 303-325). Springer, Singapore.
12. Manikanta, G., Mani, A., Pal, S. H., & Kumar, C. D. (2019). Adaptive quantum-inspired evolutionary algorithm for optimizing power losses by dynamic load allocation on distributed generators. *Serbian Journal of Electrical Engineering*, 16(3), 325-357.
13. Chaturvedi, D. K., & Singh, M. P. (2019). Online equivalent circuit parameter estimation of three-phase induction motor using ANN. *Journal of The Institution of Engineers (India): Series B*, 100(4), 343-347.
14. Rastogi, R., Chaturvedi, D. K., Satya, S., Arora, N., Gupta, M., Singhal, P., & Gulati, M. (2019). Statistical analysis of exponential and polynomial models of emg & gsr biofeedback for correlation between subjects medications movement & medication scores. *International Journal of Innovative Technology and Exploring Engineering*.
15. Rastogi, R., Chaturvedi, D. K., Satya, S., Arora, N., Gupta, M., Verma, H., & Singh, A. P. (2019). Trends observation during different medications by subjects under EMG & GSR biofeedback. *depression*, 3(4), 5.
16. Dev, N. K., Shankar, R., Gupta, R., & Dong, J. (2019). Multi-criteria evaluation of real-time key performance indicators of supply chain with consideration of big data architecture. *Computers & Industrial Engineering*, 128, 1076-1087.

17. Kumar, P., & Sharma, R. (2019). Microstructure, Economic, and Emission Evaluation of Castings Produced from Biodiesel-fired Self-designed Rotary Furnace. In *Advances in Industrial and Production Engineering* (pp. 721-734). Springer, Singapore.
18. Gupta, S., Jain, S., & Agarwal, M. (2019). DWSA: a secure data warehouse architecture for encrypting data using AES and OTP encryption technique. In *Soft Computing: Theories and Applications* (pp. 505-514). Springer, Singapore.
19. Manikanta, G., Mani, A., Singh, H. P., & Chaturvedi, D. K. (2019). Simultaneous placement and sizing of DG and capacitor to minimize the power losses in radial distribution network. In *Soft Computing: Theories and Applications* (pp. 605-618). Springer, Singapore.

### Department of Civil Engineering

#### Patents Filed

Title	Author(s)	Agency	Year	Status
System and method to simulate 3D printer machine	Saurabh Bhardwaj, Shivam Gautam, Guru Ratan Satsangee, Er. Ishant Singhal, Dr. Ankit Sahai, Dr. Rahul Swarup Sharma	Government of India Patent Office  202011018294  E-12/410/2020/DEL	2020	Filed
Extruder of civil construction 3D printer for depositing concrete	Er. Ishant Singhal, Er. Suyash Goyal, Er. Ankit Jain, Er. Veer Pratap Singh, Er. Mohit Rajput, Dr Ankit Sahai, Dr Rahul Swarup Sharma	Government of India Patent Office  E-12/358/2020/DEL 202011014665	2020	Filed
Foldable freeform fabricator	Er. Shailendra Shakya, Shivam Gautam, Sumit Agarwal, Saurabh Bhardwaj, Prashant Pachauri, Er. Pushpendra Yadav, Er. Ishant Singhal, Dr. Ankit Sahai, and Dr. Rahul Swarup Sharma	Government of India Patent Office  E-1/21603/2020-DEL 202011019765	2020	Filed

#### Publications

1. Sharma, N. (2020). Analysis of free vibrations in trans radially isotropic spherically symmetric thermoelastic spheres. *Multidiscipline Modeling in Materials and Structures*.
2. Pushpendra Yadav, Ishant Singhal, Dheeraj A Angazala, Ankit Sahai, Rahul Swarup Sharma, Evaluating Mechanical Strength of Three-Dimensional PLA printed parts by Free Form Fabrication, *International Mechanical Engineering Congress (IMEC-2019)*, 29th Nov- 1st Dec 2019, NIT Tiruchirappalli, India, 2019.
3. Pushpendra Yadav, Ishant Singhal, Bobby Tyagi, Ankit Sahai, Rahul Swarup Sharma, "Intensifying Hands-on Learning and Experimentation of Fused Deposition Modeling Three-Dimensional Printers",

7th International and 28th All India Manufacturing Technology, Design and Research (AIMTDR-2018) Conference Anna University, Chennai., 309-317, 2019.

4. Book Chapter on Intensifying Hands-on Learning and Experimentation of Fused Deposition Modeling Three-Dimensional Printers, Springer, Singapore, 309-317, ISBN978-981-32, 2020.

# FACULTY OF SCIENCE 2019-20





# Faculty of Science

---

The erstwhile REI Degree College which was affiliated to Agra University became the part of Dayalbagh Educational Institute (Deemed University) in 1981 as Faculty of Science. Faculty of Science is an integrated unit of the following Departments:

1. Botany
2. Chemistry
3. Mathematics
4. Physics & Computer Science
5. Zoology

The faculty has focused its academic programme with highly qualified faculty and strong commitment towards excellence in teaching and research in areas relevant to the modern society. It is equipped with a wide range of sophisticated experimental facilities to support the academic activities including research. Faculty departments receive grants under SAP, FIST, DRS and INSPIRE programmes besides research grants from agencies such as UGC, CSIR, DST, BRNS, AICTE, DRDO, etc. There are several MoUs and international research collaborations. Recently, Biodiversity Park, Security & Surveillance Network and 5G labs have been established.

The faculty offers Undergraduate programmes (BSc Honours) in (1) Applied Botany Science (2) Botany (3) Chemistry (4) Mathematics (5) Physics (6) Zoology (7) Computer science (8) Economics and (9) Psychology and Postgraduate (MSc) programmes in MSc (Botany/Botany (Plant & Microbial Biotechnology), Chemistry, Mathematics/ Mathematics (Computer Applications), Physics/Physics (Electronics)/Physics (Computer Science) and Zoology. The faculty also offers several Integrated programmes like Integrated BSc (Computer Science) Hons., MSc (Comp. Sc.), MTech (Engg. Systems) with specialization in Computer Science. PG Diploma in Computer Science and Applications [PGDCSA], PG Diploma in Big Data, Logistics and Operations Research [PGDBD], PG Diploma in Environment and Green Technology [PGDEGT] and Diploma in Ayurveda (Up-Vaid) are also offered by the faculty. MPhil and Doctor of Philosophy (PhD) programme are available in Botany, Chemistry, Mathematics, Zoology, Physics and Computer Science. The faculty also offers Certificate Courses on Nursing Aid, Midwifery and Companion Help and six B.Voc. Programmes.

## *Department of Botany*

The Department of Botany was established in 1970 as a part of REI Degree College affiliated to Agra University. It became an independent department of DEI in 1981. It is strongly committed towards Hi-tech research that is relevant to the society, especially the farmers. The department is headed by Prof. JN Srivastava and comprises of 3 Professors, 7 Assistant Professors, 8 Guest Faculty and 1 Emeritus Professors. The Department offers the following Programmes:

- B.Sc. (Hons) Botany
- B.Sc. (Hons.) Applied Botany (introduced in 2017-18)
- B.Sc. (Hons.) Agricultural Sciences (introduced in 2017-18)
- B.Voc. Agriculture Technology (introduced in 2017-18)
- B.Voc. Dairy Technology
- B.Voc. Green House Technology
- M.Sc. Botany/Botany with specialization in Plant & Microbial Biotechnology.
- M.Voc. Dairy Technology

Dayalbagh Educational Institute (Deemed to be University), Agra

- PG Diploma in Environment & Green Technology
- M.Phil.
- Ph.D.

At the undergraduate level the department offers Work Experience Courses on

1. Maintenance of Botanical Gardens
2. Dairy Products
3. Modern Crop Production
4. Protein Production Technology: Mushroom & Spirulina Cultivation and
5. Cell & Molecular Techniques

The Botany Department has developed and maintains a Botanical Garden in Science Faculty, a Biodiversity Park in REI Intermediate College, a Medicinal and herbal garden in Dairy Campus, a Fruit orchard at Seminar Hall Complex and a multi-dimensional Phytodiversity Park with conservatory for local medicinal plants, fruit orchard, and plants for essential oil at Bahadurpur and a Fruit orchard and herbal garden at Himachal Pradesh.

The thrust areas of research of the department are Microbiology, Environment and ecosystem studies, Plant Biotechnology, Plant Tissue Culture, Plant Molecular Biology, Virology, Phycology, Biodiversity parks and Conservation, natural Products and agriculture. The department has well equipped Plant Biotechnology Lab, Dairy Lab: Milk Section, Dairy Lab with a Butter Section, Digital Soil Testing lab and instrumental facilities like Plant Growth Chamber, Semi-automatic microtome, Muffle Furnace, DNA Amplifier, Flame Photometer, Cooling Centrifuge, Rota-evaporator and Clevenger Apparatus.

The department has firm and active international and national collaborations with several Universities and Research Institutes like the Department of Agriculture, Michigan State University, USA, University of Arkansas, USA, Kiel University, Germany, Dr. Y.S. Parmar Agricultural University for Horticulture & Forestry, Nauni, H.P., G.B. Pant University of Agriculture and Technology, Pantnagar Uttarakhand, India, Jain Irrigation, Jalgaon, Maharashtra, Beej Sheetal Pvt Ltd., Jalna, Maharashtra, Aligarh Muslim University, Aligarh, Bhabha Atomic Research Centre, Mumbai and Indian Agriculture Research Institute, New Delhi and Saveer Biotech, Delhi.

### **New Courses/Programs**

Two new B.Voc. programmes: Sustainable Agriculture and Floriculture, have been approved by UGC.

### **Achievements**

Ph. D. Submitted / Awarded: Six

DR. SHARMITA GUPTA

- Received Certificate of excellence in reviewing from Asian Journal of Biology, 2020
- Reviewer for Agricultural Research Journal since 2017
- Name selected for inclusion in Asia Pacific Who's Who [Vol.XVIII]
- Submitted a Project entitled, "Optimization and scale up of microbial production of biodegradable bio plastics using cow dung" under "Scientific Utilization through Research Augmentation- Prime Products from Indigenous Cows": SUTRA-PIC India Program 14.3.2020

DR. RAJIV RANJAN

- Invited talk in a National conference on recent trends and new frontiers in Biotechnology, Agriculture, Science and Environment held on 23<sup>rd</sup> Feb 2020, St John's College, Agra.

#### DR. SUSHMA MISHRA

- Editorial Board member of the journal Exploratory Biotechnology Research, Knowledge Empowerment Foundation
  - Reviewer for the following journals:
    - Theoretical and Experimental Plant Physiology (TXPP) (IF: 1.2)
    - Frontiers in Plant Sciences (IF: 4.4)
    - Plant Growth Regulation, Springer Journals (IF: 2.8)
    - Symbioses (IF: 1.8)
    - Algal Research (IF: 4.5)
  - Mr. Krishan Kant has been awarded CSIR-NET Junior Research Fellowship from CSIR-HRDG, New Delhi.
  - Pooja Saraswat qualified GATE 2019
  - Kritika Yadav qualified GATE 2019
  - 3<sup>rd</sup> Prize for Poster presentation to Ms. Rimjhim on the title “Effect of Gut Microbiota on Human Psyche” in the International Virtual Conference on Recent Advances in Biochemical and Material Sciences, 2020.
- A team of students of B. Voc in Dairy Technology presented the indigenously developed Rapid Milk Adulteration Testing Kit (KEMAT – Kit for Easy Milk Adulteration Testing) before the Honorable Minister for Health & Family Welfare at the ‘Eat Right Mela’, December 2019.

#### **Workshops/Conferences/Seminars/Webinars Organized**

1. National Conference on ‘Bioprospecting and Bioactive Compounds from Microbes and Plants’ Organized by Department of Botany, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra held on 28-29 March 2019.
2. 3<sup>rd</sup> Seminar on Bioprospecting and Bioactive compounds from microbes and plants held on March, 24, 2021 at DEI, Agra.

#### **Workshops/Conferences/Seminars/Webinars Attended**

##### Dr. Sharmita Gupta

- Sonal and Sharmita Gupta. “Biological characterization of virus infecting Garden quinine and its effect on nitrogen of host plant” in 107<sup>th</sup> Indian science congress, Science and Technology: Rural Development from 03/01/2020 to 07/01/2020, held at University of Agricultural Sciences Bangalore.
- Lovely Singh and Sharmita Gupta. “Comparative analysis of Synergistic effect of Bioactive Plant Extract of *Catharanthus roseus* and *Azadirachta indica* against different pathogenic microbes” in 107<sup>th</sup> Indian science congress, Science and Technology: Rural Development from 03/01/2020 to 07/01/2020, held at University of Agricultural Sciences Bangalore.
- Manaswi Rani and Sharmita Gupta. “*Argemone ochroleuca*: A review on its ethnopharmacological aspects.in107<sup>th</sup> Indian science congress, Science and Technology: Rural Development from 03/01/2020 to 07/01/2020, held at University of Agricultural Sciences Bangalore.
- Nitesh Verma and Sharmita Gupta. “Mitigation of polythene waste by using fungi” in 107 Indian science congress, Science and Technology: Rural Development from 03/01/2020 to 07/01/2020, held at University of Agricultural Sciences Bangalore.
- Sharmita Gupta attended “Climate, health and sustainability”, webinar on 4.6.2020 by Department of Chemistry, D.E.I.
- Sharmita Gupta attended Webinar on “Novel Covid 19 and How to march ahead” on 9.6.2020 organized by DEI Ayush Webinar series I

##### DR. RAJIV RANJAN

- Attended a three days online workshop on DNA barcoding from 22<sup>nd</sup> to 24<sup>th</sup> May, 2020 organized by the Department of Biotechnology, Islamiah College, Vaniyambadi.

## Dayalbagh Educational Institute (Deemed to be University), Agra

- National Webinar on COVID 19 and Indian Agriculture: Challenges and opportunities on 9<sup>th</sup> June 2020, organized by Faculty of Agriculture, UdaiPratap college, Varanasi.
- Attended a one-day workshop for Enhancing research communication skills through ScienceDirect and Mendeley, organized by internal quality assurance cell (IQAC) and School of Education (PMMMNMTT), Dayalbagh Educational Institute, Agra.
- International Faculty development program on Recent Trends in science and technology from 15 June 2020 to 20<sup>th</sup> June 2020 organized by Academic Staff College in collaboration with School of applied sciences and department of international relation, Suresh Gyan Vihar University, Jaipur, Rajasthan.
- International Webinar on COVID 19 pandemic- prevention and Management organized by the Department of Microbiology, Government Holkar (Model, Autonomous) Science college, Indore, (M.P).
- Live webinar in the series of Next generation Genomics and Integrated Breeding for Crop Improvement (VII-NGGIBCI) on Genomics for food, health and nutrition, organized by CEGSB on 14<sup>th</sup> May, 2020.
- Indo-US CRISPR/Cas mediated genome Editing: Applications, tools and experimental design Workshop held at May 27-31, 2019 organized by Department of Genetics, South Campus, Delhi University

### Dr. Sushma Mishra

- Two-week refresher course in 'Botany and Life Sciences' organized by UGC HRDC Lucknow University from December 17 – 31, 2019.
- Attended 27<sup>th</sup> DR. B.P. Pal Memorial Lecture on "Reforms for Secure and Sustainable Agriculture: A road map" on May 27, 2020 organized by ICAR-IARI.

### Dr. Akbar Ali

- National Conference on Waste Nothing- A circular Economy Perspective. December 20-21, 2019, Department of USIC, DEI, Agra
- One day webinar on Climate, Health and Sustainability. June 04, 2020, Department of chemistry, DEI, Agra
- One day online workshop on "Interactive Teaching and Experiential Learning using MATLAB and Simulink" delivered by MathWorks Expert. May 13, 2020 organized by the State Project Implementation Unit – Uttar Pradesh
- One Day Online Training on High Performance Thin Layer Chromatography Instrumentation and Applications. May 22, 2020 Jointly organized by Anchrom Enterprises (I) Pvt. Ltd., Mumbai and University of Rajasthan, Jaipur

### **Conferences and Webinars attended by Students**

#### *Dr. Teg Bahadur Singh*

- Participated in the Workshop "Essential Skills for Research Writing & Publishing" organized by Bennett University. on 15-19<sup>th</sup> June, 2020
- Participated in the National Level Webinar on Plant Immunology: Advances and Applications hosted by the Post Graduate & Research Department of Botany, Arignar Anna Government Arts College, Villupuram, on 30<sup>th</sup> June 2020.

#### *Dr. Arti Yadav*

- 21st Indo-US Flow Cytometry Workshop on Basics of Flow Cytometry and its Applications in Plant Biology, 06-07 Feb, 2020 at Eternal University Baru Sahib H. P

#### *Mrs. Preksha Shrivastav*

- International Conference On "Green Technologies, Circular Economy & Restoration of Cultural Heritage" 28-29 November, 2019 Sponsored By UGC, New Delhi In Collaboration With CEAA Organized By R.B.S. College Agra And R.B.S. Community College, Bichpuri, Agra.

Dayalbagh Educational Institute (Deemed to be University), Agra

- ICAR Sponsored Training Programme On “Capacity Building for Generation of Soil Health Cards” January 15-29, 2020; Organized By Division Of Soil Science And Agricultural Chemistry, ICAR-IARI, New Delhi, India

*Ms. Deepika Goyal*

- Attended online webinar on “High performance Thin Layer chromatography- Instrumentation and Applications”. Organized by Anchrom enterprises Pvt. Ltd & University of Rajasthan. on 22 May, 2020.
- Attended one-week national online training on “COVID 19 pandemic: Impact & strategies for Agricultural Education” Organized by centre for Advance Agricultural science and technology under NAHEP of ICAR New Delhi. on 9 to 13 June, 2020.

*Mrs. Versha Dixit*

- Attended online webinar on “High performance Thin Layer chromatography- Instrumentation and Applications”. Organized by Anchrom enterprises Pvt. Ltd & University of Rajasthan. On 22 May, 2020.
- Participated in online webinar on “National Seed System and Policy Perspectives”. Organized By NAHEP (ICAR)-CAAST, IARI, New Delhi. On 23<sup>rd</sup> May, 2020.
- Participated in online webinar on “Techniques in Molecular Biology” Organized by Department Of Zoology University Of Rajasthan, Jaipur. On 25<sup>th</sup> -29<sup>th</sup> May, 2020.
- Participated in International online webinar on “Biodiversity and Wildlife Conservation”. Organized By the Dept. of Zoology, Sant Gadge Baba Amravati University. On 30<sup>th</sup> May, 2020
- Participated in International Online webinar on “Taxonomy and Forensic Entomology” Organized by the Dept. of Zoology, Sant Gadge Baba Amravati University. On 31<sup>st</sup> May, 2020.
- Attended Online seminar on “How is CRISPER-Cas Accelerating Crop Improvement”. Organized by Bioingene.com. on 29<sup>th</sup> June, 2020.

*Ms. Suman Kumari*

- Participated in online webinar on “Techniques in Molecular Biology” Organized by Department Of Zoology University Of Rajasthan, Jaipur. On 25<sup>th</sup> -29<sup>th</sup> May, 2020.
- Participated in online webinar on “Biodiversity and Environmental Protection During Pandemic Outbreak of COVID 19”. Organized by International Society of Waste Management Air and Water. On 5<sup>th</sup> June, 2020.
- Participated in 3 Days “International Webinar on COVID 19 Pandemic Prevention and Management”. Organized By Dept of Microbiology, Govt. Holkar Sc. College. On 4<sup>th</sup> to 6<sup>th</sup> June, 2020
- Attended online webinar on “Fast Scanning Tri-Range IR system with compact TGIR Hyphenation”. Organized by PerkinElmer Broadcast. on 11<sup>th</sup> June, 2020.

*Ms. Deeksha Singh*

- Attended online webinar on “High Performance Thin Layer Chromatography- Instrumentation and Applications”. Organized By Anchrom Enterprises Pvt. Ltd & University of Rajasthan, Jaipur on May 22, 2020.
- Participated in online webinar on “National Seed System and Policy Perspectives”. Organized By NAHEP (ICAR)- CAAST, IARI, New Delhi. on 23<sup>rd</sup> May, 2020.
- Participated in 3 days International Webinar On “COVID 19 Pandemic Prevention and Management”. Organized by the Dept of Microbiology, Govt. Holkar Sc. College from 4<sup>th</sup> to 6<sup>th</sup> June, 2020.

*Ms Parul Tyagi*

- Attended an International Conference on ‘Role of Genetics, Epigenetics, Environment and Nutrition Towards Plant, Animal and Human Health under Climate Change (GEENPAHH-2019)’ organized by Hindustan College of Science and Technology on 22-24 February, 2019.
- National conference on ‘Advances in Nano and Bio Sciences’ organized by Department of Physics and computer science, DEI, Agra, held on 2<sup>nd</sup> March, 2019.

- Attended a National Conference on 'Bioprospecting and Bioactive Compounds from Microbes and Plants' Organized by Department of Botany, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra held on 28-29 March 2019.
- One-month self-financed summer training (28.05.19-27.06.19) held at MNNIT, department of Biotechnology, Allahabad.
- National training program (10.12.2019-19.12.2019) on 'Meta-omics-based methods and techniques for understanding microbial community function, ICAR-NBAIM, Mau, Kushmor, India.
- Participated in Research fair -2020 @ DEI organized by Dayalbagh Educational Institute, Agra held on 11 January, 2020.
- on "Employment in Biotech and Pharma Industry in Post COVID Times", organized by Amity Institute of Biotechnology, Amity University Uttar Pradesh, Lucknow Campus on June 13<sup>th</sup> 2020.
- E-Quiz on "Cell Biology" organized by Department of Botany L.R.G. government Arts College for Women. Tirupur-641604, Tamilnadu, India on 15th June 2020.
- Virtual international conference on "Bioinspired Design and Engineering" (BIDE 2020) held on 27th-28th June 2020 organized by Centre of Bioinspired Innovations and Designs (CBID), a part of School of Bioscience and technology (SBST). Vellore Institute of Technology (VIT), Vellore.
- Attended the webinar on "How is CRISPR-Cas accelerating crop improvement?" presented by Dr. K. A. Molla on 29 June 2020 organized by Bioingene.com. Here is your Certificate.

#### *Anamika Gupta*

- Participated in Research fair -2019 @ DEI organized by Dayalbagh Educational Institute, Agra held on 19 January, 2019.
- Attended National workshop on "Genomics for Microbial Diversity and Taxonomy (GEMTAX-2019)" (21.01.2019 – 25.01.2019) organized by the Laboratory of Environmental Microbiology and Ecology (LEnME), Department of Life Science, NIT Rourkela, Odisha.
- Attended Ten days National Training on "Mining of Metagenome for Genes: Cloning & Expression" (12.02.2019 – 21.02.2019) held at ICAR-National Bureau of Agriculturally Important Microorganisms (NBAIM), Mau, Uttar Pradesh.
- Attended an International Conference on 'Role of Genetics, Epigenetics, Environment and Nutrition Towards Plant, Animal and Human Health under Climate Change (GEENPAHH-2019)' Organized by Hindustan College of Science and Technology on 22nd -24th February 2019.
- Attended a Seminar on "Advances in Nano and Bio Sciences" organized by Department of Physics and Computer Science, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra held on 27 March 2019.
- Presented a paper entitled "In silico characterization of stress related transcription factors in *Artemisia annua*L." in National Conference on 'Bioprospecting and Bioactive Compounds from Microbes and Plants' organized by Department of Botany, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra held on 28-29 March 2019.
- Attended a National Conference on 'Bioprospecting and Bioactive Compounds from Microbes and Plants' organized by Department of Botany, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra held on 28-29 March 2019.
- Participated in Research fair -2020 @ DEI organized by Dayalbagh Educational Institute, Agra held on 11 January, 2020.
- Training Course on "Techniques in Molecular Biology" 16th to 21st March 2020 organized by Agribiotech foundation PJTS Agriculture University Campus Rajendranagar, Hyderabad.
- Attended a National Conference on 'Bioprospecting and Bioactive Compounds from Microbes and Plants' organized by Department of Botany, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra held on 24th March 2020

## Dayalbagh Educational Institute (Deemed to be University), Agra

- Attended an International Online conference on COVID 19 Biotechnology: A way forward, organized by Department of Biosciences, school of Basic Sciences, Manipal University, Jaipur on 30th April, 2020.
- Attended one day online workshop for Enhancing research communication skills through Science Direct and Mendeley on 3rd May 2020, organized by Internal quality Assurance cell (IQAC) and school of education (SoE), Faculty of education, Dayalbagh Educational Institute, Agra in collaboration with Elsevier.
- Attended an International online conference on Drug development, its challenges and the role of Nutrition in Immunoboosting+ against COVID 19 organized by Department under AEGIS of IQAC, Kalindi College, University of Delhi, India, on 20th May 2020.
- Attended 5 days online workshop on Microbial genomics- 2020, organized by center of Bioinformatics, computational and system Biology, Pathfinder research and training and foundation, Geater Noida, UP.
- Attended an online certification course on Introduction to Bioinformatics batch II organized by Learn to upgrade and wet lab championship. (Serial No. 2DQKD2XX, 2020).

### *Pooja Saraswat*

- Conference on 'Bioprospecting and Bioactive Compounds from Microbes and Plants', Sponsored by UGC-SAP, DEI, Agra, India, 28<sup>th</sup>-29<sup>th</sup> March, 2019
- Hands on training Short term training program on 'Environmental sustainability through microorganisms', sponsored by TEQIP, IIT Delhi, India from 18<sup>th</sup>-22<sup>nd</sup> November, 2019.
- Participated in Research fair -2020 @ DEI organized by Dayalbagh Educational Institute, Agra, held on 11 January, 2020.
- Training Course on "Techniques in Molecular Biology" 16th to 21st March 2020 organized by Agribiotech foundation PJTS Agriculture University Campus Rajendranagar, Hyderabad.
- Attended one day online workshop for Enhancing research communication skills through Science Direct and Mendeley on 3rd May 2020, organized by Internal quality Assurance cell (IQAC) and school of education (SoE), Faculty of education, Dayalbagh Educational Institute, Agra in collaboration with Elsevier.
- Participated in an Online Certificate Course in Recombinant DNA Technology (Batch II) from 6th to 10th June, 2020 organized by UKA Tarsadia University.

### *Ayushi Singh*

- Participated in Research fair -2020 @ DEI organized by Dayalbagh Educational Institute, Agra held on 11 January, 2020.
- International webinar on "Deep learning for Detection and Management of Plant Diseases" dated on March 8 and 12, 2020.
- National webinar on "Training of Trainers for Participating Institutes of Unnat Bharat Abhiyan (UBA) on Risk Communication for Prevention of the Spread of COVID-19 in Rural India" organized by SRM Institute of Science and Technology, Tamil Nadu; Dated on May 27, 2020.
- Live Webinar on "Internet of Things (IoT)- Concept and Opportunities" organized by MIET Meerut; Dated on June 08, 2020.

### *Laccy Phurailatpam*

- Certificate for participation on Research Fair 2019 organized by Dayalbagh Educational Institute on 19th Jan 2019.
- National Conference on Bioprospecting and Bioactive Compounds from Microbes and Plants organized by Department of Botany, Dayalbagh Educational Institute on 28-29 March 2019.
- Webinar on Post covid19 World and the Pivotal role of Science and Technology organize d by Raza P.G. College Rampur 17 May, 2020.
- Webinar on HPTLC Instrumentation and Applications organized by Rajasthan University. Speaker Dr. Manjusha Phase (Anchrom) 22nd May 2020.

- Webinar on Techniques in Molecular biology organized by Rajasthan University, Department of Zoology. 25 to 29 May, 2020.
- International level Interdisciplinary webinar on overcome covid19 pandemic through Nuances of Life. Organized by Vivek college of commerce Mumbai in association with Mumbai University 29 May, 2020.
- Webinar on General awareness, Physiological and Biochemical aspects of covid-19 on 30 May organized by Department of Zoology, Jhunjhunwala P.G College, Ayodhya.
- Webinar on Human Health and Herbs, Mahila Vidyalaya College Lucknow 30 May.
- Workshop on patents, Intellectual Property Rights and Patcomatic organized by Samnvya (The information Management System) 30 May, 2020.
- Certificate of Participation on 2 days online training on Using Open Educational Resources (OER) for creating courses held on 1-2 June 2020 organized by e-Government cell and IDP -NAHEP of GB Pantanagar University of Agriculture and Technology, Pantanagar.
- Certificate for participating in the National level Webinar on Bioprospecting of Medicinal Plants: Challenges and Opportunities organized by PG and Research Department of Botany, V.O. Chidambaram College on 3rd June 2020.
- Certificate of achievement for attending the online webinar on Microbiologist in Everybody organized by Biocon Academy and Biotechnika Info Lab pvt ltd on 3rd June 2020.
- Certificate for actively participating in the International Web Conference on Emergence of Alternative Therapeutic to Contagious Diseases organized by PG and Research Department of Zoology, Sri Vasavi College Erode on 11th and 12th June 2020.
- Certificate of participation on two days International Virtual Conference on Modern Instrumental and Characterization Technique in Applied Science 2020 (MICTAS) organized by MIET Kumaon and Hallwani and Dept of Chemistry H.N.B. govt P.G. college khatina Uttarakhand in Collaboration with USERC DST Dehradun on July 5-6 2020 at e- platform.

*Ms. Namrata Singh*

- National webinar on "Patcomatic: A self-automated & instantaneous patent Drafting Tool", and Quiz on "Basics Patents organized by Techno Law Lease Intellectual Property Management Solutions, Telangana on 25th April 2020.
- "Career Edge - knockdown the Lockdown" Online course offered by TCSiON, TATA consultancy Service From 30 April 2020 to 13 May 2020.
- International Symposium on the topic "Bio technological Potential of Mushroom: An Emerging Approach to fight against COVID 19" Organized by Department of Biotechnology on 23- 24 May 2020.
- National webinar on "Prevention of Sports Injuries" Organized by Sports Department, Shiromani Gurudwara Parbandhak Committee's conducted on 30 May 2020.
- "World Environment Day Awareness Quiz -2020 (Online)" Organized by PG and Research Department of Environmental Science, Bishop Heber College, Tiruchirapalli, Tamil Nadu, India on 3 June 2020.
- National webinar on "Bioprospecting of Medicinal Plants: Challenges and opportunities" Organized by P.G. & Research Department of Botany, V. O. Chidambaram college 3 June 2020.
- World Environment Day 2020 Webinar on "Biodiversity and Environment Protection during Pandemic Outbreak of COVID 19" organized by international society of waste Management Air and water 5 June 2020
- National Conference on the topic "Biomonitoring - An Interdisciplinary Approach in Environmental Assessment" Organized by Department of Science, Compfeeders Aisect College of professional Studies, Indore on 5 June 2020.
- National webinar on "COVID- 19: Impact on Environment and Social Change Organized by Pranahi, the Eco Club of BCAS on 5 June 2020.



Dayalbagh Educational Institute (Deemed to be University), Agra

- Food safety Quiz on the occasion of "2nd world food safety day -2020" Organized by the Department of food Technology, AKS University, Santa, M.P. on 7 June 2020.
- National webinar on "Evolution of Earth and life forms" organized by PG Department & Research Center in History, Rajapalayam Rajus, College on 28 June 2020.

*Ms. Mukta Satsangi*

Research Scholar to attend the workshop and provide the valuable inputs in Handbook on Understanding Science through activities, games and toys at Upper Primary Stage" as a resource person. DESM, First floor, Janaki Ammal Block, NIE campus, NCERT, New Delhi.

*Ms. Priyanka Chaturvedi*

Oral Presentation titled Role of Bacteria in the Treatment of Cancer by Ms. Priyanka Chaturvedi (Research Scholar) at International Virtual Conference on Recent Advances in Biochemical and Material Sciences 2020.

*Mr. Talhabin Arshad Siddiqui*

Poster Presentations titled Competitive Inhibition of *Listeria monocytogenes* by Lactic Acid Bacteria by Mr. Talhabin Arshad Siddiqui (B.Voc – Dairy Technology) in the 60th Annual Conference of Association of Microbiologist of India at Rohtak, December 2019 .

*Ms. Shreya Sharma*

Poster Presentation titled A Pilot Study on the Application of Functionalized Magnetic Nano Particles for the Detection and Extraction of Pathogens from Beverages by Ms. Shreya Sharma (M. Sc. - Botany) in the 60th Annual Conference of Association of Microbiologist of India at Rohtak, December 2019.

## Publications

1. Mintoo MN, Mishra S and Dantu PK. 2019. Isolation and Identification of Endophytic Bacteria from *Piper longum*. Proc. Nat. Acad. Sci., India Section B: Biol. Sci. 89: 1447-1454 <https://doi.org/10.1007/s40011-018-01064-8>.
2. Chaudhary J and Dantu PK. 2019. Induction of somatic embryos in cultures of *Asparagus racemosus* Willd: an endangered medicinally important plant. Bull. Nat. Res. Centre 43:113, [doi.org/10.1186/s42269-019-0157-z](https://doi.org/10.1186/s42269-019-0157-z).
3. Singh S and Gupta S. 2019. Studies of biochemical changes in healthy cowpea plants mechanically infected with sap isolated from virus infected *Clerodendrum inerme* leaves. Int. Arch. App. Sci. Technol; 10 [2]: 72-75.
4. Verma N and Gupta S. 2019. Microbial Approach to Minimise the Polythene Waste Int. Arch. App. Sci. Technol; 10 [2]: 104-110.
5. Singh L and Gupta S. 2019. "Ethnopharmacological aspects of *A. Mexicana* Linn., A significant plant species, in traditional system of medicine" Int. Arch. App. Sci. Technol. (IAAST), 10 (2), 143-150.
6. Verma N and Gupta S. 2019. "Assessment of LDPE degrading potential *Aspergillus* species isolated from municipal landfill sites of Agra" SN App. Sci., 1(7), 701.
7. Gupta D, Satpati S, Dixit A and Ranjan R. 2019. Fabrication of biobeads expressing heavy metal-binding protein for removal of heavy metal from wastewater. *Appl. Microbial. Biotechnol.*, 103(13), 5411-5420.
8. Prasad M, Srivastava JN, Dantu PK and Ranjan R. 2019. Medicinal plants of DEI herbal garden, Dayalbagh: A survey. *J. Pharmacol., Phytochem*, 8(4), 06-22.

9. Saraswat P, Prasad M and Ranjan R. 2019. *Moringa oleifera*: A food plant with medicinal and nutritive value. *Int. J. Pharm Pharm. Sci.* 1(2), 14-19.
10. Singh TB, Sahai V, Ali A, Goyal D, Prasad M, Yadav A, Shrivastav P and Dantu PK. 2020. Screening and evaluation of PGPR strains having multiple PGP traits from hilly terrain. *J. Appl. Biol. Biotech.* 8(04):38-44, DOI: 10.7324/JABB.2020.80406.
11. Singh TB, Sahai V, Ali A, Goyal D, Prasad M, Yadav A, Shrivastav P and Dantu PK. 2020. Identification, characterization and evaluation of multifaceted traits of plant growth promoting rhizobacteria from soil for sustainable approach to agriculture. *Curr. Microbiol.* 77, 3633–3642 (2020). <https://doi.org/10.1007/s00284-020-02165-2>.
12. Chaudhary G, Shrivastav P and Dantu PK. 2020. Pollen germination studies in *Boerhavia diffusa* Linn. (Nyctaginaceae) – An important medicinal plant. *The Int. J. Plant. Repro. Biol.* 12(1):80-83, DOI 10.14787/ijprb.2020.12.1.80-83.
13. Singh S and Gupta S. 2020. Characterization of virus causing chlorotic spot disease in garden quinine and its effect on nitrogen and pigments” *Annals of Plant and Soil Research (APSR)* 22(2):186-188.
14. Gupta D and Ranjan R. 2020. In silico characterization of synthetic promoters designed from mirabilis mosaic virus and rice tungro bacilliform virus. *Virus Disease*, 31(3), 369-373.
15. Gupta A and Ranjan R. 2020. Grasses as an immense source of pharmacologically active medicinal properties: An overview, *Proceedings Indian National Science Academy (INSA)*, 86 :1323-1329.
16. Singh TB, Sahai V, Ali A, Prasad M, Yadav A, Shrivastav P, Goyal D and Dantu PK. 2020. Screening and evaluation of PGPR strains having multiple PGP traits from hilly terrain. *J. Appl. Biol & Biotechnol.* 8:38-44 ISSN Online: 2347-212X, ISSN Print: 2455-7005.
17. Singh TB, Sahai V, Goyal D, Prasad M, Yadav A, Shrivastav P, Ali A and Dantu PK. 2020. Identification, Characterization and Evaluation of Multifaceted Traits of Plant Growth Promoting Rhizobacteria from Soil for Sustainable Approach to Agriculture. *Curr. Microbiol.* <https://doi.org/10.1007/s00284-020-02165-2> IF = 1.610 Electronic ISSN 1432-0991, Print ISSN 0343-8651.
18. Alam F, Ali A, Ansari AA, Naeeme M, Aftab T, Masroor M, Khan A. 2020. Employing silicon nanoparticles and GA3 in enhancing the productivity and biochemical attributes of sweet-leaf plant (*Stevia rebaudiana* Bert.) *Int. J. Botany Stud.* 05: 383-387 ISSN: 2455-541X
19. Kumar P, Yadav S, Singh MP. 2020. Bioregulators application improved heat tolerance and yield in chickpea (*Cicer arietinum* L.) by modulating zeaxanthin cycle.” *Plant Physiol. Reports-Springer*, 25:677-688.
20. Kumar P, Yadav S, Singh MP. 2020. “Possible involvement of xanthophyll cycle pigments in heat tolerance of chickpea (*Cicer arietinum* L.)”. *Physiol. Mol Biol Pla- Springer*, 26(9): 1773–1785.
21. Achal M, Kishore M, Chaturvedi DK and Dantu PK. 2020. Herbal flavoured milk and sensory evaluation. *Int. J. Curr. Microbiol. Appl. Sci.* ISSN 9(5).
22. Achal M, Kishore M, Hemant and Chaturvedi DK. 2020. Milk preservation by using HVEF. *Int. J. Curr. Microbiol. Appl. Sci.* 9(7).

### Book Chapters

1. Singh S, Gupta S, Prabha Y and Soni SK. 2019. “Comparative analysis of phytochemicals of healthy and symptomatic *Clerodendrum inerme*”, In: Kundu R., Narula R. (eds) *Advances in Plant & Microbial Biotechnology*.p 113-119, Springer, Singapore. [https://doi.org/10.1007/978-981-13-6321-4\\_15](https://doi.org/10.1007/978-981-13-6321-4_15).
2. Mishra S, Gupta D and Ranjan R. 2019. Molecular approaches for enhancing stress tolerance in plants. In “Approaches for Enhancing Abiotic Stress Tolerance in Plants.” Eds. Mirza Hasanuzzaman, Kamrun Nahar, Masayuki Fujita, Hirosuke Oku, and Tofazzal. Boca Raton: CRC Press, <https://doi.org/10.1201/9781351104722>. eBook ISBN 9781351104715 pg. 403-414.
3. Mishra S. 2019. Targeted Genome Editing Tools in Plants. In “Innovations in Life Science Research”. Eds: R. P. Sinha, S. Pandey-Rai and N. Ghoshal. NOVA Sci. Pub., USA ISBN: 978-1-53615-868-7 pg. 129-145.

4. Mishra S, Goyal D, Kumar A, Dantu PK. 2019. Biotechnological Applications of  $\beta$ -Glucosidases in Biomass Degradation. In "Recent Advancement in White Biotechnology through Fungi". Eds: Ajar Nath Yadav, Sangram Singh, Shashank Mishra, Arti Gupta. Springer Nature Switzerland AG. 978-3-030-25505-3 pg. 257-281.
5. Verma N and Gupta S. 2020. "Management of polythene waste through biodegradation by using few species of *Aspergillus*: An environment friendly approach". in: Sen et al. (Eds.) Biotechnology and biological sciences pp. 325-332. (Taylor and Francis, London). ISBN978-0-367-43161-7.
6. Phurailatpam L and Mishra S. 2020. Role of Plant Endophytes in Conferring Abiotic Stress Tolerance. In "Plant Ecophysiology and Adaptation under Climate Change - Mechanisms and Perspectives II." Springer, Singapore. Eds. Mirza Hasanuzzaman. 978-981-15-2171-3, Published online 02 June 2020, pg. 603-628.
7. Goyal D, Yadav A, Prasad M, Singh TB, Shrivastava P, Ali A, Dantu PK and Mishra S. 2020. Effect of Heavy Metals on Plant Growth: An Overview. In "Contaminants in Agriculture: Sources, Impacts and Management". Eds Mohammad Naeem, Abid Ali Ansari, Sarvajeet Singh Gill. Springer, Cham. 978-3-030-41551-8 pg. 79-102. 10.1007/978-3-030-41552-5\_4.
8. Jain D, Phurailatpam L and Mishra S. 2020. Microbes-Mediated Mitigation of Drought Stress in Plants: Recent Trends and Future Challenges. In "Advances in Plant Microbiome and Sustainable Agriculture". Springer, Singapore. Eds Ajar Nath Yadav et al. 978-981-15-3203-0, 483908\_1\_En, (9) pg. 199-218 ([https://doi.org/10.1007/978-981-15-3204-7\\_9](https://doi.org/10.1007/978-981-15-3204-7_9)).
9. Shrivastav P, Prasad M, Singh TB, Yadav A, Goyal D, Ali A and Dantu PK. 2020. Role of Nutrients in Plant Growth and Development. In: Contaminants in Agriculture: Sources, Impacts and Management. Naeem, M, Ansari AA, Gill SS (Eds.). Springer International Publishing AG, Switzerland. PP 43-60, ISBN 978-3-030-41551-8.
10. Singh TB, Ali A, Prasad M, Yadav A, Shrivastav P, Goyal D and Dantu PK. 2020. Role of Organic Fertilizers in Improving Soil Fertility. In: Contaminants in Agriculture: Sources, Impacts and Management. Naeem, M, Ansari AA, Gill SS (Eds.). Springer International Publishing AG, Switzerland. PP 61-78, ISBN 978-3-030-41551-8.
11. Goyal D, Yadav A, Prasad M, Singh TB, Shrivastav P, Ali A, Dantu PK and Mishra S. 2020. Effect of Heavy Metals on Plant Growth: An Overview In: Contaminants in Agriculture: Sources, Impacts and Management. Naeem, M, Ansari AA, Gill SS (Eds.). Springer International Publishing AG, Switzerland. PP 361-384, ISBN 978-3-030-41551-8.
12. Prasad M, Ranjan R, Ali A, Goyal D, Yadav A, Singh TB, Shrivastav P and Dantu PK. 2020. Efficient Transformation of Agricultural Waste in India. In: Contaminants in Agriculture: Sources, Impacts and Management. Naeem, M, Ansari AA, Gill SS (Eds.). Springer International Publishing AG, Switzerland. PP 271-288, ISBN 978-3-030-41551-8.
13. Yadav A, Goyal D, Prasad M, Singh TB, Shrivastav P, Ali A and Dantu PK. 2020. Bioremediation of Toxic Pollutants: Features, Strategies, and Applications. In: Contaminants in Agriculture: Sources, Impacts and Management. Naeem, M, Ansari AA, Gill SS (Eds.). Springer International Publishing AG, Switzerland. PP 361-384, ISBN 978-3-030-41551-8.
14. Gupta D, Gupta A, Yadav K and Ranjan R. 2020. Molecular Mechanism of Plant Adaptation and Tolerance to Cold Stress. In *Plant Ecophysiology and Adaptation under Climate Change: Mechanisms and Perspectives II* (pp. 61-87). Springer, Singapore.
15. Prasad M, Gupta A, Ranjan R. 2020. Nano-contaminants: Sources and impact on Agriculture, Contaminants in Agriculture Springer (Page 175-199).
16. Prasad M, Ranjan R, Ali A, Goyal D, Yadav A, Singh TB, Srivastava P, Dantu PK. 2020. Efficient transformation of Agriculture waste in India, Contaminants in Agriculture, Springer (271-287)
17. Prasad M and Ranjan R. 2020. Brassicaceae plants responses and tolerance to water logging and flood, Springer Singapore, 978-981-15-6344-7,475626\_1\_En. (Chapter-10).

### Conference Proceedings

1. Gupta A and Ranjan R. 2019. *In silico* characterization of stress related transcription factors in *Artemisia annua* L. In National conference proceeding, Bioprospecting and Bioactive Compounds from Microbes and Plants (BBCMP): 148 : 166 ISBN : 978-93-81778-71-5.
2. Gupta A, Tyagi P and Ranjan R. 2019. *In silico* characterization of stress related transcription factor in *Ocimum tenuiflorum* L. – A system biology approach. In National conference proceeding, Bioprospecting and Bioactive Compounds from Microbes and Plants (BBCMP): 90-110 ISBN: 978-93-81778-71-5.
3. Phurailatpam L, Goyal D, Dantu PK and Mishra S. 2019. Isolation of IAA-producing endophytes from *Piper longum* (L.). Bioprospecting and Bioactive Compounds from Microbes and Plants. ISBN – 978-93-81778-71-5) pg: 184-192.
4. Yadav AN, Yadav N, Kour D, Kumar A, Yadav K, Kumar A, Rastegari AA, Sachan SG, Singh B, Chauhan VS, Saxena AK. 2019. Bacterial Community Composition in Lake. Freshwater microbiology: Perspectives of Bacterial Dynamics in Lake Ecosystems, Edited by: S.A. Bandh, S. Shafi, N. Shameem. 1-71 Published by Elsevier Inc. ISBN 978-0-12-817495-1
5. Kumar A, Chaturvedy VK, Tewari SK, Tewari DD. 2019. Effect of fly ash and press mud on growth, yield and quality parameters of *Plantago ovata* cultivated in sodic soil. Conference proceedings on Local Environmental Change have Global Effect, published by MLK PG College, Balrampur, 315-331 ISBN: 978-93-88838-38-2.
6. Kumar A, Chaturvedy VK, Tewari SK, Tewari DD. 2019. Effect of fly ash and press mud on growth, yield and quality parameters of *Plantago ovata* cultivated in sodic soil. Conference proceedings on Local Environmental Change have Global Effect, published by MLK PG College, Balrampur, 315-331 ISBN: 978-93-88838-38-2.
7. Yadav K, Kumar A, Ranjan R, Kumar A. 2019. Assessment of ground water quality and contaminants geochemistry of Agra city. Conference proceedings on Bio-prospecting and Bioactive compounds from microbes and plants. Published by Dayalbagh Educational Institute, Agra, 193-204. ISBN: 978-93-81778-71-5

### New Instruments Acquired

- i. Microwave Plasma Atomic Emission Spectroscopy (MP-AES)
- ii. Infrared Gas Analyzer (IRGA)
- iii. Cooling centrifuge
- iv. Water Purification System
- v. Deep freezer (-80°C)
- vi. Hot air Oven
- vii. Real-time PCR
- viii. BioMerieux – MiniVIDAS – Immuno(chromatographic) assay based Rapid Pathogen Detection system
- ix. BioMerieux – Tempo – Immuno(chromatographic) assay based Advanced Automated Microbial enumeration system
- x. Unisensor – Extenso – Immuno(chromatographic) assay based Rapid detection of Antibiotic residues in Milk & Milk Products

### New Facilities Created Including Lab on Land

Presently, the Department of Botany, DEI, is developing 6 sites; site-wise details are as follows:

1. **Shanti Nagar (Khasra 359) Site:** Approximately 8.6 Acre land is available at this site. Following works are on progress:
  - a) Development of Fruit orchard: Different fruit plants given below has been planted and are under management of organic farming system. Fruit plants names are Falsa, pomegranate, guava, fig, citrus fruits, kiwi, peach, sapota, apple, jamun, mango, almond, bael, jackfruit and drumstick.

- b) Plantation of Timber plants: A variety of timber plants has been planted at this site like white teak, Burma teak, Sheesham, neem, red wood sandal, white wood sandal.
- c) Construction of two poly houses: Two poly houses (1000 square meter each) has been approved and are under construction.
- d) Vegetable production: By following agroforestry method vegetable production has been started from mid-June 2020. Under this program plots have been prepared by DEI staff members and 20 different types of vegetables are under cultivation practices. These are managing by organic ways only. Vegetables under cultivation names are yellow- white and red bell pappers, chilly, coriander, pumpkin, bottle guard, red & white reddish, tomato, cauliflower, cabbage, lobia, green and red lady finger, spinach, green & red chaulai, bitter guard, tinda.
- e) Plantation of Ornamental plants: Callistemon, silver oak, bougainvillea, goldmohur, seasonal flower plants.



*Plantation work at Shanti Nagar (Khasra 359) Site*

**2. Seminar Hall Complex:** At this site total 17-acre land was given to the Department for development. Following works are on progress at this site:

- a) Biodiversity Park: A biodiversity park is already flourishing at this site. At present this park has been extended towards East side for development of new fruit orchard and a small forest of timber trees. A variety of timber plants (white teak, Burma teak, Sheesham, neem, red wood sandal, white wood sandal, pinus, kanzi) and fruit plants i.e., hanuman phal, guava, fig, citrus fruits, kiwi, peach, sapota, apple, jamun, mango, almond, bel, jackfruit and drumstick has been planted.
- b) Vegetable and groundnut production: Different types of vegetables are under cultivation practices by following organic farming. Vegetables at this site are chilly, coriander, pumpkin, bottle guard, red & white reddish, tomato, cauliflower, cabbage, lobia, green and red lady finger, spinach, green & red chaulai, bitter guard, tinda. Groundnut production is also under cultivation on a part of this land



*Plantation work at Seminar Complex Biodiversity Park*

3. **Bahadurpur Site:** At this site total 7-acre land is under management of Department of Botany. A Fruit orchard and aromatic plant garden is already at fruitful stage. Following works are also added at this site:
- Plantation of fruit plants: A variety of fruit plants i.e., pomegranate, guava, fig, citrus fruits, kiwi, peach, sapota, apple, jamun, mango, almond, bel, jackfruit and drumstick has been added into orchard of this site.
  - Plantation of Timber trees: Timber trees like pippal, white teak, Burma teak, Sheesham, neem, red wood sandal, white wood sandal, pinus, kanzi has been planted in this monsoon.
  - Vegetable production: Micro plots has been prepared along with fruit orchard and vegetables like tomato, cauliflower, cabbage, lobia, green and red lady finger, spinach, green & red chaulai, bitter guard, tinda, cucurbits are under cultivation in these plots.



*Plantation work at Bahadurpur site*

4. **Senior Boys Hostel site:** A variety of fruit plants has been planted into fruit orchard of this site. Total 4-acre area is under farming. Many types of summer season vegetables (brinjal, tomato, cauliflower, cabbage, lobia, cucurbits) are under cultivation.



*Plantation work at Senior Boys hostel site*

5. **REI Site:** Total area of 5 acre is already under development of biodiversity park. At present vegetable production by preparing plots has also been started from summer season.



*Plantation work at REI site*

6. **Protected Cultivation in Polyhouse:** Two polyhouses have been erected to facilitate protected cultivation and for acclimatization purpose. Temperature and humidity could be controlled in these polyhouses. In July,

seedling nurseries were prepared and transplanting of seeding such as Tomato, Bell pepper, and Brinjal & other off-season crops such as Red Okra have also been cultivated in these polyhouses. Strawberries, Cherry Tomatoes, lettuce & Edible Kale are being grown in these polyhouses.



*Protected Cultivation in Polyhouse : Polyhouses at Dairy*



*Polyhouses at Shantinagar*



Dayalbagh Educational Institute (Deemed to be University), Agra

- Vertical hydroponics system has been established in Polyhouse. Many crops e.g. tomato, cherry tomatoes, cauliflower, cabbage, Chinese cabbage, gladiolus, ochre, coriander brinjal have been grown for demonstration purpose.
- Advanced Microbiological Instrumentation Facility for Food & Dairy Testing has been set up.

### *Department of Chemistry*

The Department of Chemistry was established in the year 1947 as a part of the erstwhile R.E.I. Degree College, which was affiliated to Agra University. In the year 1981, with the formation of Dayalbagh Educational Institute as a Deemed to be a university, it became a part of it. The department is headed by Prof. Sahab Dass and comprises of 7 Professors, 5 Assistant Professors, 3 Guest Faculty and 1 Emeritus Professor. Catering to the needs of modern-day Chemistry students, the Department offers following Degree and Diploma programmes, which aim to impart sound understanding on fundamentals as well as applications and lay greater emphasis on exposing students to the frontiers of research.

1. B.Sc. (Hons) Chemistry
2. M.Sc. Chemistry
3. M.Phil.
4. Ph.D.
5. Diploma in Ayurveda (Up-Vaid)

The Department also offers Work Experience Courses on: Extraction of Natural Products, Soil Testing, Pollution Control of Air and Water, and Physical and Chemical Aspects of Leather Processing. The department is equipped with a wide range of sophisticated analytical and experimental facilities to support its research and teaching activities. Besides receiving extra-mural research grants from UGC, DST, AICTE, ISRO, MHRD, CSIR and BRNS-DAE, the Department is UGC-SAP assisted under DRS-1 and DRS II Scheme and is recipient of DST-FIST Level I grant twice. The Department has successfully completed an International collaborative research project with the University of Maryland under the DST-NSF Material World Network Programme. It is also pursuing an ISRO-GBP research project in the area of atmospheric chemistry. Recently, the department was awarded the prestigious Indo-US 21<sup>st</sup> Century Knowledge Initiative Research Grant, to the tune of Rs. 11.7 million, for its research programme on Solar Hydrogen in collaboration with Arizona State University, USA. The members of the department have worked in collaboration with Prof Kattesh V Katti, Director, Green Nanotechnology Platform, University of Missouri, Columbia, USA, in the area of phytochemical studies on anti-cancer drug development. The Department has also signed a Memorandum of Collaboration with industrial partner, Indian Oil Corporation Ltd., to upscale the hydrogen production devices and for developing a test reactor in the country. The Department is associated with SIGACHI Industries Pvt. Ltd., Hyderabad and working towards the designing of novel materials, viz. nano-cellulose, for commercial applications. Department is in active research collaboration with several other Research Laboratories/Institutions, namely: IIT Delhi; BARC, Mumbai; Indian Association for the Cultivation of Science, Kolkata; Jawahar Lal Nehru Centre for Advanced Scientific Research, Bangalore; Inter University Accelerator Centre, New Delhi; Physical Research Laboratory, Ahmedabad; Jawahar Lal Nehru University, New Delhi; International Centre for Genetic Engineering and Biotechnology, New Delhi; IIT Roorkee; IISc, Bangalore; IIT Mumbai, Jawaharlal Nehru Cancer Hospital & Research, Bhopal; National Physical Laboratory, New Delhi and University of Malay, Malaysia.

The faculty members have been nominated as Members to Science Academies and accorded distinctive awards/medals/prizes in their research areas. Faculty members regularly visit different Universities and Research Organizations in the country and abroad, in the capacity of Visiting Professor and Resource Person to deliver lectures in UGC sponsored refresher courses and invited talks, chair sessions in national/international conferences

and as examiner for Ph.D. thesis. They also serve as Editor and Reviewer for many reputed journals, Expert in the Selection Committees, Board of Studies, Academic Bodies of Universities and Fellow/Member to the Science Academies. The alumni of the Department occupy high positions in the industry and academia and through their outstanding achievements have truly reflected the quality of training imparted to them by the Department.

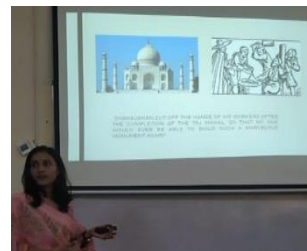
### Facilities

The department is equipped with state of the art instruments like X-Ray Diffractometer, High Performance Thin Layer Chromatograph, Ion Chromatograph, Atomic Absorption Spectrophotometer, Gas Chromatograph, UV-Visible Spectrophotometer, Potentiostat, Carbon Analyser, Online Ozone, NO<sub>x</sub> and CO Analysers, Atomic Force Microscope, GC-MS, Raman Spectrometer, Table-top SEM, Spray Pyrolyzer, Electrochemical Work station, Cluster Computer, Weather Station, Zeta sizer, ICP-OES, Fluorescence Spectrophotometer, Thermogravimetric Analyzer and Differential Scanning Calorimeter and several air sampling equipment's.

### Projects

- The Department was sanctioned the FIST Grant worth Rs. 1.30 Crore by DST for the period 2018-2022. In this grant, the department was sanctioned an Equipment grant to procure instruments like DTA-DSC, ICP-AES, and Thermal Desorption Unit along with an Infrastructure and Maintenance Grant.
- Project entitled Studies on novel semiconductors towards increasing the efficiency of Photo-electro-chemical (PEC) water splitting for hydrogen generation was sanctioned to Prof. Sahab Dass (PI) and Prof. Vibha Rani Satsangi (Co-PI from Dept. of Physics and Computer Science, DEI) and Prof. Rohit Shrivastava (Co-PI) worth Rs. 1,41,97,000/- by Ministry of New and Renewable Energy, Hydrogen Energy and Fuel Cell Division, GOI for a period of 3 years (2018-2021).
- The ISRO-GBP AT-CTM Project sanctioned to Prof. K. Maharaj Kumari and Dr. Anita Lakhani was extended for the period 2018-2019 with an additional grant of Rs. 28.0 lakh.
- The ISRO- ARFI Project sanctioned to Dr. Ranjit Kumar has been extended for the period 2018-2019 with an additional grant of Rs. 10.0 lakh.
- Project entitled Chemical characterization of PM<sub>1</sub> and health risk assessment was sanctioned to Prof. K. Maharaj Kumari (PI) and Dr. Anita Lakhani (Co-PI) worth Rs. 29.0 lakhs by DST- SERB, New Delhi for the duration 2017-2020.
- Project entitled Generation of Reactive Oxygen Species in size fractionated ambient particulate matter: Association with metals, polyaromatic hydrocarbons and meteorology was sanctioned to Dr. Anita Lakhani (PI) and Prof. K. Maharaj Kumari (Co-PI) worth Rs. 30.5 lakhs by DST, New Delhi for the duration 2018-2022.
- Project entitled Development of low-cost sensors for monitoring of odours in ambient air under IMPRINT IIC has been sanctioned to Dr. Ranjit Kumar as Co-PI with Dr. Mahesh Kumar, PI and Dr. Satyajit Sahoo, Co-PI from Indian Institute of Technology, Jodhpur worth Rs. 126 Lakhs for the period 2019-2022.

### Conferences/Seminars/Workshops/ Invited Talks Organized



- An invited talk on the topic “**Introduction to Patents**” was delivered by Ms. Deepshika, Associate - (Patents), Khurana & Khurana Advocates and IP Attorneys, New Delhi, on the 19<sup>th</sup> October, 2019. The talk was attended by the M.Sc. students, PhD scholars and the Staff.
- Prof. Alok Dhawan, Director, CSIR- Indian Institute of Toxicology Research (CSIR-IITR), Lucknow visited the Chemistry Department on Nov. 2, 2019 and delivered a Talk on “*Supporting Risk in Science: Emergence of Nanomaterial Toxicology in India*” at the DEI Seminar Hall Complex which was attended by the B.Voc. and M.Sc. students, PhD Scholars and Staff of Faculty of Science.
- The 1989 Batch of M.Sc. Chemistry (2nd Batch) comprising of Mrs. Reena Ahuja (Partner-Director, Smart Head Strategy Soln. Pvt Ltd), Dr. Sandhya Mishra (CTO-LIB, Head, R&D-LAB, HBL Power Sys. Ltd), Dr. Amita Gulati (Social Work and Public Issues), Mr. Rajesh Walia (Head, Quality Centrient Pharmaceuticals), Mr. Sandeep Saxena (Entrepreneur Real Estate-Constructions), Mr. K B Purushottam (Delivery Head SAP, TCS) visited the Department on Nov. 23, 2019.
- A Workshop on Instrumental Techniques in Chemical Analysis (WITCA) was organized by the Department during 26-29 Nov, 2019. The Workshop was attended by 18 participants including Assistant Professors and Research Scholars from GLA University, Mathura, Institute of Basic Sciences, Khandari, Agra, St. John’s College, Agra and Scholars of the Department of Zoology, DEI. In the four-day Workshop the participants were apprised of various Instrumental Techniques through Lectures and Lab sessions. The Workshop was marked by deliberation of two Special Invited talks:
  1. Analytical Interventions Necessary to Understand Biomass to Ethanol Production Process, delivered by Dr D.K. Tuli, DBT IOC Chair, DBT IOC Centre for Advanced Bioenergy Research, Faridabad.
  2. Towards Excellence in Chemistry in the 21st Century: Challenges and Opportunities, delivered by Prof. (Dr) A K Bakshi, Vice-Chancellor, PDM University, Haryana, Chairman, National Resource Centre of Chemistry of MHRD.





- A Webinar on “Climate, Health and Sustainability” was organized by Department of Chemistry, on 4 June, 2020 on the eve of World Environment Day. In the Webinar Prof. Pratim Biswas, Chair, Department of Energy, Environment and Chemical Engineering, Washington University in St. Louis, USA delivered an exemplary talk on “COVID-19 and the SARS-COV-2 Virus: Airborne Transmission. How it happens, How it infects & How can we stay safe?” Prof. Sourav Pal, Director, USER, Kolkata was the Chief Guest. He gave a lecture on “Computational Chemistry, Application and Fate of Nanoparticles” and highlighted the role and applications of Computational Chemistry in addressing environmental challenges. Prof. R. Gurunath, from IIT Kanpur delivered a talk on “Fate of an Organic Pollutant: Story of N, N-Dimethylformamide and highlighted its environmental aspects. Prof. Shyam Lai, Emeritus Professor, Physical Research Laboratory, Ahmedabad spoke on the effect of Lockdown on Pollution Levels by his talk on “Scenario of Trace Gases in India during the Lockdown Period” and Dr. S. Suresh Babu, from Space Physics Laboratory, Vikram Sarabhai Space Centre, Thiruvananthapuram, Kerala emphasized the role of Atmospheric Aerosols on Climate through his talk on “Aerosols and Climate”.

### Recognitions/ Achievements

- Prof. Sahab Dass delivered a Keynote address on Photoelectrochemical Splitting of Water for Hydrogen Generation - Some significant results achieved at DEI in the Green & Sustainable Chemistry Conference held at Manav Rachna University, Faridabad during 7-8 November, 2019.
- Prof. M.M. Srivastava delivered a Keynote address on Green Nanotechnological Enhancement in pharmacological bio-efficacy: Our Research Experiences, in the Green & Sustainable Chemistry Conference held at Manav Rachna University, Faridabad during 7-8 November, 2019.
- Prof. Sahab Dass delivered a Keynote address on Hydrogen Generation via Photoelectrochemical Splitting of Water: Overview of Research at DEI in the NATIONAL CONFERENCE on Science, Technology Applications of Microscopy (STEAM-2019) held during 11-12, November, 2019 organized by Department of Chemistry, Institute of Basic Sciences, Dr. Bhimrao Ambedkar University, Agra.
- Prof. Sahab Dass delivered a Keynote address on Towards Generation of Hydrogen from Solar Water Splitting- Issues and Progress in the International Conference on “Green Technologies, Circular Economy and Restoration of Cultural Heritage” held during November 28 -29, 2019, organized by R.B.S. College & R.B.S. Community College, Bichpuri, Agra
- Dr. Ranjit Kumar, invited and participated in inaugural session of NatFoS-2019, Jaipur, India.
- Dr. Ranjit Kumar was nominated as representative of one of the two leading CSOs by Assistant Chief Election Commission Officer, Uttar Pradesh to participate in workshop cum ELC training, 28-29 November 2019, United Service Institution, New Delhi.
- Dr. Ranjit Kumar convened a session on ‘NOTA’ during workshop of Electoral Literacy Club.
- Dr. Ranjit Kumar delivered talk on “Coal combustion: emission and control” in 38<sup>th</sup> Annual conference of Indian Council of Chemist held in Jaipur National University, Jaipur from 26-28<sup>th</sup> December 2019.
- Mr. Udit Tiwari, M.Sc. Chemistry pass out of 2018-2019 was conferred the prestigious Marie Sklodowska-Curie PhD Fellowship to pursue PhD on the topic “Probing electron transport and nanoscale behavior in

perovskite solar cells," at University of Central Lancashire and The University of Manchester for the period Jan1, 2020 to Jan1, 2023.

- Ms. Sakshi Saxena was selected for the award of INSPIRE Fellowship, Department of Science and Technology, Ministry of Science and Technology, Govt. of India.
- Ms. Sakshi Saxena and Ms. Mukti Sharma were awarded the Best Paper Presentation Award in the " Green & Sustainable Chemistry (GSCC 2019)" Conference organized by Manav Rachna University, Faridabad, sponsored by Science & Engineering Research Board (SERB), Department of Science and Technology India, Indian Oil R&D Center, Faridabad and Royal Society of Chemistry, North Indian Section held on 7-8th Nov 2019. The title of Sakshi's paper was "A study on understanding the role of incorporation of MWCNT in nanoporous doped bismuth vanadate in photoelectrochemical water splitting for hydrogen generation." The title of Ms. Mukti Sharma's paper was "Green Synthesis and Characterization of Flavanoid Loaded Mono and Bimetallic Nanoparticles Potentiating Wound Healing Bio-Efficacy "
- Ms. Ankita Mangal was awarded the Best Poster award for her presentation on Chemical Characterization of Submicron Particles during Heating and Non-Heating Period: Sources and Health Risk Assessment, in the National Conference Science Technology Applications of Microscopy (STEAM) organized by Institute of Basic Sciences, Khandari Agra held during Nov, 11-12, 2019.
- Rohini Singh was awarded Prof. G. Gopala Rao, Centenary Commemorative Award 2019 for best oral presentation in Analytical and Physical Chemistry Section in 38th Annual Conference of Indian Council of Chemist held in Jaipur National University, Jaipur from 26-28 December, 2019.
- Ms. Isha Goyal, received the Best Paper Award for the paper in International Conference on Innovation and Opportunities in Chemical Engineering for Sustainable Environment and Energy (IOCSE-2020).

#### Participation in Conferences/ Seminars/ Workshops/ Training Programs/Courses

- Ms. Sonal presented a paper entitled long range transport of dust and crop-residue burning aerosols to Agra, in the International Conference on Innovation and Opportunities in Chemical Engineering for sustainable Environment and Energy (IOCSE-2020).
- Ms. Neela Baghel presented a paper entitled Observations of tropospheric Ozone and its precursors (CO, NO<sub>x</sub> and HCHO) at a suburban site Dayalbagh, Agra, in International Conference on Innovation and Opportunities in Chemical Engineering for Sustainable Environment and Energy (IOCSE-2020).
- Ms. Isha Goyal presented a paper entitled Particle characteristics of PM<sub>2.5</sub> as revealed through Scanning Electron Microscopy in the International Conference on Innovation and Opportunities in Chemical Engineering for sustainable Environment and Energy (IOCSE-2020).
- Ms. Sonal presented a Poster on "Application of satellite data on identification of episodic events" in International Global Atmospheric Chemistry-Monsoon Asian and Oceanic Networking Group (IGAC MANGO 2019) training during 28-30 November 2019 at ARIES, Nainital.
- Pratima Gupta, Ashok Jangid and Ranjit Kumar presented a paper entitled Atmospheric concentration of black carbon during monsoon and non-monsoon season in Aerosol, clouds, precipitation and hydrological cycle in the Water Future Conference, IISc Bangalore, India on 24-27 September, 2019.
- Rohini Singh and Ranjit Kumar presented a paper entitled Atmospheric bioaerosols: characterization and deposition. XXXVIII Conference of the Indian Council of Chemists 26-28 December 2019 at Department of chemistry, Jaipur National University, Jaipur.
- Pratima Gupta, Ashok Jangid and Ranjit Kumar presented a paper entitled Chemistry of soot particles and role of neighboring component at AGU Fall meeting, San Francisco from 9-12 December, 2019.
- Pratima Gupta, Ashok Jangid and Ranjit Kumar presented a paper entitled Black carbon: emission and deposition at the 38<sup>th</sup> Conference of Indian Council of Chemist, Jaipur National University, Jaipur from 26-28 December 2019.

### Educational Excursion

An educational Excursion was organized to Department of Chemistry, IIT, Kanpur in November 2019.

### Department of Mathematics

The department aims at providing the students a comprehensive foundation in Mathematics, increase their employment potential and to undertake meaningful research. The department of Mathematics comprises of 6 Professors, 1 Associate Professors, 4 Assistant Professors, 1 Emeritus Professor and 1 Guest Faculty. Prof. Ravinder Kumar is the Head of the Department. At the Undergraduate level the department offers BSc. (Hons) in Mathematics and at the Postgraduate level it offers M.Sc. Mathematics and M.Sc. Mathematics with Specialization in Computer Applications, M. Phil. and Doctoral programme. In addition, the department also offers a Post Graduate Diploma in Big Data, Logistics & Operations Research. The department also offers certain courses to other Faculty and Departments like:

1. Computational Methods to M.Tech. students of Engineering
2. Engineering Mathematics to B. Tech students of I, II & III Yr of Engineering
3. VRE Engineering Mathematics to VRE students of Engineering
4. Mathematics to students Arts/Social Sc. B.A./B.S.Sc.
5. Math. Methods for Economics to students of B.A. (Hons) Economics of Faculty of Social Sc.

The department has recently introduced new Courses like Metric Spaces, Algebra III (Sylow's Ths & Inner Product Sps) and Tensor Analysis at the Honours level, Measure & Integration, Field Theory and Introduction to Riemannian geometry at the MSc level and Statistics for Engineering for the Engineering students of VI Sem.

The thrust areas of research of the department include Fluid Dynamics, Fuzzy Mathematics, Graph Theory, Linear Algebra, Numerical Analysis, Optimization and Topology. The department is also involved in some Interdisciplinary research areas like Mathematical Biology (Use of Differential Equations in Solving Biological Problems), Mathematical Physics (Topological Study of Lorentz Manifolds), Soft Computing (Use of Computing Techniques in Solving Graph Theoretic Problems) and Bio-Technology (Use of Topology and Graph Theory in the Study of Proteins).

The department also has strong collaborations in the area of Linear Algebra with University of Tampere, Finland, Optimization with Christian Albrecht University, Kiel, Germany, Evolutionary Algorithms with CINVESTAV – Tamaulipas, Mexico and Operations Research with Eritria Institute of Technology, Eritria. The members of the department also have active inter-Department collaborations within the institute in the field of Evolutionary Algorithms with Department of Mechanical Engineering, Optimization with Department of Mechanical Engineering and Bio-Technology with Department of Zoology.

The department of Mathematics is furnished with a Computing Lab consisting of 22 Desktop Computers: DELL OptiPlex 780n, HP Pro i3/ i5 based computers, a Dell Precision T5500 Workstation, a Dell Power Edge T410 Server and has some licensed software's like MATLAB 7.0 10 user license with symbolic math and statistics toolbox and Systat 9.0. The other equipment's available in the department are a Four Channel Data Acquisition System, Peristaltic Pump, Multi- Channel Flow Meter with Flow Sensors.

The Members of the department are on the Review Boards of Journals like Math Sci Net (American Mathematical Society), Knowledge based Systems, Engineering Optimizations, Computers and Operations Research, Mathematical Reviews, Discussiones Mathematicae, Graph Theory, Statistics in Transition in New Series, Journal of Applied Probability and Statistics, International Journal of Bio-Mathematics, Member, Expert Committee Faculty Selection, ABV- Indian Institute of Information Technology & Management, Gwalior, Reviewer, Project Proposal,

Research Council of Sultanate of Oman, Reviewer, IEEE Transactions on Evolutionary Computations, Reviewer, IEEE Access, Resource Person - UGC National workshop on "Evaluation Reforms in Higher Education" at Hyderabad during July 2019.

## Achievements

Pinki Lawania, Aditi Singh, Jitendra Rathore and Deepanshi qualified NET examination in 2019.

Amrita P. and Dimple Sharma students of M.Sc. Maths second year attended the online NPTEL course "Introduction to fuzzy sets, arithmetic and logic" during July-October 2019 through SWAYAM and got highest marks.

Amrita P. also attended the online NPTEL course "Introductory non-linear dynamics" during July-October 2019 through SWAYAM and got highest marks.

## Participation in Conferences/ Seminars/ Workshops/ Training Programs/Courses

- Dr. Richa Bansal attended online Faculty Development Programme on Machine Learning and Deep Learning Applications in Engineering & Science (MLDLAES - 2020) from 16-20 May 2020, organized by civil engineering department of govt. college of Engineering Karad (Maharashtra).
- Aditi Khandelwal completed a short-term training program on "MATLAB based Teaching-Learning in Mathematics, Science & Engineering" from 18 to 22 May 2020 organized by Department of Electronics Engineering, RADIT and Design Tech Systems Pvt. Ltd.
- Ms Aditi Khandelwal attended a workshop on "Effective and efficient online teaching" on 16 May 2020 organized by IIT Bombay.
- Rani Kumari participated in Covid 19 awareness quiz and Python Programming Quiz held online on 23<sup>rd</sup> and 26<sup>th</sup> May, 2020 respectively

## Publications

1. Agrawal, G., & Pathak, R. (2019), First Singular Homology Group of Spacetime. *Reports on Mathematical Physics*, 84(2), 245-252.
2. Vijay Lakshmi Tiwari, Antika Thapar (2019), Covering Problem for Solutions of Max-Archimedean Bipolar Fuzzy Relation Equations, *International Journal of Uncertainty, Fuzziness and knowledge Based Systems*, 28(4), 613-634.
3. Gunjan Agrawal and Roma Pathak, First Singular Homology Group of Spacetime, *Reports on Mathematical Physics*, 84 (2), 2019, 245-251.
4. A. Singh, S. Dahiya, S. P. Singh, S.P, (2020), A fourth-order B-spline collocation method for nonlinear Burgers–Fisher equation. *Math Sci* 14, 75–85 <https://doi.org/10.1007/s40096-019-00317-5>.
5. Agrawal, G., & Pathak, R. (2019), First Singular Homology Group of Spacetime. *Reports on Mathematical Physics*, 84(2), 245-252.
6. Agarwal, S., & Sharma, S. (2020). A Shootout Method for Time Minimizing Transportation Problem with Mixed Constraints. *American Journal of Mathematical and Management Sciences*, 39(4), 299-314.
7. Gujral, K., & Singh, S. P. (2020). Effect on flow characteristics of blood in overlapping stenosed artery considering the axial variation of viscosity using power-law non-Newtonian fluid model. *International Journal of Computing Science and Mathematics*, 11(4), 397-409.
8. Aditi Khandelwal, Kamal Srivastava, Gursaran (2020), On Roman Domination of Graphs using a Genetic Algorithm, *Advances in Intelligent Systems and Computing*, Proceedings of the International Conference on Computational Methods and Data Engineering (ICMDE 2020) Springer Series (ISSN: 2194-5357).

9. Kardam, Y. S. & Srivastava, K. (2020). General Variable Neighborhood Search for the Minimum Stretch Spanning Tree Problem, *Advances in Intelligent Systems and Computing*, In Proceedings of the International Conference on Computational Methods and Data Engineering (ICMDE 2020) Springer Series (ISSN: 2194-5357).
10. Kardam, Y. S. & Srivastava, K. (2020). Tabu Embedded Simulated Annealing Algorithm for Profile Minimization Problem, *Advances in Intelligent Systems and Computing*, Proceedings of the International Conference on Computational Methods and Data Engineering (ICMDE 2020) Springer Series (ISSN: 2194-5357).



### **Department of Physics and Computer Science**

The Department of Physics and Computer Science focuses on building a strong foundation in fundamental concepts of Physics while developing expertise in different aspects of electronics and computer science. It is headed by Prof. Vibha Rani Satsangi. There are 8 Professors, 3 Associate Professors and 8 Assistant Professors and 5 Guest Faculty in the department. The department offers the following programs

- B.Sc. (Hons) Physics
- B.Sc. (Hons) Computer Science
- B.Voc. Internet of Things
- B.Voc. Telematics
- B.Voc. Telecommunications
- M.Sc. Physics/Physics with spl. in Electronics/Computer Science
- M.Sc. Computer Science
- PG Diploma in Computer Science & Applications
- M.Phil. Physics
- M.Phil. Computer Science
- Ph.D.

### **New Programmes Introduced**

The department also offers Courses on Media Processing (Fall) and Intelligent Information Processing (Spring) for M.Sc. Computer Science, M.Phil. and B.Sc. Engg. jointly with Dept. of CSE, IITD Under DEI-IITD MoU and Courses on Information Centric Design of Systems (Fall) and Computer Networks (Spring) for M. Sc. Physics (Spl. CS), M.Sc. Math and M.Sc. Computer Science from Dept. of CSE, University of Maryland, College Park, USA under DEI-UMD MoU.

The research areas of the department are Quantum Information Systems, Solar Energy Conversion, Nano-Biophotonics Ultrafast Phenomena involving Nano-Bio-Photonics/Organic/Silicon Photonics, Microwave Devices, Neural Networks and Soft Computing, VLSI Design, Graph Theoretic Quantum Systems Modeling for Information Processing Circuits, Neural Networks and Soft Computing, String Theory and Astrophysics.

The members of the department are on the Editorial boards of Journals such as Journal of Electronic Science and Engineering, Journal of Optical Engineering and Applications, Recent Patents on Signal Processing, International Journal of Computer & Electrical Engineering, International Journal Computer Theory and Engineering and also members of Review Boards of Journals like IEEE Trans. Fuzzy Systems, IEEE Trans. Neural Networks, IEEE Trans. Systems, Man & Cybernetics, IEEE J. Quantum Electronics, IEEE Trans. Evolutionary Computation, Optics Express, Optical Engineering , Optics Communications, Optics and Laser Technology , Photochemistry and Photobiology B, J. Modern Optics, Intl J. Hydrogen Energy , J. Phys. Chem., Materials Research Bulletin, Papers in Physics, Swarm and Evolutionary Computation, General Relativity and Gravitation, Mathematical Reviews, Intl. J. of Computer Theory and Engineering, Intl. J. of Physical Sciences, J. of Petroleum Tech. and Alternate Fuels, J. of Engineering and Computer Innovation, Current Science, Pramana-Journal of Physics, Indian Journal of Physics. The department has collaborations with Harvard University, USA, Stanford University, USA, Princeton University, USA, Michigan State University, USA, University of California Santa Barbara, USA, University of Maryland, College Park, USA, Arizona State University, Tempe, USA, Northeastern University, USA, University of Waterloo, Canada, Max Planck Institute for Science of Light, Germany, Hokkaido University, Sapporo, Japan, TIFR, Mumba, TIFR, Bengaluru, IISc., Bengaluru, JNCASR, Bengaluru, IIT Delhi, IIT Kanpur, Inter-University Accelerator

Centre, New Delhi, National Physical Lab., New Delhi, CDAC, Pune and Indian Oil Corporation, Faridabad.

### Facilities

The department has a 296-Core Computing Cluster, Virtual Instrumentation Lab., 22-Terminal Computing Lab, Atomic Force Microscope Ns Laser Flash Photolysis Spectrometer, Surface Profiler Tubular Furnace, HP RF Vector Network Analyzer, and Indigenously Designed Remote Triggered – Analog Communication Electronics (RT-ACE) Lab., IOT lab and a 5G Laboratory.

The department hosts Under-Graduate Research Award (UGRA) to 5-6 bright students selected annually from Science and Engineering in research areas of the Department.

### Achievements

- Professor Sukhdev Roy delivered an invited talk and participated in the Panel Discussion in the National Conference on Benchmarking of Quality Parameters of Research Programs, organized by the Rashtriya Uchchar Shiksha Abhiyan (RUSA), Govt. of Tamil Nadu, in Chennai, on October 15, 2019.
- Professor Sukhdev Roy also delivered an invited talk on “*Controlling the Brain with Light: Low-power and high frequency optogenetic control of neuronal firing*”, at the Seminar on Contemporary Optics and Photonics, at IIT Delhi, from Nov. 9-10, 2019.
- Dr. Dayal Pyari Srivastava, Department of Physics and Computer Science delivered an invited talk in The second international conference on Dayalbagh Science of Consciousness, DSC 2020 organized by DEI and Radhasoami Satsang Sabha held in online mode on May 22, 2020 on the topic "Intuition, Emotionally Aesthetic Experience, and Effect of Meditation from Early Childhood: Some Research Initiatives.
- Prof. C. Vansatha Laxmi participated in SPP Big Data Annual Meeting 2019 in University of Freiburg, Germany from September 16-18, 2019.
- Prof. C. Vansatha Laxmi visited Christian Albrechts Universitat Zu Kiel, Germany as part of the Indo German joint research project on "Evolutionary Algorithms for whole ocean coupled Bio Geochemical models and for Genome Assembly September, 2019.
- Professor Sukhdev Roy delivered the Inaugural Plenary talk titled, “*Bioengineered Natural Photoreceptor Proteins: Novel Molecules for Photonic Applications*”, and chaired a session at the 5<sup>th</sup> International Conference and Expo on Biotechnology and Bioengineering, June 17-18, 2019, at London, UK. He participated in the International Conference on Sculpted Light in the Brain, at the Royal Society, London, from June 20-21, 2019 and presented papers at the International Conference on The Science of Consciousness (TSC-2019), held at Interlaken, Switzerland, June 25-28, 2019. He also reviewed research papers for Optics Communications, IEEE Access, Journal of Energy and Optics and Laser Technology and a PhD thesis of Jamia Milia Islamia, New Delhi.
- Professor Sukhdev Roy chaired the 8<sup>th</sup> World Conference and Expo on Nanoscience and Nanotechnology, from Feb. 17-18, 2020, held at Philadelphia, USA. He delivered the Inaugural Plenary talk titled, “*The Impact of Photonics in the Convergence of Technologies for Improving Human Welfare: Nano, Bio-, Info- and Cognitive Technologies*”, and also chaired a session. He visited the Department of Biomedical Engineering and the Neurophotonics Center at Boston University, and the McGovern Institute for Brain Research at MIT, USA, from Feb. 19-20, 2020 and held extensive discussions on Neurophotonics and

Cognitive Science. He reviewed research papers for IEEE Access, AIP Advances, Optik: International Journal of Lasers and Electro Optics and Journal of Optics and has been invited to join the MIT Technology Review Global Panel.

- Anam Saifi, Final year student of M.Sc. Physics participated in the summer school programme (SSP-2019) of Institute for Plasma Research, Bhat, Gandhinagar (an Autonomous Institute of Department of Atomic Energy, Govt. of India). She won First Prize for the poster presentation which was based on her research project titled "Detection of Faulty Location as well as Measurement of Degree of Fault of RF Transmission Line for Plasma Current Start-up Experiment"

### Papers presented in Conferences/ Seminars/ Workshops

1. Bansal H., Gupta N. and Roy S., (2019), Optimization of Temporally Precise High-Frequency Bidirectional Optogenetic Control of Neuronal Spiking," *XXXVII Annual Meeting of Indian Academy of Neurosciences*, at AIIMS New Delhi, India (November 19 – 21, 2019).

### Publications

2. Neha Gupta, Himanshu Bansal and Sukhdev Roy, (2019), Theoretical optimization of high-frequency optogenetic spiking of red-shifted very fast-Chrimson-expressing neurons, *Neurophotonics*, 6(2), 025002.
3. Himanshu Bansal, Neha Gupta and Sukhdev Roy, (2019), Low-power and high-frequency optogenetic control of spiking in ultrafast red-shifted Chrimson-expressing neurons, *Asian Journal of Physics*, 28(7-9), 631-642.
4. Vijai Dev and Preetvanti Singh, (2019), A Hybrid Method to Analyze and Manage Tourist Arrivals *Journal of Tourism & Management Research*, 4(2), 429-444. ISSN: 2149-6528.
5. Kumari Asha, Anamika Banerjee, Sakshi Saxena, Saif A. Khan, Indira Sulaniya, Vibha Rani Satsangi, Rohit Shrivastav, Rama Kant, Sahab Dass, (2019), Morphological influence of electrode/electrolyte interface towards augmenting the efficiency of photoelectrochemical water splitting – A case study on ZnO, *Journal of Power Sources*, 432, 38-47.
6. Anupam Srivastav, Anuradha Verma, Saif. A. Khan, York R. Smith, Vibha Rani Satsangi, Rohit Shrivastav, Sahab Dass, (2019), Photoelectrochemical Water Splitting with 600 keV N<sup>2+</sup> Ion Irradiated BiVO<sub>4</sub> and BiVO<sub>4</sub>/Au Photoanodes, *Int. J. Hydrogen Energy*, 44, 13061-13079.
7. Nirupama Singh, Mrinal R. Pai, Gurpreet Kaur, Divya, Vibha R. Satsangi, Sahab Dass, Rohit Shrivastav, (2019), Zn<sub>1-x</sub>Fe<sub>x</sub>O<sub>y</sub> nanocomposites for renewable hydrogen produced efficiently via photoelectrochemical *vis-a-vis* photocatalytic splitting of water, *SN Applied Sciences*, 1, 611.
8. Ashi Ikram, Sahab Dass, Rohit Shrivastav, Vibha R. Satsangi, (2019), Integrating PbS Quantum Dots with Hematite for Efficient Photoelectrochemical Hydrogen Production, 216(7), 1800839.
9. Sant Saran, Neha Gupta and Sukhdev Roy, Theoretical analysis of low-power fast optogenetic control of firing of Chronos-expressing neurons, *Neurophotonics*, 5(2), 025009.
10. M. Mebin Panamkuttiyiel Saumain (2020). Generalized Expression for the 9th Integration of Transcendental and Non-Transcendental Functions" in *International Journal of Mathematics Trends and Technology (IJMTT)* Volume-66, Issue-1.
11. Pathak, A., & Jangid, A. Measurement and Impact Assessment of Radio Frequency Electromagnetic Fields in Dayalbagh Educational Institute. In *2020 IEEE 9th Power India International Conference (PIICON)* (pp. 1-5). IEEE.
12. Arora, B., Chaudhary, D. S., Satsangi, M., Yadav, M., Singh, L., & Sudhish, P. S. (2020, February). AgriBot: a natural language generative neural networks engine for agricultural

- applications. In *2020 International Conference on Contemporary Computing and Applications (IC3A)* (pp. 28-33). IEEE.
13. Sharma, R., & Saini, S. (2020, July). Heuristics and Meta-Heuristics Based Multiple Depot Vehicle Routing Problem: A Review. In *2020 International Conference on Electronics and Sustainable Communication Systems (ICESC)* (pp. 683-689). IEEE.
  14. Bansal, H., Gupta, N., & Roy, S. (2020). Comparison of low-power, high-frequency and temporally precise optogenetic inhibition of spiking in NpHR, eNpHR3.0 and Jaws-expressing neurons. *Biomedical Physics & Engineering Express*, *6*(4), 045011.
  15. Prakash, S., & Sinha, R. (2020). Melonic dominance in subchromatic sextic tensor models. *Physical Review D*, *101*(12), 126001.
  16. Pathak, A., & Jangid, A. Measurement and Impact Assessment of Radio Frequency Electromagnetic Fields in Dayalbagh Educational Institute. In *2020 IEEE 9th Power India International Conference (PIICON)* (pp. 1-5). IEEE.
  17. Kumar, S. S., Kumar, A., Singh, S., Malyan, S. K., Baram, S., Sharma, J., ... & Pugazhendhi, A. (2020). Industrial wastes: Fly ash, steel slag and phosphogypsum-potential candidates to mitigate greenhouse gas emissions from paddy fields. *Chemosphere*, *241*, 124824.
  18. Prakash, S., & Gupta, A. (2020). Contextual bound states for qudit magic state distillation. *Physical Review A*, *101*(1), 010303.
  19. Soniya, Paul, S., & Singh, L. (2020). Application and Need-Based Architecture Design of Deep Neural Networks. *International Journal of Pattern Recognition and Artificial Intelligence*, *34*(13), 2052014.
  20. Saraswat, D., & Singh, P. (2020, July). Comparison of Different Decision Tree Algorithms for Predicting the heart disease. In *International Conference on Machine Learning, Image Processing, Network Security and Data Sciences* (pp. 245-255). Springer, Singapore.
  21. Soniya, Paul, S., & Singh, L. (2020). Application and Need-Based Architecture Design of Deep Neural Networks. *International Journal of Pattern Recognition and Artificial Intelligence*, *34*(13), 2052014.
  22. Daya, K. S., & Doneria, P. (2019). Measurement of Dielectric Properties of Biological Materials Using Co-Axial Fork-Type Probe. *IEEE Sensors Journal*, *19*(22), 10482-10489.
  23. Agarwal, M., & Srivastava, G. M. S. (2019). A PSO algorithm-based task scheduling in cloud computing. *International Journal of Applied Metaheuristic Computing (IJAMC)*, *10*(4), 1-17.
  24. Arya, L., & Srivastava, G. (2019, September). Fuzzy Models for Water Quality Assessment. In *2019 International Conference on Issues and Challenges in Intelligent Computing Techniques (ICICT)* (Vol. 1, pp. 1-6). IEEE.
  25. Sandhir, R. P., & Ravishankar, V. (2019). Weak classicality in coupled N-level quantum systems. *The European Physical Journal D*, *73*(6), 1-8.
  26. Sumati, V., Patvardhan, C., Paul, S., Singh, L., & Swarup, V. M. (2019, June). Hybrid Model of Interval Type-2 Neural Fuzzy Inference System and Mutual Subsethood with Applications. In *2019 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)* (pp. 1-6). IEEE.
  27. Kalra, A. R., Gupta, N., Behera, B. K., Prakash, S., & Panigrahi, P. K. (2019). Demonstration of the no-hiding theorem on the 5-Qubit IBM quantum computer in a category-theoretic framework. *Quantum Information Processing*, *18*(6), 1-13.
  28. Ikram, A., Dass, S., Shrivastav, R., & Satsangi, V. R. (2019). Integrating PbS Quantum Dots with Hematite for Efficient Photoelectrochemical Hydrogen Production. *physica status solidi (a)*, *216*(7), 1800839.
  29. Subbarao, V., Srinivas, K., & Pavithr, R. S. (2019, April). A survey on internet of things based smart, digital green and intelligent campus. In *2019 4th International Conference on Internet of Things: Smart Innovation and Usages (IoT-SIU)* (pp. 1-6). IEEE.
  30. Gupta, N., Bansal, H., & Roy, S. (2019). Theoretical optimization of high-frequency optogenetic spiking of red-shifted very fast-Chrimson-expressing neurons. *Neurophotonics*, *6*(2), 025002.

31. Varshney, S., Jain, P., & Srivastava, S. (2019). Removal and Recovery of Chromium from E-waste by Functionalized Wood Pulp: A Green Bio-hydrometallurgical Approach. *National Academy Science Letters*, 42(2), 99-103.
32. Saxena, K., Kumar, M., Daya, K. S., & Bandyopadhyay, A. (2019, March). Detection of Millimeter Wave Properties of Beta Amyloid using Dielectric Filled Truncated Cylindrical Waveguide. In *2019 URSI Asia-Pacific Radio Science Conference (AP-RASC)* (pp. 1-4). IEEE.
33. Daya, K. S., Tirumalai, P. S., Baum, M., & Adelung, R. (2019, March). Understanding the Interaction of Escherichia coli with ZnO Tetrapods at Microwave Frequencies. In *2019 URSI Asia-Pacific Radio Science Conference (AP-RASC)* (pp. 1-4). IEEE.
34. Kumar, S., & Jangid, A. (2019). Comparative Study of the Photostability of Two Glycine Molecules in Different Medium. *MRS Advances*, 4(28), 1631-1637.

### Department of Zoology

The Department of Zoology was established in the year 1970 as a premier Centre for teaching and research in Zoology under the Radhasoami Educational Institute (REI) and in 1981 became part of the Dayalbagh Educational Institute, (DEI) Deemed University. The Department is headed by Prof. Sant Prakash and comprises of 3 Professors, 1 Associate Professor, 5 Assistant Professors, 1 Emeritus Professor and 1 Guest Faculty. The Department emphasizes a seamless transition from Classical Zoology to frontier areas of Zoology with active interspersions of interdisciplinary research. The current research and teaching areas in the Department include Molecular Genomics; Genotoxicity, Computational Biology, Vector Control Entomology, Vector Control Parasitology; Molecular Systematics; Evolution and Biodiversity, Cell-Biotechnology and Nano-biotechnology, Neurobiology, Molecular Genetics & Evolutionary Biology, Sustainable Eco-Development & Biodiversity Conservation. The faculty is actively involved in participatory research under Institutes MOU programmes with ICGEB, University of Missouri, USA, University of Maryland USA, National Institute of Health and Family Welfare (NIHFW / ICMR) New Delhi, Centre for Research on Goats (CIRG / ICAR) Mathura, MOU DBT - Biotech Park Lucknow, National JALMA Research Institute for Leprosy and other Mycobacterial Diseases (JALMA) Agra, Advanced Treatment Institute, Tassilo, Gauting Germany, MOU International Centre for Genetic Engineering and Biotechnology (ICGEB) New Delhi. The faculty in the department are acclaimed for their high achievements as Fellow of Royal Society of Entomology; INSA; JURY Member of DST-INSPIRE AWARDS; Members of the Selection Boards of Professors of other institutions; Member of the Academic Bodies of other Universities; Reviewers and Editors of various National and International Journals. The department also has extramural funding from DST, DBT and UGC, besides receiving the grant under the DST-FIST programme. The department also extends support to the government agencies such as UP Forest Department, Jal Nigam, RSS Sabha for Laboratory Testing, Assessments, and Inventories. The Department has been holding various National and International Seminars and conferences to provide a platform for scientific exchanges. Two Patents have been filed and Fourteen Unique Gene Sequences have been registered at NCBI, USA by the Faculty members. Recently the department has procured Real Time PCR (qPCR), Gradient PCR, Sonicator, Water purification system, Phase contrast microscope and several Computers. The department offers the following programmes:

1. B.Sc. (Hons.) Zoology
2. M.Sc.
3. M Phil.
4. Ph.D.
5. Paramedical Certificate Courses: Nursing/ Midwifery / Companionship

It offers Work Experience Courses on:

Cell Biotechnology (I – VI Semester) and

Bioinformatics (I – II Semester)

The department has introduced new courses on Neurobiology and Neuroscience (Compulsory) for B.Sc. (Hons.) students and as electives at the PG level.

### Achievements/Recognitions

- Dr. Arun Pratap Sikarwar was felicitated with "INNOVATIVE TEACHER AWARD" by the "Center for Educational Development (CED) Foundation Trust" at India International Center, New Delhi on 8<sup>th</sup> September, 2019. The dignitaries as Chief Guest of the award ceremony were Padma Vibhushan Shri T.N. Chaturvedi Ji (former IAS officer, Comptroller & Auditor General of India, Rajya Sabha Member and Governor of Karnataka & Kerala), Padma Shri Prof. Kiran Seth (IIT Delhi), Dr. Dev Swarup (Additional Secretary, UGC, Gov. of India), Dr. A.K. Bisoi (Cardio-thoracic surgeon, AIIMS Delhi), and Shri Sharad Yadav (senior Parliamentarian). Dr. Arun was offered an opportunity to deliver a lecture in the august gathering over Moon Mission of India and "Future of Space Science in India" keeping in mind his contributions to cover Lunar Mission as a scientific expert over various National TV News.
- Dr. Arun Pratap Sikarwar had been one of the Scientific Expert Panelist to cover the Live broadcast of landing of "Vikram" lander of Chandrayaan-2 mission of Indian Space Research Organization (ISRO, India) on the Moon surface at the night of 6<sup>th</sup> and 7<sup>th</sup> September at national TV news channel "INDIA TV" for 04:30 hr duration, between 11:30pm to 04:00am. Dr. Soumya Dutta, a scientist & thinker, and Astha Talwar, an astronomer, accompanied as panelist for the TV broadcast, along with journalists from control centre of ISRO at Bangalore.
- Dr. Priyanka Gautam and Rahul Jain received the Second Prize in Poster presentation in the International Conference on Neurological Disorder and Therapeutics (ICNDT) from October 24-26, 2019 at NIPER, Ahmedabad Gandhinagar, Gujarat, INDIA.
- Dr. Arun Pratap Sikarwar received a public felicitation with an award in the field of "Science Communication" from "Pt. Deendayal Upadhyay Smriti Mahotsava Samiti", Farah, Mathura, on the eve of birth anniversary of Pt. Deendayal Upadhyay, on 25 September 2019. The Award was given by Shri Raj Kumar Chahar, the Hon'ble Member of Parliament (Lok Sabha) from Fatehpur Sikri, Agra.
- Neha Loach (Research Scholar), was awarded 2nd prize in Digital Poster presentation entitled "Phytochemical and Larvicidal Evaluation of *Jatropha curcas* against *Anopheles stephensi* (Liston) & *Culex quinquefasciatus* (Say) in 12<sup>th</sup> National Conference on Vector Borne & Zoonotic Diseases-Identification to Management, organized by Zoological Survey of India on November 25-26, 2019.
- Dr. Arun Pratap Sikarwar was invited as a Resource Person at 114<sup>th</sup> Orientation Program at Academic Staff College (ASC), UGC- Human Resource Development Centre (HRDC) of prestigious Jawaharlal Nehru University (JNU), on 15 July 2019. He delivered a lecture

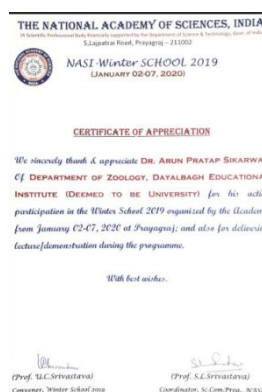


entitled “Basics of Brain Biology and Role of Human Memory in Educational Learning”. The orientation program was having forty (40) Assistant Professors from almost 16 states of country, including three participants of biological sciences.

- Dr. Arun Pratap Sikarwar, was also invited as an expert panelist in Scientific debate at AAJ TAK television (an eminent Hindi language news channel of India) during the LIVE coverage of the launch of “Chandrayaan-2”, India's second lunar exploration mission developed by the Indian Space Research Organisation (ISRO), between 01-04pm Indian Standard Time (IST) on July 22, 2019. The live coverage and scientific debate of the important lunar satellite launch of Chandrayaan-2 was watched by several millions of viewers on TV and internet worldwide. The other panelists of scientific group at AAJ TAK included eminent personalities e.g., Prof. Gauhar Raza (National Institute of Science Communication and Information Resources, NISCAIR), Prof. K. Siddharth (Geophysicist) and Prof. P.D. Sahare (Astrophysicist, Delhi University).
- Dr. Arun Pratap Sikarwar was invited to deliver a motivating and science popularization lecture and interactive session over 'Basics of Brain Biology' to almost 200 selected young students from various states of India at the Winter School-2020, organized by The National Academy of Sciences, India (NASI, the oldest Science Academy of India) at Prayagraj, on 5 January, 2020.
- Dr. Arun Pratap Sikarwar, was invited to serve as Honorary Secretary of Dr. A.P.J. Abdul Kalam Centre, New Delhi, which aims to create and implement mission-mode projects along with the vision of Dr. A.P.J. Abdul Kalam, the 11<sup>th</sup> President of India for creating liveable planet and sustainable development.



- Dr. Arun also participated in a Live TV debate over Chandrayaan-2 mission entitled “Chandrayaan-2 Ke Mayane” at national TV news channel Lok Sabha TV (LSTV) at the Parliament House, on 7<sup>th</sup> September, 2019. The fellow panelists with Dr. Arun were Dr. Rajeev Nayan, a senior scientist at Institute for Defence Studies and Analyses (IDSA), and Mr. Sunil Jayant Namodhar Ji, Retd. Air Vice Marshal of Indian Air Force (IAF).
- Dr. Arun Pratap Sikarwar was invited as a Resource person to deliver a lecture entitled “Basics of Brain Biology to unravel the Secrets of Cognitive Mind” at 115<sup>th</sup> Orientation Programme at UGC- Human Resource Development Centre (UGC-HRDC) of prestigious Jawaharlal Nehru University (JNU), New Delhi, dated 26 November 2019. He was also invited as a Resource person to deliver a lecture entitled “Brain Anatomy and Functioning” (covering various aspects of Neuroscience e.g., neuroanatomy, neurophysiology, memory, neurobics, neuroplasticity and dreams etc.) at “Capacity Building Programme on Brain Based Learning Strategies” conducted by Pandit Madam Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT), MHRD, Gov. of India, at Dayalbagh Educational Institute, Agra, dated 21 October 2019.



- Dr. Arun Pratap Sikarwar, was invited as a Resource Person by UGC-HRDC of Jawaharlal Nehru University (JNU), New Delhi, to deliver two lectures on 9<sup>th</sup> March, 2020. He delivered the lecture entitled "A tell-tale of human Brain Memory and its importance for a cognitive mind" to the participants of 117<sup>th</sup> Orientation Programme for regular Assistant Professors of various Universities of India, and another lecture entitled "Memoir of Human Brain Memory, an important faculty of Mind" to the participants of 4<sup>th</sup> National Interaction Programme for Ph.D. and Postdoctoral Scholars in Social Sciences & Humanities.
- Dr. Arun Pratap Sikarwar, had given TEDx public talk entitled "PERILS OF OFFLOADING OF HUMAN MEMORY OVER INTERNET AND MACHINE" at TEDxTajNagri event conducted at J.P. Auditorium by Institute of Engineering and Technology (I.E.T.) of Dr. B.R.A. University, Agra, dated February 16<sup>th</sup>, 2020. The TEDx talk recording was about 15 minutes long and the message given was over the increased dependency of humans over electronic gadgets, especially mobile phone and computers to get any information, rather hitting and trying to utilize our own brain memory. This way human is externalizing a part of brain memory over the digital world and it's surprising that it has started affecting the pattern of human brain memory.
- Dr. Arun Pratap Sikarwar delivered a lecture entitled "Importance of Creativity & Innovation in Teaching and Learning along with New Education Policy-2020" to the "Institution's Innovation Council" of National College (Mumbai University), Bandra, Mumbai, dated December 13<sup>th</sup>, 2020.
- Dr. Arun Pratap Sikarwar delivered a lecture as a Resource person entitled "Role of Human Brain Memory in Teaching & Learning" to the Faculty Induction Program (FIP) of UGC-HRDC center of Jawaharlal Nehru University (JNU), New Delhi, dated October 21<sup>st</sup>, 2020.
- Dr. Arun Pratap Sikarwar had been one of the Scientific Expert Panelist to cover the Live broadcast of landing of "Vikram" lander of Chandrayaan-2 mission of Indian Space Research Organization (ISRO, India) on the Moon surface at the night of 6<sup>th</sup> and 7<sup>th</sup> September at national TV news channel "INDIA TV" for 04:30 hr duration, between 11:30pm to 04:00am. Dr. Soumya Dutta, a scientist & thinker, and Astha Talwar, an astronomer, accompanied as panelist for the TV broadcast, along with journalists from control centre of ISRO at Bangalore.
- Dr. Arun also participated in a Live TV debate over Chandrayaan-2 mission entitled "Chandrayaan-2 Ke Mayane" at national TV news channel Lok Sabha TV (LSTV) at the Parliament House, for the period of 10:00am to 11:30am on 7<sup>th</sup> September, 2019. The fellow panelists with Dr. Arun were Dr. Rajeev Nayan, a senior scientist at Institute for Defence Studies and Analyses (IDSA), and Mr. Sunil Jayant Namodhar Ji, Retd. Air Vice Marshal of Indian Air Force (IAF).



### Projects Ongoing

- DST- FIST sanctioned for the period 2015-2020 is in progress.

### Conference/ Seminar/ Workshop/Special Lectures/Organized

Dr. Asita Elengoe, Lincoln University College Malaysia delivered a talk on Applications of Bioinformatics in Biology on October 3, 2019.

### Participation in Conference/ Workshops/ Seminar/Symposia

- Dr. Shabd Preet attended an international 4-week Webinar series on the theme “Water Challenges during and post COVID-19” organized by International Centre for Clean Water (ICCW), IIT Madras. She attended 3<sup>rd</sup> and 4<sup>th</sup> Symposium which were as follows:
  - a) Water and Sanitation: Best Practices (21<sup>st</sup> May, 2020)
  - b) Impact of COVID-19 on water resources and new opportunities (28<sup>th</sup> May, 2020)
- Dr. Priyanka Gautam, attended one day online workshop on books and article publishing and springerlink platform demonstration organized by GNDU, Amritsar, School of Education, Pandit Madan Mohan Malaviya National Mission on teachers and Teaching, MHRD, Govt. of India, in Collaboration with Springer, Nature on 29<sup>th</sup> April, 2020.
- Priyanka Gautam, attended one day Online Workshop for Enhancing Research Communication Skill through Science Direct and Mendeley organized by IQAC & PMMMNMTT, Faculty of Education, Dayalbagh Educational Institute Agra on 3<sup>rd</sup> May 2020.
- Priyanka Gautam, successfully completed Two Weeks Faculty Development Programme on “Managing online classes and co-creating MOOCS from April 20-May 06, 2020 organized by Teaching Learning Centre Ramanujan College, University of Delhi sponsored by Pandit Madan Mohan Malaviya National Mission on teachers and Teaching.
- Priyanka Gautam, successfully completed national workshop on ICT Tools for online learning from April 20-28, 2020, organized by SNTD Women’s University, Teaching Learning Centre, Department of Education Technology, under Pandit Madan Mohan Malaviya National Mission on teachers and Teaching.
- Priyanka Gautam, successfully completed FDP on MOOC and E-learning Technologies (Online mode only) from April 10-15, 2020 organized by FDC, M.D. University, Rohtak, Haryana, under Pandit Madan Mohan Malaviya National Mission on teachers and Teaching.
- Krishna Rana Research Scholar, attended a National Level Workshop on Research Methodology, Statistics Techniques & Data Analysis using MS Excel organized by Tilak College of Science and Commerce Mumbai on 18-20<sup>th</sup> May 2020.
- Rajul Jain, attended an Online guest Lecture on Selecting a Journal for Publishing Your Research Work on 22<sup>nd</sup> May 2020, organized by Dept. of Biotechnology, GLA.
- Krishna Rana, Neha Singh, Rajul Jain, Rani Kumari, Aditi Khandelwal research Scholar, Dept. of Zoology, attended One Day Online Workshop for Enhancing Research Communication Skill Through Science Direct and Mendeley organized by IQAC & PMMMNMTT, Faculty of Education, Dayalbagh Educational Institute Agra on 3<sup>rd</sup> May 2020.
- Krishna Rana, research Scholar, Dept. of Zoology, attended the following programs:
  - a) International Web Conference on Science, Engineering, & Technology organized by Society of Technologically Advanced Material of India on 15-16<sup>th</sup> May 2020.
  - b) Webinar on Host Immunity & COVID-19 organized by Mahamaya Govt. degree College praygraj on 16<sup>th</sup> May 2020.
  - c) webinar on “Startup Life Cycle and Patent Registration” organized by Atharva College of Engineering Mumbai on 18-19<sup>th</sup> May 2020.

- d) Webinar on “Molecular Taxonomy and DNA Barcoding: Concepts, Methods and Applications” organized by R.D. & S.H. National College and S.W.A. Science college, Bandra (W) Mumbai on 20<sup>th</sup> May 2020.
- e) Online faculty awareness program on “Research Methodology” organized by the Dept. of Mech. Eng. Rajgad dnyahpeeth’s shri chatrapati shivajiraje College of Engineering Pune on 20-25<sup>th</sup> May 2020.
- f) Krishna Rana attended "Webinar in the Series of Advances in Biotechnology for Health, Food and Nutrition to Encounter COVID-19" organized by Department of Biotechnology, AKS University, Satna (M.P.) on 22-23<sup>rd</sup> May 2020.
- Krishna Rana, Parisa Gupta, Radha Yadav participated in International Day for Biological Diversity Quiz organized by Hindusthan College of Arts and Science (Autonomous), Coimbatore on 22<sup>nd</sup> May 2020.
- Rajul Jain, attended the following programs:
  - a) Webinar on Zoonotic Transmissions: Origins and Pathogenesis of the Novel Coronavirus on Friday, April 17<sup>th</sup>, 2020 organized by The Pine Biotech Team 1441 Canal Street Suite 413 New Orleans Louisiana 70112 USA.
  - b) Webinar on DNASTAR - Sanger Sequence Analysis by DNASTARInc.
- Neha Singh, attended webinar on Next Generation Genomics and Integrated Breeding for Crop Improvement (VII-NGGIBCI) on Genomics for food, health, and nutrition organized by Center of Excellence in Genomics & Systems Biology (CEGSB), 14 May 2020.
- Parisa Gupta, attended
  - a) Webinar on "HPTLC Instrumentation and Applications" held on May 22, 2020, organized by Rajasthan University, Jaipur.
  - b) National level webinar titled “Gender implication of COVID-19 pandemic” on 23 May 2020 organized by CMS, Jain (Deemed to be University).
  - c) Online symposium on the topic “Biotechnological potential of mushroom: An emerging approach to fight COVID-19”, from 23 May 2020 to 24 May 2020, organized by Dept. of Biotechnology, Sri Guru Tegh Bahadur Khalsa College, Jabalpur (M.P.)
  - d) Online symposium on the topic “Role of plants as medicine and immunity booster with special reference to COVID-19 pandemic”, from 26 May 2020 to 27 May 2020, organized by Dept. of Botany, Sri Guru Tegh Bahadur Khalsa College, Jabalpur (M.P.)
- Parisa Gupta, Anuradha Kapoor attended a webinar on “Techniques in Molecular Biology” organized by Department of Zoology, University of Rajasthan, Jaipur. on 25 May to 29 May 2020.
- Ami Verma, Radha Yadav, Anuradha Kapoor attended a webinar on “micro pipetting techniques” on 22 May, 2020, organized by Labquest, Borosil.
- Ami Verma attended a webinar on “Techniques in Molecular Biology” organized by Department of Zoology, University of Rajasthan, Jaipur, 25 May to 29 May 2020.
- Radha Yadav, attended the following scientific events:
  - a) Webinar on “Techniques in Molecular Biology” Organized by Department of Zoology, University of Rajasthan, Jaipur, from 25 to 29 May 2020.
  - b) Online symposium on the topic “Role of plants as medicine and immunity booster with special reference to COVID-19 pandemic”, from 26 to 27 May 2020, organized by Dept. of Botany, Sri Guru Tegh Bahadur Khalsa College, Jabalpur (M.P.)
- Madhuri Chaudhary, presented a poster on the topic “ZIKA: A problem to mankind” in 1<sup>st</sup> International conference organized by S.N Medical College, Agra. Dated: 28-29 Feb, 2020.
- Krishna Rana did Course on COVID-19 (Awareness and Prevention) Conducted by Global Institute of Healthcare Management (GIHM), New Delhi on 22<sup>nd</sup> May 2020.

## Publications

1. Shabad Preet and Neh Satsangi (2019), Size Controlled Green Synthesis of Biocompatible Silver Nanoparticles with Enhanced Mosquito Larvicidal Activity, *Journal of Cluster Science*, 30, 1611-1621.
2. Savy P. Minal and Soam Prakash (2019), Efficacy of Bimetallic Copper-Zinc Nanoparticles Against Larvae of Microfilariae Vector in Laboratory, *International Journal of Scientific Research*, 8(2), 72-75.
3. P. Manjusha and Soam Prakash (2019), Biosynthesis of Silica Nanoparticles from *Saccharum officinarum* Bagasse and its Efficacy against *Culex quiquefasicatus* (Say) Larvae, *International Journal of Scientific Research (ISSN No 2277 – 8179)*, 8 (2).
4. Anjali and Sant Prakash (2019), Some adaptive pattern of behaviour in spiders of semi-arid regions, *Journal of Entomology and Zoology Studies*, 7(2), 1118-1122.
5. Minal, S. P., & Prakash, S. (2020). Laboratory analysis of Au–Pd bimetallic nanoparticles synthesized with Citrus limon leaf extract and its efficacy on mosquito larvae and non-target organisms. *Scientific reports*, 10(1), 1-13.
6. Sharma, S., Loach, N., Gupta, S., & Mohan, L. (2020). Phyto-nanoemulsion: An emerging nano-insecticidal formulation. *Environmental Nanotechnology, Monitoring & Management*, 100331.
7. Satsangi, N. (2020). Synthesis and characterization of biocompatible silver nanoparticles for anticancer application. *Journal of Inorganic and Organometallic Polymers and Materials*, 30(6), 1907-1914.
8. Preet, S., & Satsangi, N. (2019). Size controlled green synthesis of biocompatible silver nanoparticles with enhanced mosquito larvicidal activity. *Journal of Cluster Science*, 30(6), 1611-1621.

# FACULTY OF SOCIAL SCIENCE 2019-20



# Faculty of Social Science

---

The Faculty of Social Sciences came into existence in the year 1994 when three Departments, viz., Economics, Psychology; Sociology & Political Science were delinked from the Faculty of Arts. In 2005, the Department of ACEEFO was brought under the umbrella of the Faculty of Social Sciences. Department of Management got the independent entity in 2006. Presently, the Faculty has the following four Departments:

1. Economics
2. Management
3. Psychology
4. Sociology & Political Science

All the Departments of the Faculty offer Undergraduate, Postgraduate and PhD programmes.

## *Department of Economics*

The department envisions achieving excellence in teaching and significant research to provide quality education to students, and prepare professional leaders to address the emerging global challenges and to deal with economic, social and business realities. Department of Economics is one of the oldest departments of the University which began its journey in 1947 as a part of the erstwhile Women's Training College. Currently the Department offers: B.A. Social Science (Hons.), Post Graduate Diploma in Business Economics (PGDBE), M.A. (Applied Economics), M.Phil. (Economics), Integrated PGDBE - M.A. (Applied Economics), M. Phil integrated with Ph.D. Department of Economics is headed by Prof. Swami Prakash Srivastava. Dr. Reena Gupta has joined the department in the current session. It offers B.A. Honours Economics (3-year course), M.A. (2-year course), Post-Graduation Diploma in Business Economics and Ph.D.

## **Conferences/ Seminars/ Workshops/Lectures Organized**

A Guest lecture on "Union budget 2020-21 under the shadow of recession in Indian Economy" was delivered by Dr Shyam Sunder Singh Chauhan, Associate Professor, Economics, Govt. P. G. College, Sirsaganj on February 10, 2020.

A Guest lecture on "Relationship between development and disaster management" was delivered by Prof. Ved Prakash Tripathi, Pro – Vice Chancellor, J S University, Shikohabad on February 14, 2020.



### Awards and Recognitions

Prof. Swami Prakash Srivastava was conferred Life Time Achievement Award, Venus International Foundation, Chennai, Tamil Nadu, 2019.

Dr. Rupali Satsangi chaired a session in National Seminar of Indian Economics & Allied Sciences Association on Mahatma Gandhi: A Lesson for Contemporary Society organized by Symbiozia Girls College, Agra on 2<sup>nd</sup> December 2019.

Dr. Rupali Satsangi became Life Member of Indian Economics & Allied Sciences Association

### Participation in Conference/ Workshops/ Seminar/Symposia

- Dr. Rupali Satsangi presented a paper entitled Impact of Microfinance on Sustainable Rural Livelihood: An Analytical in International Conference on Knowledge and Policy for Sustainable Development organized by Directorate of International Affairs, Guru Gobind Singh Indraprastha University, New Delhi held from 23-25 September, 2019.
- Ms. Jyoti Gupta, presented paper entitled "The crypto currency in india-its working, future aspect, challenges and opportunities with special reference to bitcoin" in National Conference in Daulat Ram College, University of Delhi.
- Dr. Suraj Pratap Singh participated in National Conference in Daulat Ram College, University of Delhi.
- Dr. Rupali Satsangi delivered a talk on "Handholding support leading to Entrepreneurship way forward for one's start-ups" on September 9, 2019, at DEI Centre for Handicraft Technical Training, Ministry of Textile, India.
- Dr. Resham Chopra chaired a session in 3rd National Conference on "Deglobalization: A Camouflage or The New Reality on June 1, 2019 organized by IPER & CII, Bhopal.
- Prof. Sangeeta Kumar presented a paper entitled "A study on women empowerment through Gandhian philosophy" in National Seminar on Gandhian ideology and its relevance in present times organized by Dept. of History and Journalism, Agra College, Agra on 7-8 February 7-8, 2020.
- Dr. Rupali Satsangi presented paper entitled "Gandhian Economic Model Towards Philosophy of Sustainability" in National Seminar of Indian Economics & Allied Sciences Association on Mahatma Gandhi: A Lesson for Contemporary Society held on Dec. 2, 2019 organized by Symbiozia Girls College, Agra.
- Dr. Rupali Satsangi presented paper entitled "Circular Economy Towards Sustainable Production and consumption with Special Reference to Sustainable Development Goals, Waste Nothing- A Circular Economy Perspective on December 20-21, 2019 at Dayalbagh Educational Institute under Mahatma Gandhi National Council of Rural Education, Ministry of Human Resource and Development.
- Dr. Rupali Satsangi presented paper entitled "A System Dynamic Approach to Mitigate Problems of Women Entrepreneurs in India "in AIU National Seminar on New Dimensions of Women Empowerment on January 17-18, 2020, organized by Dr D Y Patil Vidyapeeth, Medical College, Hospital & Research Centre, Sant Tukaram Nagar, Pimpri, Pune.
- Dr. Suraj Pratap Singh participated in One Day Online Workshop for Enhancing Research Communication Skills through Science Direct and Mendeley Organized by Internal Quality Assurance Cell (IQAC) & School of Education (PMMMNM), Faculty of Edu., DEI on May 3, 2020.
- Dr. Suraj Pratap Singh participated in Online International Conference on "New Normal - Corporate and Self-Management in Current Scenario" organized by the School of Management, Gautam Buddha University, Greater Noida on 17 - 18 June, 2020.
- Gogia, J., Neha Sikarwar presented paper entitled "Ensuring Food and Nutritional Security through Sustainable Food Systems" presented in UGC sponsored National Conference on

Food Safety, Nutritional Security and Sustainability, Shyama Prasad Mukherji College for Women, University of Delhi on March 6-7, 2020.

### Publications

1. Swami Prakash Srivastava, (2019), Digitalization of Indian Economy-Issues, Opportunities and Challenges, International Journal of Social Science & Development Policy, 5(1), January-June 2019, 51-70 ISSN: 2454-5732
2. Swami Prakash Srivastava, (2019), Impact of NPA's on Indian Economy-Issues, Opportunities and Challenges, In Banking Sector- Non-Performing Assets (NPA's) and Financial Inclusion, Eds: Dr Shailesh Kumar, Shandilya Publication, New Delhi. 54-77, ISBN No-978-93-88147-08-8.
3. Jyoti Gogia, Neha Sikarwar (2019), Agriculture and Dairy Sectors Contribution to Food Security in India, Intl. Journal of Basic and Applied Research, 9(4), 13-22, ISSN: 2249-3352 (P) 2278-0505 (E).
4. Gogia, J., & Sharma, M. N. (2019), The Perception of Producers towards Environmentally-Safe Products, Intl. Journal of Research and Review, 6 (9) pp 21-28, E-ISSN: 2349-9788; P-ISSN: 2454-2237.
5. Gogia, J (2019), Contribution of Dairy Sector towards Sustainable Development" in International Journal of Research and Analytical Reviews, 6 (2), 706-711, E-ISSN 2348-1269, P-ISSN 2349-5138.

### Department of Management

The department was established in 1991 offering a PG course in Business Management in response to the country's needs for trained managerial manpower. In 2006, the department of Management was established as an independent department. Department of Management is headed by Prof. Sanjeev Swami. Additionally, there are 7 Professors, 3 Associate Professor and 7 Assistant Professors. The department offers undergraduate (BBM), post graduate (MBA in Business Management), M. Phil and Ph.D. The department offers several Work Experience Courses like Introduction to Computers & Operating Systems, Office Management Software, Computer Programming, Database Management Systems, The Internet & E-commerce, Management Information System, Industry Analysis Project and Work Term Project. This year the department introduced a new Post Graduate Diploma in Urban Planning and Management. Department of Management is headed by Prof. Sanjeev Swami. Additionally, there are 7 Professors, 3 Associate Professor and 7 Assistant Professors. The department has firm collaborations with IIM Bangalore, IIT Kanpur, Indian Railways, Tata Consultancy Services, IIM Calcutta, IIT Delhi, The Energy and Resources Institute, School of Planning & Architecture, IIM Udaipur, Malaysia Institute for Supply Chain Innovation and has MoU with Supply Chain Management Centre, IIM Bangalore (2009 onwards) and School of Planning and Architecture (2017). The department also runs Business Advisory Clinics.

#### New programs introduced:

- MBA General Management,
- MBA Innovation
- MA (Soc. Science Business Management)
- MBA Waste Management
- BBM Retail,
- BBM Logistics

### Awards and Recognitions

Prof. Sanjeev Swami

- Member, Editorial Board, Emerald Publishers, U.K.
- Member, Editorial Board, Sage Publishers, USA
- Popular Article, MIT, USA
- Invitation Articles In (1) Sustainability Indicators in Supply Chains, (2) Corporate Social Responsibility in Supply Chains by Encyclopaedia of Renewable and Sustainable Materials
- Invitation Article in Textile and Apparel Industry: Industry 4.0 Applications by Handbook of Smart Materials, Technologies, And Devices: Applications of Industry 4.0

Prof Shalini Nigam

- Received Certificate of Appreciation from Internshala AICTE

Prof Sanjay Bhushan

- Ranked in Top 10% of International Authors by Elsevier-SSRN, Elsevier Inc., USA in Year 2020
- Appointed as Consultant by Population Council of India (PCI), Indian Habitat Centre, New Delhi on the project entitled "Evaluation of UDAAN Programme", being implemented in the State of Rajasthan. Conducted a systems dynamics modelling (SDM) to estimate the number of child marriages and teenage pregnancies averted by the UDAAN intervention.
- Most downloaded articles
  - ✓ System Dynamics Conception of Cognitive Consciousness: A Convergent Systemic Interface to Artificial Neural Network and Genetic Algorithm, Was Recently Listed on SSRN's Top Ten Download List For: Biorn: Neuroscience (Topic)
  - ✓ Expositions About Spiritual Linkages to Quantum Consciousness", Was Recently Listed on SSRN's Top Ten Download List For: Csn: Spirituality (Sub-Topic)

Prof. Sanjay Bhushan was invited to participate as Subject Expert, Focus Group Discussion on Web (Zoom), involving Policy Makers and Executives at Population Council of India, Indian Habitat Centre, New Delhi on 13 April, 2020. He was also appointed to serve as a Consultant by Population Council of India (PCI), New Delhi on the project entitled "Evaluation of UDAAN Programme", being implemented in the State of Rajasthan. Prof. Bhushan will be involved in conducting a systems dynamics modelling (SDM) to estimate the number of child marriages and teenage pregnancies averted by the UDAAN intervention. The UDAAN intervention aims to reduce adolescent fertility. He was also Resource Person for FDP programme at Department of Management Studies via Zoom Webinar 2020, J. C. Bose University of Science and Technology, YMCA, FARIDABAD for May 20-June 20. Students of Management in Business Administration, Ms. Kritika Khandelwal, Ms. Ananya Agarwal, Ms. Reshu Mulani and Mr. Prayas Mittal participated at Aagaz- National Innovative Challenge at IIM Ahmdabad on 2nd October 2019. The theme of the presentation was empowering women digitally and they were judged 5<sup>th</sup> among 1500 students.

Prof Sunita Malhotra

- Evaluator, Toyathon, AICTE

Dr. Purnima Bhatnagar

- Received certificate of Appreciation from Internshala AICTE
- Mentor, Abhyuday – social entrepreneurship challenge, IIT Bombay
- Innovation Ambassador, DEI by AICTE
- Co-Mentor for Case Study Creation by School of Planning and Architecture, SPA



## Students Achievements

S. No.	Name	Course	Name of Award	Institute presented the Award	Year of receiving the award
1.	Ms. Ritika Swaroop	MBA - Regular 2nd Year	Founder's Medal	Dayalbah Educational Institute	2020
2.	Mr. Hans Kaushik	Research Scholar	Sant Das Swami Award for Best PhD Synopsis	Hindustan Institute of Management and Computer Science	2019
3.	Mr Prateesh Satsangi *and team	MBA - Agriculture	MIT COVID-19 Hackathon "India Turning the Tide"	Massachusetts Institute of Technology, USA*	2019
4.	Mr Pradeep Gautam and Prateesh Satsangi	MBA - Agriculture	Final Round, Aadhyam @IRMA – National level FPO Business Plan Competition	Institute of Rural Management, Gujarat, NCDEX, NABARD and ITC	2020
5.	Mr. Ratika Rani	PhD Research Scholar	Best PhD Synopsis	Hindustan Institute of Management and Computer Science	2019
6.	Ms. Upasana Jain	MBA PG Integrated MBA Program with PG PROGRAMS (DEGREE & DIPLOMA) Integrated	Selected for Internships jointly under DEI and SPA, Delhi – Work from Home	SPA and DEI	2020
7.	Mr. Shobhit Lal	Integrated MBA Program with B.TECH.	Selected for Internships jointly under DEI and SPA, Delhi – Work from Home	SPA and DEI	2020
8.	Mr. Laxmi Kant Tyagi	Integrated MBA Program with B.Tech.	Selected for International Internships with Light Speed Logistics Inc, Canadian Firm – Work from Home	Light Speed Logistics Inc, Canada	2020

9.	Mr. Gaurav Pratap Singh Jadaon	MBA Regular	Selected for International Internships with Light Speed Logistics Inc, Canadian Firm – Work from Home	Light Speed Logistics Inc, Canada	2020
10.	Mr. Pankaj Yadav	MBA Regular	Selected for International Internships with Light Speed Logistics Inc, Canadian Firm – Work from Home	Light Speed Logistics Inc, Canada	2020
11.	Ms. Shreya Yadav	MBA in Agr Mngt	Selected for International Internships with Light Speed Logistics Inc, Canadian Firm – Work from Home	Light Speed Logistics Inc, Canada	2020
12.	Mr. Abhishek Kumar Sharma	MBA Regular	Selected for International Internships with Light Speed Logistics Inc, Canadian Firm – Work from Home	Light Speed Logistics Inc, Canada	2020
13.	Ms. Samiksha Dabrai	MBA PG Integrated	Selected to work on Live Project for Designing a Risk Analytic tool - WFH	Fresenius Kabi	2020
14.	Ms. Atibhi Chaudhary	MBA Regular	Selected for mentoring under Co-operative Management Internship by Ms. Aarti Gupta - WFH	SAP, Germany (In Individual Capacity)	2020
155	Agam Prasad	Research Scholar	Best paper award	Sriram Murthi Smarak College of Engineering and Technolgy, Bareilly	2019

16	Agam Prasad	Research Scholar	First prize won in research fair 2019	Dayalbagh Educational Institute,	2019
17	Mr. Dhruv Chopra	Research Scholar	Best Paper, Technical Session, IEM Congress	Institute of Engineering and Management, Kolkata	2019
18	Mr. Anmol Srivastava	MBA	Selected for Indian Army	Directorate General of Recruiting, Ministry of Defense	2020

S No.	Name	Certificate	Year
1	Mr. Saurabh Srivastava	Certificate of Internship with Establishment Section of Central Administrative Office, DEI	2019
2	Mr. Shobhit Lal	Certificate of Appreciation by ZP Chandarpur	2020
3	Mr. Shobhit Lal	Certificate of completion of Basics of Covid-19 by Dept of Personnel and Training	2020
4	Mr. Shobhit Lal	Covid Awareness quiz by ETI, DBRAU	2020
5	Mr. Shobhit Lal	Course on STAAD.Pro by CADD Centre	2020
6	Mr. Shobhit Lal	Certificate by MHRD Innovation Cell	2020
7	Mr. Shobhit Lal	Financial Modelling and Valuation by Internshala	2020
8	Mr. Shobhit Lal	Certificate by Green Revolution Sponsored by United Nations	2020

### Projects

- Dr. Jaspreet Kaur successfully completed a project entitled, A Study for Value Addition in Potato Produce by Exploring Processing Units: Case of Agra Region worth Rs. 6.5 Lakhs sanctioned by ISSR for 2018- 2020.

- Dr. Sunita Malhotra (PI) and Dr. Preet Kumari (Co-PI) successfully completed a project entitled, Analysis of accomplishment of universal elementary education: With special reference to Uttar Pradesh worth Rs. 5.5 Lakhs sanctioned by ISSR, for the period 2018- 2020.

### Papers presented in Conferences/Seminars/Workshops

Jaspreet Kaur presented a paper entitled “Developing Feedback Loops for Adoption of AI in Finance” on Changing Landscape of Securities Market, by Securities and Exchange Board of India, National Institute of Securities Markets on January 22-24, 2020.

### Publications

1. Sanjay Bhushan New frontiers of human wisdom: information, communication and consciousness empowered decision-making under the broader realm of reality, Information and Communication Technologies for Humanitarian Services, 2020, e-ISBN: 9781785619977, IET, [www.theiet.org](http://www.theiet.org), 2020
2. Sanjay Bhushan ‘System Dynamics Model of Humanitarian Supply Chain’, Book- Emergency and Disaster Management: Concepts, Methodologies, Tools and Applications, Information Management Resources Association, Chapter-12, IGI Global, pp. 261-278, USA, 2019-20, ISBN-9718522561958
3. Purnima Bhatnagar ANGAN – BEE 2019: Augmenting Nature by Green Affordable New – habitat. An International Conference on Building Energy Efficiency, at The Lalit, New Delhi, India
4. Purnima Bhatnagar Book on Social Responsibility in India released by LAP, October 24, 2020: Publishing 978-620-2-81516-1
5. Jaspreet Kaur & Navita Nathani & Resham Chopra, 2019. "Interactions between macro-prudential framework and macroeconomic indicators," DECISION: Official Journal of the Indian Institute of Management Calcutta, Springer; Indian Institute of Management Calcutta, vol. 46(1), pages 59-73, March.
6. Jaspreet Kaur Book on Determinants to Financial Stability in Emerging Market Economies on September 2019, with ISBN (978-3-659-53654-0).

### Department of Psychology

The department of Psychology has a humble beginning as an Undergraduate department of the erstwhile Women’s Training College in the year 1951 which was upgraded to Postgraduate level in 1969 and acquired the status of a University department in 1981. The department focuses on building a sound foundation for the understanding of the human behaviour in development perspectives of different walks of life. The department offers B.A. (Hons.) Psychology, M.A. Psychology, M. Phil and Ph.D. In the session 2017-2018, the department introduced a new course; BA Social Science with Specialization in Cognitive Science. The department is headed by Prof. Kamaljeet Sandhu and is comprised of 1 Professor, 3 Assistant Professors and 3 Emeritus Professors. The thrust areas of teaching and research are Clinical Psychology, Environmental Psychology, Cognitive Psychology and Organizational Behaviour.

*Department of Sociology & Political Science*

The Department is headed by Prof. Poornima Jain and consists of 2 Professors, 2 Associate Professors, 2 Assistant Professors and 6 Guest Faculty. The department offers B.A. Social Science (Hons.), M.A. Social Science, M. Phil., Ph.D., PG Diploma in Safety, Health and Environment and PG Diploma in Human Rights and Social Work with Work Experience Courses on Uplift of Weaker Section, Local Self Government: Empirical Study. The research areas of the department are Dalit Studies, Gender Studies, Development Studies, Local Self Government, International Relations, Consciousness Studies and Human Rights.

# SCHOOLS AND COLLEGES 2019-20



# DEI Schools and Colleges

## Prem Vidyalaya Girls Intermediate College

The Prem Vidyalaya Girls Intermediate College was founded in 1930 as a Middle School to exonerate the curse of illiteracy and to set an ideal of female education in the country. High School and Intermediate classes were subsequently started in 1936 and in 1939, respectively. Administrative and academic control of the College was assigned to the University by the State Government of Uttar Pradesh in the year 1995. The College has imbibed distinctive DEI education pattern. Dr. Mala Bal is the present Principal of the College. In the beginning of this session one more section was added in class VII resulting in two sections of class VII.

## REI Intermediate College

In pursuance of the lofty ideals of the Radhsoami Faith to evolve the superman of tomorrow, Radhasoami Satsang Sabha started the open to all Radhasoami Educational Institute (R.E.I.), co-educational Middle School on January 1, 1917, with classes VI - VIII and student strength of 169, that marked the genesis of education in Dayalbagh. It was recognized for High School in the year 1917 itself and in the year 1919 the first batch of the 18 boys appeared in High School Examination, out of which 17 passed. Subsequently, the School was upgraded to Intermediate College with science subjects on 3<sup>rd</sup> July 1922. The administrative and financial control of the College has been handed over recently to DEI (Deemed University) by the U.P Government vide its order dated 11/10/2012. It is recognized by the Madhyamic Shiksha Parishad, U.P. and is on the grants-in-aid list of the government.

## DEI Nursery-cum-Play Centre

1. **Name of Society Running the School:** DEI Women's Training College Society, Dayalbagh
2. **Principal In-Charge:** Mrs. Soami Pyari Nigam  
**Staff:** Teaching Staff: 19  
 Regular: 12  
 Part Time: 03  
 Non-Teaching: 04

3. **Enrolment: Current Year (up to 1<sup>st</sup> September 2019)**

Class	No. of Students Enrolled		
	Boys	Girls	Total
NURSERY	24	36	60
K.G.	26	24	50
<b>TOTAL</b>	<b>50</b>	<b>60</b>	<b>110</b>

4. **Details of Student's activities:**

- a) **Literary:** Celebrated the Children's Day, Republic Day and Independence Day. Sweets were distributed among the students & staff during these celebrations.
- b) **Cultural (Music, dance, drama etc.):** Celebrated the Annual Day on 31<sup>st</sup> March 2019. Children presented group dance and performed a drama.
- c) **Social:** Children visited D.B. Courttallam (Children's Park) with teachers. Children residing in Dayalbagh participated in the 'Baby Show' competition and the Final Function was

celebrated on 9<sup>th</sup> February, 2019 in the Fields where prizes were given to all the prize winners and Prasad to all the participants and staff.

- d) **Sports and Games:** Children play on the swings installed in the school. They also play other games like bat-ball daily.
- e) **Any other:** Children made toys with clay, cotton etc. and participated in activities like Block Printing and Paintings. The items prepared by children were displayed in the Exhibition conducted by DEI on Founder's Day, 31<sup>st</sup> January 2019.

5. **Any other information:** Medical Check-up of the general and dental health of students was done by the Doctors of Saran Ashram Hospital and suggestions were given to the parents by the committee of Children Affairs.

6. **Examination Results (2018-2019)**

Class	NURSERY	K.G.
Appeared	52	48
Passed	52	48
Failed	--	--
Pass Percent	100%	100%

I. **Annual Report of DEI PV Primary School**

1. **Name of the In-charge:** Ms. Jayati Mathur

2. **Staff:**

Teaching Staff: **18**

- **Honorary –15**
- **Part Time –03**

Non-Teaching Staff: **04**

3. **Enrolment Details:**

Class (Sections)	No. of Students Enrolled - 2019		
	Boys	Girls	Total
I (A, B)	42	40	82
II (A, B, C)	60	55	115
III (A, B)	38	39	77
IV (A, B)	38	43	81
V (A, B)	41	39	80
<b>Total</b>	<b>219</b>	<b>216</b>	<b>435</b>

4. **Activities:**

(i) **Literary**

- 318 students participated in Hindi 'Sulekh' Competition organized on 05.09.19.
- 34 students participated in English Poem Recitation (Solo) Competition organized on 09.09.19.
- 12 groups participated in English Poem Recitation Competition organized on 09.09.19.
- 137 students participated in Hindi Poem Recitation Competition organized on 01.10.19.



**(ii) Music**

- 59 students participated in Solo Song Competition organized on 15.11.19.

**(iii) Creativity**

- 318 students participated in Drawing Competition organized on 05.09.19.

**(iv) Sports & Games**

- Sports Day, a mega-event, was organized on 30.11.19.
  - 90 students participated in the House-wise March-past.
  - 64 students participated in the various races (Frog Race, Rabbit Race, Glass Balancing Race, Crow Race, Ball Balancing Race, Obstacle Race, Relay Race)

**Glimpses of Activities Organized**

▪ Display during visits



(a) Display during the visit of NITI AYOOG team (b) Display during the visit of UGC Chairman

▪ Sports and Prize Distribution



(a) Chief Guest Mr. Sunil Chand Joshi,  
Regional Sports Officer



(b) School Prayer



(c) March past  
Taking by House Captains



(d) Oath



(e) Races



(f) Chief Guest Giving Away Prizes

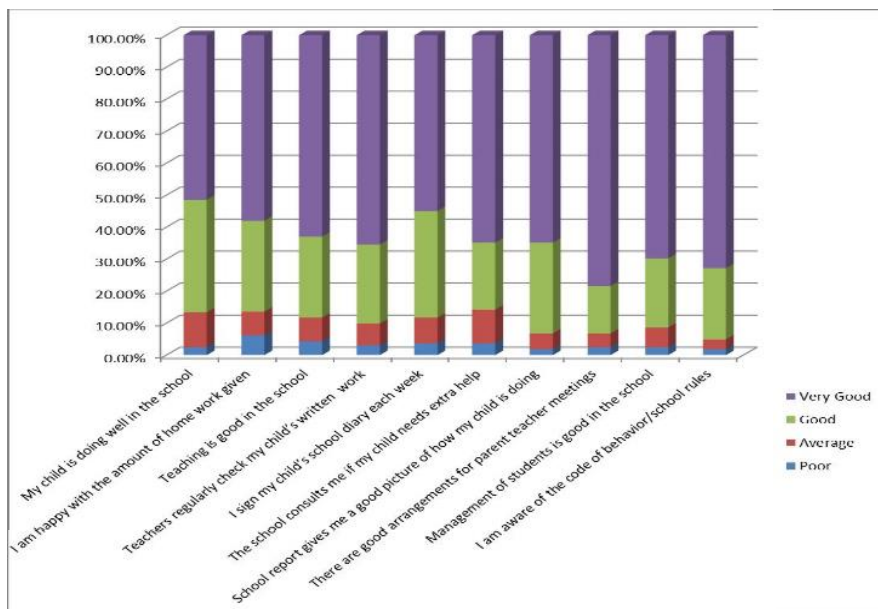
- **Constitution Day**



Oath taking on the Constitution Day, 26<sup>th</sup> November 2019

### 5. New Initiatives:

- Behavioral Counseling for children with disciplinary problem.
- Feedback of Parents as taken in Parent-Teacher Meeting:



### 6. Professional Development Programmes attended by the staff:

- Ms. Geeta Rani & Dr. Preeti Bhasin attended the National Workshop 'Teaching through Visual and Performing Arts' from May 16 to 19, 2019.
- Ms. Mandeep attended a two day 'National level Lecture cum Demonstration Workshop through Performing Arts' from August 28 to 29, 2019.
- Ms. Geeta Rani & Mrs. Neelam Saxena participated in the Workshop 'Implementing Education for Sustainable Development (ESD) through Scholastics and Non-Scholastic Activities in Social Science at Primary Level' from September 13 to 14, 2019.
- Dr. Preeti Bhasin & Mrs. N. Surat Pyari attended the Seminar 'Capacity Building Programme on Brain Based Learning Strategies from October 21 to 23, 2019.

### 7. Awards / Recognition:

#### (i) Students

- 10 students of Class-III, 9 students of Class-IV & 11 students of Class-V participated in SOF National Science Olympiad (NSO).
- 24 Students of Class-III, 9 students of Class-IV & 15 students of Class-V participated in SOF International Mathematics Olympiad (IMO).
- Olympiad Achievers:

	II Level	Zonal Rank	International Rank
Science Olympiad (NSO)	Km. V. Bani (Class-III)	238	2078
	Vyom Jangid (Class-IV)	329	3157
	Km. Dhun Satsangi (Class-V)	424	5067
Mathematics Olympiad (IMO)	Km. Dhun Satsangi (Class-V)	434	5111

**(ii) Teachers**

- Mrs. Madhu Bhatnagar was felicitated with the coveted Karamveer Puraskar Maharatna for sustained efforts in Environment Education by iCONGO and UNITED NATIONS.

**8. Results**

Class	Enrolled April - 2018	Appeared March – 2019	Passed	Failed	Result %
I A	40	40	40	-	100
I B	39	39	39	-	100
I C	37	37	37	-	100
II A	37	37	37	-	100
II B	38	38	38	-	100
III A	43	43	43	-	100
III B	40	40	40	-	100
IV A	37	37	37	-	100
IV B	40	40	40	-	100
V A	45	45	45	-	100
V B	43	43	43	-	100
<b>Total</b>	<b>439</b>	<b>439</b>	<b>439</b>	-	<b>100</b>

## II. Annual Report of DEI PV Primary School - Extended Wing

1. **Name of the In-charge:** Punam Prakash:

2. **Staff:**

- Teaching Staff: 03 (Honorary)
- Non-Teaching Staff: 01

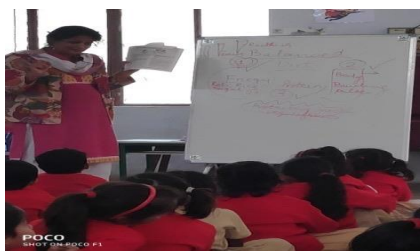
3. **Enrolment Details:**

Class (Sections)	No. of Students Enrolled		
	Boys	Girls	Total
I	43	39	82

4. **Activities**

**(i) Literary**

- 6 students participated in English Poem Recitation Competition organized on 09.09.19.
- 82 Students attended Story Telling sessions by Dr. Ashima Srivastava on 3.10.19 and 29.11.19



Story Telling

**(ii) Creativity**

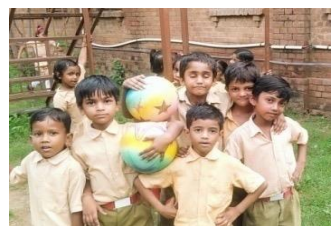
- 82 students participated in Hindi *Sulekh* Competition and Art Competition on *Swachhata Abhiyan* on 05.09.19.
- 20 students participated in *Creative and Constructive Learning Session* in Education Faculty during NAAC visit (2019).



Creative & Constructive Learning

**(iii) Sports & Games**

- 8 students participated in Bunny and Frog Race organized on 30.11.19.
- Students regularly participate in Games on the School Grounds



#### Excursions/Visits

- Students visited *Gaushala* supervised by 2 teachers and one helper on 03.12.19 (boys) and 04.12.19 (girls), as a culmination to their *Animal Unit*
- Students visited the Science Centre, Dayalbagh on 18.12.2019



#### Visit to *Gaushala*

#### (iv) Any Other

- 60/82 students have had medical check-ups till now at Saran Ashram Hospital
- 50 parents attended *Sanskar* and *Medical Counseling* session for Parents in school, conducted by medical team of 3 members and the Chairperson of the *Council of Children's Affairs*.
- Students regularly participate in Community Service cleaning the school grounds and classrooms.



#### Medical Counseling



#### Community Service

**4. New Initiatives:**

- Active Learning based on Interest/Aptitude organized for students (2 Activity Rooms with various games, puzzles and reading choices)
- Constructive Play sessions with Dr. Ashima Srivastava on 3.09.19, 17.09.19 and 24.09.19



Constructive Play based on Interest and Aptitude

**5. Professional Development Programmes attended by staff:**

- Mrs.A. Madhuvani and Mrs. Anju Saxena attended a workshop on *Neuroscience of Brain Based Learning* organized by Faculty of Education on 21<sup>st</sup> & 22<sup>nd</sup> September
- Mrs. Anju Saxena attended a workshop on *Calligraphy and Poster Making* organized by Faculty of Education on 1<sup>st</sup>- 5<sup>th</sup> August 2019



Professional Development Programs

**III. Radhasoami Saran Ashram Nagar School**

**1. Name of the Principal-Mrs. Madhur Lata Tyagi**

**2. Staff:**

Teaching Staff: 12

- Regular – 7 (Sewak Scheme)
- Honorary - 5

Non-Teaching Staff - 2

**3. Enrolment Details:**

Class (Sections)	No. of Students Enrolled		
	Boys	Girls	Total
Nursery	7	5	12
I	15	15	30

II	15	15	30
III	14	16	30
IV	14	16	30
V	16	15	31
<b>Total</b>	<b>81</b>	<b>82</b>	<b>163</b>

**(i) Activities**

**Literary**

- 23 students participated in Debate Competition (Hindi/English) organized on 28.09.18.
- 64 students participated in Poem Recitation Competition (Hindi/English) organized on 25.08.18 and 27.08.18.
- 58 students participated in writing Competition (Hindi/English) organized on 24.09.18 and 26.09.18.

**(ii) Music/Dance**

- 25 students participated in Dance Competition organized on 30.09.18.



Dance Competition

**(iii) Creativity**

- 12 students participated in Rangoli Competition organized on 28.08.18.
- 20 students participated in Fancy Dress Competition organized on 30.08.18.
- 28 students participated in Drawing Competition organized on 24.09.18.
- 19 students participated in Hindi Craft Competition organized on 23.09.18.

**(iv) Sports & Games**

- 10 students participated in Three- Legged Race organized on 28.09.18.
- 12 students participated in Zig Zag Race organized on 28.09.18.
- 15 students participated in Sack Race organized on 28.09.18.
- 09 students participated in Obstacle Race organized on 28.09.18.
- 16 students participated in Crow Walk Race organized on 28.09.18.
- 10 students participated in 50 m. Race (For Nursery Stds.) organized on 28.09.18.





### Sports Competition

#### (v) Excursions/Visits

- Visit to General Section and Bal Satsang Darshan of Pawan Smrityalaya.
- Nature Walk to Phal Bagh.
- Class 5 Children visited Children's Science Centre 4 times during the session.



Visit to Phalbagh

#### (v) Any other

- Silver Jubilee Annual Function was celebrated on Dec. 2, 2018 with zeal and enthusiasm.
- Yogasanas are practiced every Saturday during morning assembly.
- Vriksharopan was organized by Dayalbagh Nagar Panchayat on 14-08.2018.
- On 30-9-18, our students became a part of 'Kids for Tigers' campaign organized by the Central Government.
- Students participated in the celebration of Independence Day and Republic Day.
- Children's Day was celebrated on 14th Nov. 2018 by organizing KaviSammelan'.
- On the occasion of the Silver Jubilee, the school brought out its magazine entitled 'Saran Sitara'.
- Chairperson, Council of Children Affairs got the wash rooms improved with the funds from AADEIs.
- Children attended winter camp at D.E.I. in the month of December, 2018.
- Students participated in Open Day celebrations at D.E.I. on 31<sup>st</sup> January, 2019.



Independence Day and Republic Day Celebrations

#### 4. New Initiatives:

- Counselling sessions for students by experts.

#### 5. Professional Development Programmes attended by staff:

- Mrs. Madhurlata Tyagi, Mrs. Aruna Nigam and Mrs. Rita Srivastava attended National workshop on 'Social Science Curriculum' on Feb 23, 2019.
- Mrs. Preeti Markan, Mrs. A. Gyanashri and Mrs. K. Malti attended workshop on 'Development programme' from June 28-30, June 2018.

- Mrs. Sherry Arora and Mrs. K. Malti attended workshop on 'Teachers Environmental Leadership' Workshop on Sept 30,2018.

## 6. Results

Class	Enrolled 1-4-2018	Appeared April-2019	Passed	Failed	Result %	Remarks
Nursery	12	12	12	NIL	100%	
I	30	29	29	NIL	100%	one student left
II	30	29	29	NIL	100%	"
III	30	29	29	NIL	100%	"
IV	30	29	29	NIL	100%	"
V	31	31	31	NIL	100%	
Total	163	159	159		100%	4 students left

## IV. DEI Prem Vidyalaya Girls' Intermediate College

1. **Name of the Principal:** - Dr. Mala Bal

2. **Staff:**

Teaching Staff: **38**

- Regular - **15**
- Honorary –**23**
- Research Assistant (Full time from Education Faculty) – **9**

Non-Teaching Staff: **08**

3. **Enrolment Details:**

Class (Sections)	No. of Students Enrolled		
	Boys	Girls	Total
VI A	-	58	58
VI B	-	58	58
VII A	-	59	59
VII B	-	59	59
VIII A	-	58	58
VIII B	-	58	58
IX A (Arts)	-	41	41
IX B (Arts)	-	34	34
IX C (Science)	-	51	51
IX D (Science)	-	49	49
X A (Arts)	-	52	52
X B (Arts)	-	45	45
X C (Science)	-	50	50
X D (Science)	-	50	50
XI (Arts)	-	69	69
XI (Science)	-	69	69
XI (Commerce)	-	60	60
XII (Arts)	-	49	49
XII (Science)	-	49	49
XII (Commerce)	-	49	49
			<b>1067</b>

#### 4. Activities:

##### (i) Literary

- 180 students participated in Essay Writing Competition organized on 25.07.19.
- 11 students participated in Self Created Slogan Competition organized on 19.07.19.
- 151 students participated in Poem Recitation Competition (Hindi/English/Sanskrit) organized on 18.07.19, 03.08.19 and 06.08.19.
- 45 students participated in 'हास्य कविता' Competition organized on 18.07.19.
- 10 students participated in Sanskrit Geet Gyan Competition organized on 06.08.19.
- 31 students participated in Speech Competition (Hindi/English) organized on 25.07.19 and 29.07.19.
- 138 students participated in Debate Competition (Hindi/English) organized on 05.08.19 and 21.09.19.
- 376 students participated in G.K. Quiz Competition organized on 29.07.19 and 09.10.19.



##### (ii) Music/Dance

- 20 students participated in Solo Song Competition organized on 25.08.19.
- 175 students participated in Solo Song Competition (Western/Indian) organized on 22.07.19 and 09.08.19.
- 63 students participated in Solo Dance Competition organized on 22.07.19 and 09.08.19.
- 102 students participated in Group Song Competition organized on 22.07.19 and 09.08.19.

##### (iii) Dramatics

- 20 students participated in Skit Competition organized on 25.08.19.
- 100 students participated in Street Play (Hindi) Competition organized on 03.08.19.
- 35 students participated in Fancy Dress Competition organized on 20.09.19 and 23.07.19.

##### (iv) Creativity

- 90 students participated in Envelop Making Competition organized on 13.07.19.
- 18 students participated in Rangoli Competition organized on 29.09.19.
- 139 students participated in Drawing & Painting Competition organized on 11.07.19 and 26-07-2019.
- 149 students participated in Mehendi Competition organized on 22.07.19 and 29.07.2019.
- 98 students participated in Card Making Competition organized on 09.07.19 and 22.07.19.

- 62 students participated in Embroidery Competition organized on 22.07.19 and 24.07.19.
- 166 students participated in Collage/Flower/Poster Making Competition organized on 12.07.19, 22.07.19 and 24.07.19.

**(v) Sports & Games**

- 150 students participated in Skipping Race organized on 16.11.19.
- 104 students participated in Lemon Spoon Race organized on 23.11.19.
- 292 students participated in Obstacle/Relay/Hurdle Race organized on 07.12.19.
- 767 students participated in Races (100 m. /200 m. /400 m.) organized on 09.11.19 and 28.11.19.
- 227 students participated in Cycle Race (Slow/Fast) organized on 16.07.19 and 07.12.19.
- 192 students participated in Three-Legged Race and One Leg Race Competition organized on 23.11.19 and 30.11.19.
- 696 students participated in Group Events (Kho-kho/Kabbadi/Tug of War) organized on 01.12.19 and 07.12.19.



**(vi) Excursions/Visits**

- 150 students of PV Girls' Intermediate College participated in the virtual tour of the Compact Muon Solenoid (CMS) experiment of the leading scientific research organization CERN, Geneva. It was organized on 2nd December 2019, from 3:00pm (IST) to 4:00pm (IST). This virtual tour was also attended by students and teachers from Jawahar Navodaya Vidhyalay (Delhi), REI Intermediate College (Agra) and Radhasoami Adivasi Higher Secondary School Rajaborari (Harda, M.P.).



**(v) Any other**

- Workshop for bringing awareness on security of girls was organized on 25<sup>th</sup> July 2019. This was organized under the 'Kavuch' campaign of Hon'ble Chief Minister of UP.

- On 14



मूख्यमंत्री योगी के चल रहे कठघंटे केमिनेन के महत प्रेम विद्यालय में एक कार्यक्रम आरंभित हुवे। इसमें नरेश पारस, नम्रता मिश्रा, रामेश्वर विश्वकर्मा (साइबल लान इंडिया फाउंडेशन दिल्ली), प्रतिभा भागद, अजय चाहर, मनोरमा यादव, रितु वर्मा, प्रदीप कुमार ने अपने विचार व्यक्त किए।



November 2019 Children's Day was

celebrated with great enthusiasm and fun in DEI Prem Vidyalaya. In the morning assembly all the students had the privilege of having Roli applied on their forehead by the teachers along with sweets. On this occasion Guest of Honour was Ms. Prem Pyari Dayal. She unfolded many inspirational sweet memories of Pt. Nehru's life. Students were overjoyed by a small skit performance by the teachers. A fete was also organized which was inaugurated by the Chief Guest. She visited all the stalls of eatables and games stalls and encouraged the students with her kind words. On this day students also presented eye catching cultural programmes. Students had a memorable day which was full of fun.



- **Fit India Movement Programme:** PV and Primary participated enthusiastically in the celebration of Fitness Day (29 Aug 2019) by listening to the live lecture of Honorable Prime Minister, Narendra Modi. Later PV girls also participated in Fitness rally organized in DEI.



- **SPHEEHA Events:** Students participated enthusiastically in competitions like essay-writing, painting organized by SPHEEHA. A lecture on 'Awareness about plastic' was also organized by SPEEHA for students of class VIII.



- **Fevicryl Workshop:** A three-day workshop was conducted from 3-6 September in the premises of PV Girls Inter College. 48 students from classes 9-12 participated under the guidance of Fevicryl expert Mr. N.K. Solanki.
- **Olympiad Competitions** in Maths, Science, English, General Knowledge, Cyber, and Commerce are organized throughout the session to improve student's awareness, performance in these subjects and to learn to compete with other schools. These competitions are organized in the college.
- **Earn while You Learn:**
  - (i) Dairy course of one month (23 May-22 June) was attended by 12 girls who received a payment of Rs. 40 per day.
  - (ii) Sale of 'Bhelpuri' made by students on Founder's Day.
  - (iii) Students were encouraged to earn while they learn in textiles by the sale of their products.



- **Values and Quality Day (27 October 2019):** The occasion of Diwali is celebrated as Values and Quality Day in DEI. Girls of Prem Vidaylaya recited poems in Hindi and English which were appreciated by all present.



- **Community Work by staff and students-**
  - a. Regular participation in Dayalbagh field work by PV students.
  - b. Students do social work in dairy and DEI canteen on a regular basis.
  - c. PV staffs participate in Medical Camp every Sunday.



- **ATAL-Tinkering Lab:** A three-day workshop (3-5 April 2019) was organized in PV in which students were provided with scientific equipment for designing models and expressing their scientific creativity. The workshop ended with the inspiring words of young scientist Shri Gopal. This workshop was organized by Mr. Hardik & Ms. Savita Rani and Prof. K. Daya.



- **Visitors-**Various teams visited PV during the session.

#### **New Initiatives:**

- Remedial classes for students of Class 6 to 12 by B.Ed. interns under the supervision of the course teacher before and after school.
- School-Self assessment with feedback from parents and students.
- Weekly counselling sessions for students from 9.30 am to 9.45 am

#### **5. Professional Development Programmes attended by staff:**

- Dr. Madhu Bala Gupta and Ms. Bhawna Sharma attended National Workshop on 'Teaching through Visual and Performing Arts' from May 16-19, 2019.
- Dr. Madhu Bala Gupta, Ms. Bhawna Sharma and Ms. Pratishtha attended a three-day workshop on 'Puppetry and its Integration in Teaching Learning' from June 3-7, 2019.
- Ms. Bhawna Tyagi, Ms. Akanksha Rani, Ms. Alka Singh & Ms. Pratishtha attended workshop on 'Brain Based Learning Strategies' from Oct 21-23, 2019.
- Ms. Bhawna Tyagi, Ms. Akanksha Rani, Ms. Alka Singh & Ms. Pratishtha attended workshop on 'Brain Based Learning Strategies' from Oct 21-23, 2019.
- Ms. Alka Singh and Ms. Neeta Satsangi attended workshop on 'Artificial Intelligence' from 23 May to 2 June 2019.
- Ms. Mrinalini and Ms. Mohini attended a two-day National level Lecture cum Demonstration workshop on 'Education through Performing Arts (Music)' on 28 and 29 August 2019 organized by Education faculty.



## 6. Awards/Recognition:

### (i) Students

- Two students won prizes in competitions organized by Sangeet Kala Kendra, Agra Pracheen Sangeet Samiti, Allahabad and Pt. Raghunath Talegaonkar Trust on 1<sup>st</sup> November 2019 at Soor Sadan Agra.

Satviki Saran

I - Indian Classical Singing

II - Indian Classical Devotional Singing

II - Indian Classical Instrumental (Tabla)

Aashna Suri

III - Indian Classical Singing.



- 27<sup>th</sup> National Children's Science Congress was conducted at district level in Agra on 5 November 2019 by National Council for Science and Communication Technology, Government of India. In this District level exhibition 122 teams in senior category and 105 teams in junior category had participated. Ms. Mehar Satsangi and Ms. Dhun Satsangi of class VI B stood second with their Project topic 'Solid Waste Management – Flower Waste to Compost'.

### (ii) Staff

Prof. Dayal Pyari Srivastava presented the following papers:

- 'Game Theory and the Game of Life' organized by TSC on 25.06.19.
- 'Consciousness Studies in the Department of Physics and Computer Science' organized by DSC on 06.09.19.
- 'Ongoing Theoretical and Experimental Studies on Science of Consciousness' organized by QANSAS on 06.09.19.
- 'Brain Simulations and Topological Graph- Theoretic Quantum System Modelling of the Brain in Hilbert Space' organized by NSC on 06.12.19.
- 'Scientific Epistemology and the Phenomenology of Consciousness: Looking for correspondence between them using SQUID based MEG Device' in a Workshop of Contemplative Practices on October 26, 2019.



## 7. Results

Class	Enrolled July - 2018	Appeared April-2019	Passed	Failed	Result %
VI	120	120	116	4	96.66
VII	116	116	116	-	100
VIII	61	61	61	-	100
IX (Arts)	99	99	98	1	98.98
IX (Science)	100	100	100	-	100
X (Arts)	79	79	79	-	100
X (Science)	82	82	82	-	100
XI (Arts)	49	49	49	--	100
XI(Commerce)	47	47	47	-	100
XI (Science)	84	84	84	-	100
XII (Arts)	57	57	57	-	100
XII(Commerce)	36	36	36	-	100
XII (Science)	60	60	60	-	100
<b>Total</b>	<b>990</b>				

### DEI Radhasoami Educational Institute (REI) Intermediate College

1. Name of the Principal: Dr. Anil Kumar Dwivedi

2. Staff:

Teaching Staff: 14

- Regular - 07
- Temporary - 07

Non-Teaching Staff: 08

3. Enrolment Details:

Class	No. of students enrolled
VI	93
VII	65
VIII	58
IX	107
X	111
XI (Math)	59
XI(Bio-Math)	43
XI (Com.)	50
XII (Math)	38
XII(Bio-Math)	34
XII (Com.)	34
<b>TOTAL</b>	<b>692</b>

## 5. Activities:

### (vii) Literary

- Essay Competition organized by SPHEEHA at Sumeet Rahul Goel Memorial Sr. Sec. School. Among 200 students from 15 schools participated in the competition. 20 students of REI participated in the competition among them Dev Saran Sujan secured the 2<sup>nd</sup> Position & Vishal Singh got the consolation prize and others participation certificates on 3<sup>rd</sup> December, 2019.



- Speech competition was organized by Aryavart Bank at REI Inter College. In which Mr. A. K Rathi, Shri KC Sharma, Shri Rishi Sharma, Shri AK Verma and Shri Rahul Mathur were present. Prizes were distributed by Mr. A. K Rathi, Regional Manager, Aryavart Bank to the first, second and third winning students on 5<sup>th</sup> November 2019.



### (viii) Music/Dance

- Students of REI Intermediate College participated in 150th Gandhi Jayanti celebration organized by Acharyakul Uttar Pradesh at Gandhi Smarak, Agra. Each and every member was imbued in patriotic fervor. Chief Guest of the occasion were Mrs. Archana kumar W/o Commissioner, Agra & Dr. Hemlatha W/o District Magistrate, Agra Division. This program was organized by Freedom Fighter Rani Saroj Gaurihar and Mrs. Vatsala Prabhakar. Mrs. Ranjana Bansal, Mathant Yogesh Puri, Fr. Moon, Mr. Arun Dang, Dr. Saroj Prashant, Mrs. Subhashini Paliwal, Mrs. Ashu Mital, Mrs. Renuka Dang, Mr. S S Chauhan, Mrs. Aparna Poddar, Mr. Anand

Rai, Mr. Sandeep Agarwal, Mrs. Beena Poddar & Mr. Sachin Shubh Sharma were present on the occasion on 2<sup>nd</sup> October, 2019.



- Solo Singing competition for Class 6<sup>th</sup> to 12<sup>th</sup> was organized at REI Inter College, Agra. Judges of the programme were Dr. Navratan & Mr. Lokendra Kumar on 10<sup>th</sup> August, 2019



- Qwawali Team of 20 students performed on Annual Day and were honored by the Principal in assembly on 12 December, 2019

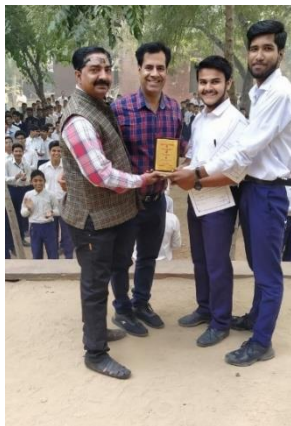


**(ix) Dramatics**

- Gujjeshwari Singh Rang Mahotsav 2019 –200 students from different schools participated in the program. 25 Students from REI took part in Theatre competition and were awarded by the Organizer on 22 October, 2019



- Gujjeshwari Singh Rang Mahotsav 2019 – 25<sup>th</sup> October, 2019 Distribution of Certificates & Momentos



**(x) Creativity**

- 35 Students of REI Inter College participated in Drawing & Painting Competition organized by SPHEEHA – 1<sup>st</sup> December, 2019



- Imagine, Invent, Inspires Young scientist of REI intermediate college at Atal Tinkering Lab with Mr Randeep lohra (faculty of engineering DEI) – 17<sup>th</sup> September, 2019



**(xi) Sports & Games**

- 26 July 2019- All the three groups namely Sub-Junior, Junior and Senior took part in cross country race and Pintu Kumar of class-8<sup>th</sup> won first position in Sub-Junior, Rajan Yadav of class-9<sup>th</sup> won first position in Junior and Dheeraj of class-12<sup>th</sup> won first position in Senior.
- 31 July 2019- A cycle race was organized. In this competition Manu Giri Class-7 category sub-Junior got first. In Junior category Hariom Class-10A got first and in Senior Category Dheeraj Class-12A was declared first.



- 5 August 2019- Slow Cycle Race was run. In this race Avichal Yadav class-11A, Senior Category, got first. In Junior category, Anmol Yadav class-10B was declared first and in sub-Junior category Pradumn Yadav class-6 was at first.



- 7<sup>th</sup> September 2019- Kabaddi Competition- In sub-junior category class-7 was the winner and class-8 was runner up. In junior category class-10A was winner and class-10B was runner up. In senior category class-12A winner and class-11A runner up.



- 9<sup>th</sup> November 2019- Basketball Competitions- In sub junior category class-7 winner and class-8 runner up, in junior category class-9A winner and class-10A runner up and in senior category class-12A winner and class-11A runner up.
- Volley ball Competition was organized on 15<sup>th</sup> October 2019



#### (xii) Excursions/Visits

- 150 students of REI Intermediate college participated in Career counselling at REI Inter College, Dayalbagh, Agra -19<sup>th</sup> August, 2019



- “Police ko Jaano” workshop was organized at REI Inter College – 23<sup>rd</sup> August, 2019



- A Live Telecast of Fit India Movement was arranged at REI– 29<sup>th</sup> August, 2019



- 150 students of REI Intermediate College participated in ‘Swachchhata Hi Seva’ Campaign by Coca Cola, Agra – 2<sup>nd</sup> October, 2019



- A Mock Drill on Fire Safety was organized by Fire Brigade department, Agra – 30<sup>th</sup> July, 2019



- 45 Students participated in Major Jn. Bal Memorial Lecture and were awarded on 04-09-2019



- 50, 20 and 20 students of REI Intermediate College were selected for 'Foldscope' programme which took place at DEI (Deemed University), Soaminagar Model School and Rajaborari on 19 to 25 December, 16 to 18 March and 14 to 18 October respectively.



**(v) Any other**

- 150 students of REI Intermediate College participated in 'Say No to Plastic' Workshop by Chetna NGO – 3<sup>rd</sup> December, 2019





- 65 students of REI Intermediate College participated in GK Competition organized by National Science Olympiad Foundation – 26<sup>th</sup> September, 2019



- **NCC Activities-** We have a JD troop consisting of 104 cadets and a company of SD consisting of 55 cadets. The cadets are always ready to perform various activities bestowed to them by their concerned battalion/college/university. The following activities took place during the year 2019-20.
  - (i) CATC 5 camp was held at Sri Ram Adarsh Mahavidyalay, Panwari from 01/06/2019 to 10/06/2019. 55 cadets volunteered to take part in this camp. The following activities took place during the camp-
    - (a) Drill competition
    - (b) Firing
    - (c) Flag Area Competition
    - (d) Solo/Group Song
    - (e) Solo/Group Dance
  - (ii) Our cadet Vishal Singh from senior division got first place in cultural program as well as drill competition. He was also declared the best cadet for the camp.



- (iii) Second CATC Camp was also held in the same college from 13/07/2019 to 22/07/2019. 35 cadets participated in this camp- 8 cadets from junior division and 27 from senior division were selected for inter-group competition. Among these cadets 8 cadets took part in other six

camps. Five cadets were selected for inter-group competition to be held at Noida. these cadets are

1. Vishal Singh
2. Sumit Shail
3. Naman Satsangi
4. Sambhav Satsangi
5. Suraj Kumar

- On 'Surgical Strike Day'-29/09/2019, a team from battalion came to the college and addressed the cadets and told them some important aspects of this strike.



- 'Beti Bachao Beti Padhao- Jan Jagrukta Abhiyan' was organized on 12/09/2019



- World AIDS Day- 01/12/2019, The cadets organized a rally to make the people aware of this disease and how to prevent it.



- Other activities like BLOOD DONATION (12/10/2019), TRAFFIC CONTROL (17-18/10/2019) and DISASTER MANAGEMENT (27-28/10/2019) etc. were also organized.



- Swachchhata Pakhawara were organized from 1 December to 15 December 2019



## 6. New Initiatives:

- 'Go Green Club' started on 03/12/2019 by Group of Teachers and students with innovative ideas of Mr. Manish Rai, Dr. Navratan and Mr. Vikram Singh Satsangi under the guidance and leadership of Principal Dr. A.K. Dwivedi. Main objective is to save promote greenery and waste management. Beside that team of young students is organized to collect plastic waste and use this waste in making eco brick and other useful products.

## 7. Awards/Recognition:

### (i) Students

- Best Actors' Award in Gujjeswari Devi Natya Mahotsav- 8th December, 2019 (State Level)



- Team Award on Environment meet- 4<sup>th</sup> December, 2019 (District Level)



## (ii) Staff

- Dr. A.K. Dwivedi, Principal, REI was honoured by Uttam Group of Institutions and Hindustan- A Daily News Paper- on 19<sup>th</sup> August, 2019



- Principal REI was Honoured by Child Care Welfare Society – 21<sup>st</sup> August, 2019



- Agra Branch of CIRC felicitated Mr. Manish Rai and Mr. Satguru Saran Singh for career counselling program.



## 8. Results

Class	Enrolled July - 2018	Appeared April-2019	Passed	Failed	Result %
VI	64	64	64	NIL	100
VII	59	59	59	NIL	100
VIII	50	50	50	NIL	100
IX	119	112	111	7	99.10
X	89	89	88	1	98.87
XI (Math)	39	39	38	1	97.43
XI(Bio-Math)	36	35	32	1	91.42
XI (Com.)	37	36	35	1	97.22
XII (Math)	42	42	42	NIL	100
XII(Bio-Math)	21	21	21	NIL	100
XII (Com.)	38	38	38	NIL	100
<b>Total</b>	<b>594</b>	<b>584</b>	<b>578</b>	<b>11</b>	<b>98.97</b>

### Technical College

The Technical College was started in 1927 as a Technical School to imparting training in automobile, electrical and mechanical engineering, leading to the award of diploma in the concerned branch of the Board of Technical Education, U.P. The Leather Working School was established in 1930, gives instructions in both theory and practice for manufacture of leather goods. The Technical College comprises of Department of Applied Science and Humanities, Department of Mechanical, Electrical and Automobile Engineering.

### Mayank Agrawal (Lecturer, Technical College)

1. Attended a short-term course on Advances in Fatigue, Creep, Fracture and Failure Analysis of Materials from 07-11 December 2020, organized by Department of Metallurgy, IIT Indore.
2. Attended a short-term course on "Advanced Manufacturing and Materials" from 18 – 20 December 2020 organized by department of Mechanical Engineering, IIT Indore.

#### a) RDC 2019

- ❖ Cadets Participated: 05
- ❖ Cadets Selected for **Rajpath**: 03 (SUO Ankur Varshney, Sgt Shivam Tiwari & Sgt Suraj Gautam)
- ❖ Cadet Selected for **Hall of Fame**: 01 (Sgt Naveen Bhadauria)
- ❖ Cadet Selected for **Ushering**: 01 (Sgt Sachit Singh)

- ❖ Cadets took part in **Culturals, Flag Are Brifing, NAIP: 04** (Sgt Shivam Tiwari, Sgt Suraj Gautam, Sgt Naveen Bhadauria & Sgt Sachit Singh)
- b) **YEP 2019 - 2020**

It's worth mentioning that 04 cadets of DEI among 05 who attended RDC 2019 made their way to most prestigious and dream of every NCC cadets for YEP and visited Bhutan (Sgt Naveen Bhadauria), Nepal (Sgt Sachit Singh, Sgt Shivam Tiwari & Sgt Suraj Gautam ).
- c) **Blood Donation Camp**

NCC Sub Unit at DEI Technical College organized a Blood Donation camps on 13<sup>th</sup> September, 2019. NCC cadets (Girls and Boys), NCC Officer, Staff and students (Girls and Boys) took part aggressively and donated 401 pints of Blood for the noble cause.
- d) **Scholarships and Awards**

Sgt Priyanshu Sharma awarded 2<sup>nd</sup> Best Cadet Award of Agra Group.
- e) **Tree Plantation**

Tree Plantation Drive was organized on 27<sup>th</sup> July, 2019 along with a NGO (SPHEEHA) as a regular activity, also on 09<sup>th</sup> August, 2019.
- f) **NCC Cadets converted to an Army officer**

NCC cadet Rahul Tyagi and Indrajeet Sikerwar recommended for Arm Services under NCC Spl. Entry Scheme. Cadet Schin Sharma and Cadet Mohit Kumar Singh joined Indian Air Force under Airman XY entry.
- g) **Selection in IGC and RDC 2020**

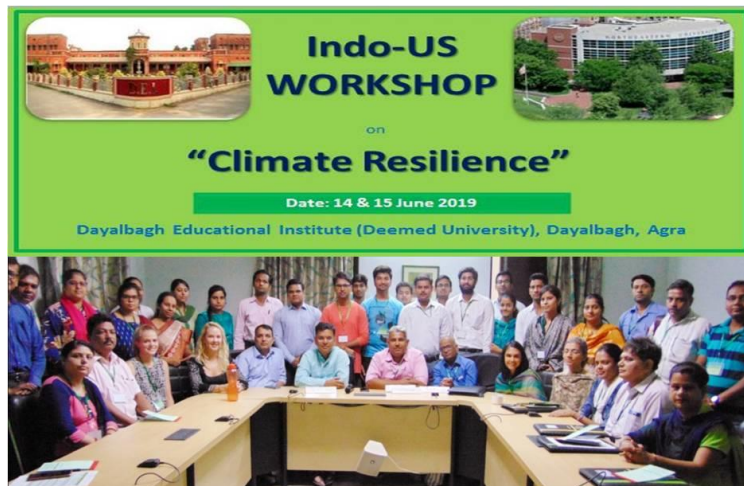
07 Cadets took part in IGC 2019 out of which 06 cadets made their way to RDC 2020.
- h) **Other Notable Achievements**

Cadet Chandrdeep Singh was felicitated with Chief Minister's Silver Medal for BEST SD cadet in Drill (UP Directorate) during IGC 2019.  
Honorary Rank of Major is given to Maj Pritam Singh (Retd).
- i) 54 cadets took Part in "**Swasth Bharat Yatra**", a Pan India cyclothon organized by FSSAI under Ministry of Health & Family Welfare, GOI from 11<sup>th</sup> January to 14<sup>th</sup> January, 2019
- j) 90 cadets took part in "**RUN FOR UNITY**" organized by Nagar Panchayat Dayalbagh celebrate the 72<sup>nd</sup> Birth Anniversary of Sardar Ballabh Bhai Patel.
- k) **Swachhta Pakhwara**
  - ✓ Swachhta Pakhwada organised from 18<sup>th</sup> September to 2<sup>nd</sup> October, 2019
  - ✓ Swachhta Pakhwada organized from 1<sup>st</sup> December to 15<sup>th</sup> December, 2019
- l) **Awareness Rallies and lectures on;**
  - ❖ Nukkad Natak to save environment (08.07.2019)
  - ❖ Prabhat Rally on Air Pollution (11.07.2019)
  - ❖ Lecture cum demo on Kargil Vijay Diwas (26.07.2019)
  - ❖ One Day Program was organized to witness "FIT INDIA MOVMENT" of GOI
  - ❖ ECO Friendly Diwali (25.10.2019)
  - ❖ World Diabetes Day (14.11.2019)
  - ❖ World AIDS Day
  - ❖ Lecture on ZERO Waste Management and SAY NO TO PLASTIC by Dr. Gur Pyari Mehra, Chairperson, Nagar Panchayat, Dayalbagh
- m) **Result 2019**

'B' Certificate: 100% with 10 AYE Grading and remaining BEE Grading  
'C' Certificate: 57% with 01 AYE Grading and remaining BEE Grading.

## Seminars and Conferences

### Indo-US workshop on “Climate Resilience”



Dayalbagh Educational Institute and Northeastern University, Boston, USA jointly organized an INDO-US workshop focused on “Climate Resilience” at DEI from 14-15 June 2019. The mentors of this workshop were Dr. Ranjit Kumar, Department of Chemistry, Faculty of Science, DEI, and Dr. Auroop Ratan Ganguly, Northeastern University, Boston, USA. Dr. Ranjit Kumar addressed the audience and chaired the Inaugural session of the workshop. Dr. Ganugly gave the Inaugural Talk

entitled, “Intelligent climate adaptation and resilient engineering (I-CARE)”. The other speakers of this session were Prof. K. Maharaj Kumari, Dr. Ranjit Kumar, Dr. Ashok Jangid, Ms. Pratima Gupta, all from DEI, Dr. D. M. Chate, Senior Scientist, IITM, Pune and Ms. Riddhi Samtani, Northeastern University. The 2<sup>nd</sup> day of the Workshop started with the welcome remarks of Dr. Ranjit Kumar. The first speaker was Kate Marie Duffy from USA. Other speakers were, Mary Elizabeth Warner from USA and Dr. Sona Dixit and Prof. D. Bhagwan Das from DEI. After these four talks, a very active session was held in capacity building. Prof Auroop Ratan Ganguly led this session and appreciated that Dayalbagh Educational Institute is making such constructive efforts for its students. A panel discussion was organized during the workshop on 15 June 2019. The main theme of the panel discussion was “Can India’s Air be Clean? Dr. Ranjit Kumar, Department of Chemistry was the Coordinator of the panel discussion. Dr. A.R. Ganguly, Northeastern University and Dr. Dilip Motiram Chate from Indian Institute of Technology were also on the Panel. Other people who took part in the discussion were, Dr. Bhuvnesh Singhal, Dr. Vijay Jha, Dr. Soumya Sinha, Ms. Deeksha, Mr. Saurabh Satsangi, Ms. Pratima Gupta, Mr. Veer Kumar, Mr. Dharendra Singh of M/s Airshed and Mr. Amit Saxena of M/s. Mars Bionalytical, New Delhi. The last session of the workshop included presentation by representatives of the well-established industrial partners viz.; M/s. AIRSHED, Kanpur, Alfatech Technologies, New Delhi and MARS Bioanalytical, New Delhi, that are working in the field of Air quality monitoring. They demonstrated the instruments and shared their views and experiences in the area of Start-up projects.

### Dayalbagh Science of Consciousness 2020 (DSC 2020)

Dayalbagh Science of Consciousness, organized in Virtual Reality mode on May 22, 2020. It was attended (through video conferencing) by 242 attendees, which included Keynote Speakers, Oral and Poster presenters. The Conference was also live streamed on the e-Satsang cascade network of Dayalbagh and on the You Tube with 9661 and 86584 passive participants respectively, with a sum total of approximately 100,000 participants from 19 countries. The Vision Talk by the Most Revered Chairman of the Advisory Committee on Education, Dayalbagh, Prof. Prem Saran Satsangi Sahab, titled Dayalbagh Science of Consciousness: Towards Evolutionary Art, Science and Engineering of Consciousness, was the guiding beacon of the Conference.

The Panel Discussion clearly brought out that the external world which is within the reach of

conventional domains of science and the other sciences like humanities and social sciences, which deal with society and community, should interact with one another for the advancement and creation of new domain for the benefit of the subscribers through different paths. It was further emphasized by the Revered Chairman that human intelligence was a physical reality, which arose from the brain and that the Radhasoami Reality is physical, which we experience in this world. He further clarified that we harness the supercomputers to establish these physical realities, and contrary to the prevailing notion among the elites, we firmly believe that the power of artificial intelligence and virtual reality can be harnessed to be subservient to the Reality.



DSC 2020 was a net zero expenditure conference with every aspect from designing of website to hospitality, conference kits and mementos which were planned and executed by the students and faculty members of the various B.Voc programmes. Through consensus building, it was decided that the 3rd International Conference on the Dayalbagh Science of Consciousness (DSC2021) would be held on the 21st May, 2021 and will be co-hosted by the CAU Kiel with Prof. Anna Horatschek and Prof. Anand Srivastava as the organizers. Dr. Apurva Narayan from the University of Waterloo has extended his support to be the Co-organizer.

### **Paryalochan 2019: Deliberations by Leaders in Education**

A two-day National Workshop entitled 'Paryalochan 2019: Deliberations by leaders in Education' was organized by School of Education, Faculty of Education, DEI, from 19 to 20 October 2019 under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching. In his Keynote- Address, Prof. K. Ramachandran, Advisor, NIEPA, New Delhi, elucidated the present position of Indian education and highlighted the key issues in the Draft Education Policy 2019. Prof. P. K. Kalra, Director of Dayalbagh Educational Institute, in his presidential remarks explicated that the Draft Policy on Education 2019 has developed deeply into educational transformation but there is a need to include the aspect of spiritual development and consciousness for overall personality development leading to a class of supermen. In the first session on Higher Education, Prof. N C Gautam, Vice Chancellor, Mahatama Gandhi Chitrakoot Gramodya Vishwavidyalaya delivered the Keynote Address. Dr. Parul Bhatnagar and Dr. K. Soami Daya from DEI gave a presentation on Innovations at DEI. In the Panel discussion, Prof. D. N. Jauhar, Former Vice Chancellor, Dr. B.R. Ambedkar University Agra, commented that while constructing a system of education, we need to keep in mind the Indian way of life rather than mere imitation of the western system of education. Prof. Swatantra, IIM Indore, discussed the corporate social responsibility of Institutes. In the session on School Education, Swami Paramatamananda, Former Chairman, Chhattisgarh Sanskrit board, Raipur, delivered the Keynote Address. Dr. Sona Ahuja and Prof. Nandita Satsangee presented the Value based Education Model for School Education at DEI. Prof. Saroj Sharma, Founder Dean, University of Education, Guru Gobind



Singh Indraprastha University, deliberated on the need of empowerment and academic freedom for teachers. Prof. Amita Bhardwaj from Shri Lal Bahadur Shastri Sanskrit Vishwavidyalaya, focused on value inculcation based on Yoga philosophy. Dr. Jubilee Padmanabhan, Central University of Punjab, discussed the problems of Indian schools and recommended that an integrated approach to sustainability be adopted for School education, community matters, yoga, social system, etc. Visit to university campus and cultural programme followed by conference dinner marked the culmination of the first day of the event. On day 2, the participants surveyed the agricultural fields in Dayalbagh in the wee hours of the morning and then visited the Medical Camp. Thereafter, they were taken on a short tour to Tajmahal. In the first session of the day, Presentations on Skilling at DEI were given by Prof. Ajay Saxena, Head, Dept. of Electrical Engineering, Prof. Dantu, Dean Agriculture and Dr. Prem Shanker, Dept. of Hindi. Prof. Sunder Lal, Former Vice Chancellor Poorvanchal University, Prof. Anand Mohan Agarwal Pro- Vice Chancellor, G L A University, Mathura, Mr. Jayanta Das and Prof. H C Purohit, Professor, Doon University and Prof. K C Vashishtha, Former Dean, Faculty of Education were panelists. The Panel suggested that the fruitful implementation of this draft policy would require more funds, quality teachers and most importantly changes in attitude and mindset of people. The social value of skilled people needs to be raised. Education should be skill oriented and proper mentorship is a must in all skill-based courses and entrepreneurial education. Prof. N PS Chandel, Head, MEd; Faculty of Education, coordinated the Panel Discussion. In the Post Lunch session, a special talk was given by Prof. Mazhar Asif, Professor, JNU and member of Draft NPE2019. He discussed the revolutionary ideas incorporated in the draft NPE and the role of indigenous knowledge in empowering students. Prof P K Kalra, Director, DEI asserted that Teachers play an affirmative role in maintaining education quality. The last session was entitled 'Technology in Education'. Presentations on Technology initiatives in DEI and Systems Model of Education were delivered by Prof. Gursaran, Prof. Patwardhan and Prof. Markan respectively. Dr. DSVGK Kaladhar, Head, Dept. of Bioinformatics, Atal Bihari Vajpayee University, Bilaspur, delivered the Keynote Address. Dr. S R Pandian, Co-ordinator, TLC, IIITDM, Kancheepuram, Mr. Sharat Chandra, Founder Director, Butterfly Fields (Ed. Tech), Hyderabad, Prof. Sanjeev Kumar, Former Director, Institute of Engineering and Technology, DBRAU participated in the Panel Discussion. In his concluding remarks, Prof. K Ramachandran, Advisor NIEPA complemented the value initiatives taken up by DEI.



### International School on Quantum and Nano Computing Systems and Application, QANSAS 2019 @ 50

International School on Quantum and Nano Computing Systems and Application, QANSAS 2019 @50 was organized by the Quantum-Nano Systems Centre and Centre for Consciousness Studies, DEI and the Divinity Study Forum, Radhasoami Satsang Sabha, Dayalbagh, Agra from November, 10-12, 2019 in honour of the 50<sup>th</sup> year of conferment of Doctorate by the University of Waterloo upon Revered Prof. Prem Saran Satsangi in 1969.



### Conference on “Waste Nothing –A Circular Economy Perspective”

A two-day conference on “Waste nothing- A Circular Economy Perspective” was organized by University Sustainable Innovation Centre (USIC) D.E.I. in collaboration with MGNCRE (MHRD) in the Seminar Hall Complex from 20<sup>th</sup> to 21<sup>st</sup> December, 2019. The conference was sponsored by TEQIP III (D.E.I.) & MGNCRE (MHRD). ‘Waste Nothing’ is a holistic concept that articulates the notion of conservation of resources – both physical and mental. There were 25 speakers who delivered their talk on various topics related to the circular economy which was the theme of the conference. This conference was attended by 98 students and various faculty members. In the Pre-inaugural Session of the Conference, Dr. Radhika Singh, Department of Chemistry, DEI discussed about Biofuel generation by pre-treated Petha waste rice straw. After that, Dr. Aruna Gali, founder, School Radio, Vishakhapatnam, discussed about the activities which children perform in digital schools to improve their voice through School Radio and Vikasa Dhatri which includes making school kits and e-books. The Inaugural Session began with the University Prayer followed by the Welcome Address by Prof. Poornima Jain, Faculty of Social Sciences. Prof. Soami Piara Satsangee, Conference Convener highlighted the theme of Conference followed by a recorded video message of chairman of MGNCRE, Dr. Prasanna Kumar. The Inaugural address was delivered by Chief Guest, Mr. Sandesh Srivastava, GM, Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL), Indian Railways. After that a short film depicting ‘Swachhta’, waste management and social service work being done at D.E.I. was screened. Following this, the MBA Curriculum designed by MGNCRE was released. Presidential remarks were made by Mr. Rajiv Narayan, Vice President, SPHEEHA. He explained the importance of developing awareness among local people and various activities related to waste management. The session ended with the vote of thanks by Prof. Sanjeev Swami, Faculty of Social Sciences. The First Technical Session was chaired by Mr. G. S. Sood, Ex-IDAS, Vice President, SPHEEHA and Senior Vice President, Radhasoami Satsang Sabha. Er. Lalit Mohan Sharma, CEO, Sehgal Group delivered his talk through Skype on ‘Green Building Aiming Sustainability’. After that, Ms. Supriya Manocha, Prof. G. Sunder Reddy and Dr. Rubina Saxena, Faculty of Arts, DEI delivered their talks. The Second Technical Session was chaired by Prof. Poornima Jain, Head, Department of Political Sciences and Sociology, DEI. Dr. Ravi Agarwal from NWMS, Mr. Rahul Khara, director of Balancing Bits, Dr. Gurinder Sambhi, NWMS, New Delhi and Dr. Rupali Satsangi gave their talks. The day ended with a visit to Dairy and Gaushala followed by a cultural programme performed by DEI students. On 21 December, the Third Technical Session was chaired by Mr. P.P. Srivastava, JVP, Radhasoami Satsang Sabha. Mr. Madhusudan Hanumappa, ITC WOW ESREE foundation, Mr. Vinod Kumar, from Bharat Oil & Waste Management Pvt. Ltd., Mr. Abhishek Gupta, CEO, WeVOIS, Jaipur and Mrs. G.P. Mehra, Chairperson, Nagar Panchayat, Dayalbagh,

## Dayalbagh Educational Institute (Deemed to be University), Agra

gave their talks. The Fourth Technical Session was chaired by Mr. B.S. Gupta, Advisor, Renewable Energy Department, Dayalbagh, Agra. Mr. Ujjwal, Business Head, Namu E-Waste Pvt. Ltd., Dr. Harsh Thakural, Director, National Productivity Council, New Delhi, Mr. R.V. Singh, Assistant Scientific Officer, State Pollution Control Board, Mr. Dinker Sharma, Consultant, Wastewater Treatment and Prof. Seema Bhaduria, RBS College, Agra delivered their talks. A Parallel Session was also conducted which was chaired by Prof. G. Sunder Reddy, Hony. Adviser & Principal Mentor, Butterfly Edufields. Dr. Shobha Bharadwaj, Mr. Pranjal Agarwal and Mr. Shivam Gautam, B. Tech. III year students at DEI, Ms. Shubha Anand, Department of Botany, DEI and Ms. Preeti Mehta, B. Voc. (Amritsar Campus, DEI) gave their talks. In the last session Mr. Pravinjith KP, Managing Director, Ecoparadigm, Bengaluru, delivered a talk on Challenges in Municipal Solid Waste Management in context with treatment plant set up at Nasik. After that, a Panel Discussion on the theme 'Career Prospects in Waste Management' was held. The panel discussion was chaired by Mr. G. Surender Reddy. Other participants were Mr. Madhusudan Hanumappa, Mr. Vinod Kumar, Ms. Aruna Gali, Mr. B.S. Gupta and Ms. Babita Upadhyaya. The Valedictory Session commenced with the University Prayer. Dr. Sumita Srivastava, Co-Convenor of the Conference, introduced the Chief Guest of the Valedictory Session Mr. Prabhjot Sodhi, Head (Circular Economy), UNDP. The Vote of Thanks was given by Prof. Poornoma Jain and conference ended with the University Song and the National Anthem. After the valedictory session, the speakers participated in Community Service at the Agricultural Farms of Dayalbagh.

A parallel 2-day exhibition jointly sponsored by TEQIP III, DEI and MGNCRE, Hyderabad was also held in which three waste management service providers from outside and three DEI B.Voc. programs students showcased their work. The conference provided a platform for sharing of innovative practices across a large cross-section of academia and industry. Representative from NGOs, government organisations and industry expressed their interest in providing internships to the waste management students of DEI.



# Activities at DEI

## Yoga Day Celebration

Under the aegis of N.S.S. Cell of DEI, the fifth International Yoga Day was celebrated on 21 June 2019 at the Science Faculty Ground of the Institute. The event commenced with the prayer. Thereafter Yoga experts Mrs. Sangita Sinha, Dr. S.D. Sinha and Mr. Abhinav Sinha taught the various postures of Yoga to the large gathering. DEI Students then rendered N.S.S. *Lakshya Geet* and University Song. Shri Ajay Veer Singh, Deputy Director, Social Welfare Department, Govt. of Uttar Pradesh, was the Chief Guest



on the occasion. In his address Shri Singh made the gathering aware of the benefit of Yoga and stressed on its daily practice. Yoga experts Dr. Arti Kapoor and Prof. Sriramamurthi also spoke about the importance of practicing Yoga and talked about its connection with not only the body but the mind as well. Towards the end, the Chief Guest gave the prizes to the winners of the written test, Km. Dhun Adhaar, Km. Jubilee, Km. Yashasvi Bhardwaj, Darshan Saini and Mrs. Asha. Prof. P.K. Kalra, Director, DEI, Prof.

Anand Mohan, Registrar, DEI, the Deans of different Faculties and various officials of NSS graced the occasion by their presence.

## Participation in the National Youth Parliament



The Ministry of Parliamentary Affairs conducts National Youth Parliament Competition every year in various categories of schools and colleges/universities with an objective of developing in students an insight into the working of Parliament as well as making them aware of the need of addressing important public issues. DEI added another feather in its cap by winning this year's group level competition and reaching the national -level of this competition, which was organized at the International Seminar Hall Complex of the institute on 13, August 2019. The Panel of Judges on this occasion included, Prof. Gurunath Ramanathan, IIT, Kanpur, Shri A.B. Acharya, Deputy Secretary,

Ministry of Parliamentary Affairs and Shri Bratin Sengupta, Retd. M.P., They received the Guard of Honour by the NCC Cadets of DEI. After the traditional beginning of the Session with Oath taking, Obituary Reference and Introduction of the new members, a most dynamic and realistic portrayal of working of the Parliament in a democratic set up was presented by DEI students through different other sessions. In the Question Hour, the queries of different members of opposition were pertinently answered by the Minister of State for Home Affairs, the Minister for Human Resource Development and the Minister of Social Justice and Empowerment. This was followed by the presentation of the message from the Secretary - General of Upper chamber of Youth Parliament. Thereafter, the Speaker gave a warm welcome to the Honourable Members of the Gulf Parliamentary Delegation. During the Calling Attention Motion that followed, one of the members of the Opposition referred to the report of NCRB (National Crime Record Bureau) regarding the alarming data of trafficking of women and children. Some of the other members of opposition joined the discussion by drawing attention to the rising rate of cases of various forms of exploitation of women and children in the country. The Minister of Home Affairs defended the ruling side by giving justifications regarding the government actions related to curbing down of these incidents. The next session was the Presentation of and discussion on different Bills, which were either newly introduced or presented for amendment. After a most intense discussion on the bills, which included the most apt explanation by the Prime Minister, the bills were passed. Finally, the House was adjourned. The members of the Jury gave their valuable inputs and also applauded the performance of DEI students. The Judges were presented Mementoes by Prof. P.K. Kalra, Director of the Institute. Eight students were lauded for their powerful performances and were given prizes by the Judges: Sabiya Javed, Mehar Bhatnagar, Aparajita Jha, Riya Agarwal, Saurabh Satsangi, B. Shabd Pyari, Anshul Sharma and Abhishek Upadhyay. Dr. Sona Ahuja was the convener of the event.

### Tri-partite Certificate Distribution Ceremony



Seneca College of Applied Arts and Technology is a multiple-campus public college located in the Greater Toronto Area of Ontario, Canada and is one of the largest vocational education providers in the province. A MoU between DEI and Seneca College was signed in February 2018 and during the session 2018-19 joint courses through videoconferencing and online collaborative learning tools were offered to students at Seneca College, DEI main campus and the ICT campus of DEI at Rajaborari. Students who successfully completed the coursework and the associated projects in inter-continental teams were awarded certificates at a three-way videoconferencing ceremony on July 15, 2019. A student from the Rajaborari tribal campus and the course mentor has also been invited to visit Seneca College, Canada.

## Youth Parliament

The Ministry of Parliamentary Affairs conducts National Youth Parliament Competition every year in various categories of schools and colleges/universities with an objective of developing in students an insight into the working of Parliament as well as making them aware of the need of addressing important public issues.



DEI won this year's group level competition and qualified for the national-level competition, which was organized at the International Seminar Hall Complex of the institute on 13, August 2019. The Panel of Judges on this occasion included, Prof. Gurunath Ramanathan, IIT, Kanpur, Shri A.B. Acharya, Deputy Secretary, Ministry of Parliamentary Affairs and Shri Bratin Sengupta, Retd. M.P., They received the Guard of Honour by the NCC Cadets of DEI.

After the traditional beginning of the Session with Oath taking, Obituary Reference and Introduction of the new members, a most dynamic and realistic portrayal of working of the Parliament in a democratic set up was presented by DEI students through different other sessions. In the Question Hour, the queries of different members of opposition were pertinently answered by the Minister of State for Home Affairs, the Minister for Human Resource Development and the Minister of Social Justice and Empowerment. This was followed by the presentation of the message from the Secretary - General of Upper chamber of Youth Parliament. Thereafter, the Speaker gave a warm welcome to the Honourable Members of the Gulf Parliamentary Delegation.

During the Calling Attention Motion that followed, one of the members of the Opposition referred to the report of NCRB (National Crime Record Bureau) regarding the alarming data of trafficking of women and children. Some of the other members of opposition joined the discussion by drawing attention to the rising rate of cases of various forms of exploitation of women and children in the country. The Minister of Home Affairs defended the ruling side by giving justifications regarding the government actions related to curbing down of these incidents. The next session was the Presentation of and discussion on different Bills, which were either newly introduced or presented for amendment. After a most intense discussion on the bills, which included the most apt explanation by the Prime Minister, the bills were passed. Finally, the House was adjourned.

The members of the Jury gave their valuable inputs and also applauded the performance of DEI students. The Judges were presented Mementoes by Prof. P.K. Kalra, Director of the Institute. Eight students were lauded for their powerful performances and were given prizes by the Judges: Sabiya Javed, Mehar Bhatnagar, Aparajita Jha, Riya Agarwal, Saurabh Satsangi, B. Shabd Pyari, Anshul Sharma and Abhishek Upadhyay. Dr. Sona Ahuja was the convener of the event.

### Dr. Rama Devi, Director Skill Education, BHU, Visits DEI



Dr. Rama Devi, Director Skill Education, BHU, visited Dayalbagh Educational Institute on 15 & 16 July 2019. Interestingly, her visit coincided with the celebrations of 'World Skill Day' on 15 July 2019 at DEI. She visited DEI skill courses and observed the outcome of skilling at DEI 'Jugaad' venue, where the students sell their products to get hands-on experience for product development and marketing besides earning their pocket money. Dr. Rama Devi was extremely impressed to witness the DEI skill model and expressed her desire to sign an MoU with DEI very soon.

### Regional Director, University of Edinburgh Visits DEI



Ms. Amrita Sadarangani, Regional Director, University of Edinburgh, visited Dayalbagh Educational Institute on Monday, July 08, 2019. The purpose of the visit was to explore collaborative opportunities between DEI and the University of Edinburgh - including student and faculty exchange, research and academic collaboration. The Regional Director is responsible for University of Edinburgh's partnerships, profile, networks, opportunities in South Asia and leads strategic engagement across the region.

### Values and Quality Day

The "Values and Quality Day" was celebrated on 27<sup>th</sup> October, 2019 on the occasion of Diwali. The event was organized at Quantum Jugaad Centre at 9.15-11.00 AM and the proceedings were transmitted in distributed mode at Faculty of Social Sciences (For All Girls Students and Ladies Staff of DEI, TC and Prem Vidyalaya), Technical College (For all Boys Students and Gents Staff of D.E.I., TC and R.E.I) and Distance/ ICT centres in India and abroad. Special performances from the winners of Poetry Recitation Competitions held at REI Intermediate College and DEI Prem Vidyalaya and Inter-Institute Bhakti Sangeet competition were also organized on this occasion. Annual prize distribution function was held for the winners of various events on the broad theme of 'Values Education and Quality teaching' held during the year.



### Results of Inter-Institute Competitions on Values & Quality Day 2019-20

#### Poster Making:

1. Astuti, BFA II Yr, Arts
2. Tanu Verma, BTech II yr, Engg
3. Sahiba, BFA II Yr, Arts
4. Sejal Mittal, MBA I Yr, GLA (Consolation)

#### Cartooning:

1. Shivani Gautam, BFA, Arts
2. Mohit Singh, BSc, II yr, Science
3. Madhu Verma, Bed I yr, Education

#### Bhakti Sangeet:

1. Anand Swaroop, Engg. I Yr.
2. Hari Om Sharma, Agra college
3. Saumya Singhal, BA I Yr.

#### Special Performance:

##### DEI Prem Vidyalaya

1. Binti Satsangi VIA
2. Divyanshi Rawat VIB
3. Tarang Singh XIIC
4. Anjali Khanna XIIC.

##### REI

1. Aman Singh, XIIA
2. Amol Satsangi, XII A
3. Achint Kumar, XII A
4. Sheetal Mani, XII A
5. Ami Satsangi, IX A



### Virtual Visit of CMS Experiment at CERN, Geneva

DEI has been working with various government ministries and departments in bringing the benefits of the latest innovations and best practices to the last, the least, the lowest and the lost. Recently, the Institute has designed a pilot training programme for the recently launched 'Code India' programme of the Office of the Principal Scientific Advisor to the Government of India. As part of the Code India programme, a virtual tour of the Compact Muon Solenoid (CMS) experiment of the leading scientific research organization CERN, Geneva was organized on 2 December 2019 for the participating students in which the students from DEI at various locations including remote tribal areas had also joined. To be precise, this virtual tour was attended by close to 500 students and teachers from Jawahar Navodaya Vidhyalay (Delhi), REI Intermediate College (Agra), Prem Vidyalaya Girls Intermediate College (Agra) and Radhasoami Adivasi Higher Secondary School Rajaborari (Harda, M.P.). The Compact Muon Solenoid (CMS) experiment is one of two large general-purpose particle physics detectors built on the Large Hadron Collider (LHC) at CERN in Switzerland and France. The goal of CMS experiment is to investigate a wide range of physics, including the search for the Higgs boson, extra dimensions, and particles that could make up dark matter. The students were given a live virtual tour of the CMS experiment at CERN and explained about the functionality and working of the CMS. The curious students from all participating locations interacted with the scientists at CERN and asked several questions related to the CMS and particle physics in general. Dr. Archana Sharma, one of the leading top scientists at CERN since more than 20 years, had also joined the virtual visit to encourage the students and teachers. Dr. Archana mentioned that this is the very first virtual visit of CERN for the underprivileged rural and tribal students in India. The students had a great visit of the CMS experiment and a very fruitful interaction with the top scientists at CERN.



### Science Day Celebration

The Faculty of Science celebrated Science Day on 28 February, 2020, with a special lecture by Dr. Leena Chandran Wadia, held in Convocation Hall of the Institute. Dr. Leena Chandran Wadia is a Senior Fellow at the Observer Research Foundation, Mumbai, and engages in research and

policy advocacy in the areas of education, renewable energy, public health, and sustainable agriculture. She has a Ph. D. in Physics from IISc Bangalore and served as a researcher at several research institutions including, ETH Zurich, EPF Lausanne, and CERN in Switzerland. She gave a talk on the topic "Education Policy of India for the Coming Decade." In this connection it is to be noted that Dr. Leena Chandran Wadia has contributed to the preparation of India's new National Education Policy as member of both the research team and the drafting committee led by Dr. Kasturirangan



### Fit India Movement

Under the banner of *Fit India Movement*, sports competitions were organized for the entire staff of the Institute on 1st March, 2020. The events included were; 2000 mt. Race for Men and Women, Cricket Match, Throw-Ball and Tug of War in which the members of staff enthusiastically participated in large numbers. The Conveners of the event were Shri. S.D. Sinha, Shri. Parampreet Singh and Shri. Sampuran Singh. Prof. P.K. Kalra, the Director of Institute, gave away Prizes to the winners of the competitions. Prof. G.S. Tyagi, Sports Officer, DEi along with the Sports teachers, Shri. Rajan Bedi and Smt. Rakesh Bedi, encouraged the participants by their motivational speeches.



### Annual Drama Festival

The Annual Drama Festival was organized from 24-26 February, 2020 jointly by English, Hindi and Sanskrit Departments of Faculty of Arts. The competition was opened for the plays in English, Hindi and Sanskrit languages at the same time, under one banner. The plays of each language were judged separately. During this event, 17 plays, 5 of English, 8 of Hindi and 4 of Sanskrit language, were performed. The Best Production prizes were won by St. John's College (English), Faculty of Engineering (Hindi) and Faculty of Arts (Sanskrit) while the Best Direction prizes were awarded to Faculty of Arts (English), Faculty of Engineering (Hindi) and Faculty of Arts (Sanskrit). The members of the Jury for the event were Mr. Vinay Patsariya, Dr. Priyam Ankit and Dr. Beena Gupta. Dr. Sonal Singh, Dr. Dayal Pyari Sinha and Dr. Nandini Raghuwanshi were the conveners of the event.



### Winter Training Camp and 7-day Camp of 'Unnat Bharat Abhiyan'

During the winter vacation (from 19.12.2019 to 25.12.2019) Technical College organized a Seven-day camp of 'Unnat Bharat Abhiyan'. During this campaign, the different groups of students visited the nearby villages. They made the village dwellers aware about the concept of superman a well as the importance of education, sanitation, cleanliness, service and self-reliance. On 19 December, 2019, Mr. Naveen Jain Mayor of Agra, in the presence of Prof. P.K. Kalra, Director of D.E.I. inaugurated the program. The students were administered the pledge to keep the Environment clean. Mr. Jain threw light on the concepts of Educated India- Healthy India, - Clean India and Self-reliant India. During the Camp, the students participated in various competitions related to sports and games, literary activities, etc. and cultural programmes were also presented. Dr. Arvind Kumar Dixit, Vice-chancellor Dr. B.R. Ambedkar University, Agra, was Chief Guest of the valedictory function held on 25 December 2019. Dr. Arvind Kumar Dixit talked about the difference between the terms India' and 'Bharat'. He threw light upon the life style of 70% villagers in India. He also drew attention towards the need of achieving the solution of global problems.



### Research Fair – 2020

The 'Research Fair' was organized on January 11, 2020 to showcase the ongoing research activities and to provide an opportunity to young researchers for interacting with their seniors. The Fair while promoting environment of research also provided a platform to explore the possibilities for Multi and Trans-disciplinarily research in the campus. The Fair was inaugurated by Prof. P.K. Kalra, Director of the Institute. 385 research scholars presented their research through elaborated and illustrative posters. Prof. Anand Mohan, Registrar and Mrs. Sneha Bijlani, Treasurer of the Institute accompanied Prof. Rama Shankar Singh, Finance Officer, BRA Central University; Lucknow visited the fair and interacted with the research scholars. A panel discussion was also held. Prof. P.K. Sharma, Ex Vice Chancellor, Kota University, Prof. Naved Khan, Faculty of Management, AMU and Prof. K. Arya, IIITM, Gwalior discussed the emerging research issues. Prof. Sharma spoke about ethical issues involved in research. He emphasized the need of quality in research. Prof. Khan expressed his views on the research process and shared tips to make research easy and simple. Prof. Arya talked about the role of supervisor in research and also gave ideas about various funding agencies in different fields.



### Socio-Cultural Day

Lohri, a socio-cultural festival, which ushers in the cheerful spring season bidding adieu to the dull winter was celebrated in the Boys' and Girls' hostels of DEI with a lot of exuberance and fanfare. The event began by a cleanliness drive in the campus. Then the entire campus was decorated with festoons. Some students and staff prepared sweets for all. Students clad in colourful attires hosted a cultural programme.



### Activities under NSS and Unnat Bharat Abhiyaan

**FREE MEDICAL & ASSISTANCE CAMPS (FMAC)** were organized every Sunday for the benefit of Villagers and People of Neighborhood Community with the help of Doctors and Para-medical Staff of Saran Ashram Hospital, Dayalbagh, Agra, Faculty Members and Staff of the Institute Scientists from Other Reputed Institutions/ Research Organizations and UBA and NSS Volunteers and Staff. The Services offered in these Camps include Multi-Specialty Free Medical Services, children Development Services and Socio-economic Development Services. The Multi-Specialty Free Medical Services are the foremost services initiated on 27 June 2010. These are offered in association with the Doctors and Para- medical staff of the Saran Ashram Hospital, Dayalbagh, Agra. The team of doctors in these camps consists of General Physicians, Surgeons, Heart Specialists, Eye Specialists, Child Specialists, Dentists, Chest & Tuberculosis Specialists, ENT Specialists, Physiotherapists, Gynaecologists, Pathologists and Radiologists. Apart from this, Specialists from the traditional field of Ayurveda and Homeopathy also render their services. The facilities provided to people in these Camps include Free Medical Check-up, Free Pathological Tests (Haemoglobin, Blood Sugar, and Blood Culture etc.), Free ECG and Free Medicines (prescribed by Doctors).

For the multifarious development of Society at large, Old, Youth, School Dropouts, Housewives and Children of Financially Downtrodden Deprived Section of Society of nearby Villages and Neighborhood Community Social/ Community Assistance Services, Education & Career Counseling Services, Chaupal: Bhagvad Geeta Ke Updesh, and Vocational Training/ Skill Development Services are conducted in Free Medical and Rural Assistance Camps. The Social/ Community Assistance Services are intended to understand basic problems related with Agriculture, Dairying, Water, Power, Sanitation etc. of people of nearby Villages and Neighborhood Community and to help / offer most feasible solution to them. Social Assistance Services to help the people of nearby Villages and Neighborhood Community was started on 7 December 2014. In this program, Faculty Members of the Department of Botany of the Institute and Experts/ Scientists from Prestigious Institutions of the Country interact with People/ farmers of nearby villages and Neighborhood Community on various issues associated with Agriculture, Dairying, Water, Power and Sanitation. They also provide Laboratory Testing Facilities for Soil, Water, Milk etc. and also the information about HYV Seeds and Fertilizers especially Wormy Compost. The team of Experts understands the problems of people associated with and offer most feasible solution.

Under Education and Career Counselling Services the team of Faculty Members including staff of



Placement Cell of the Institute counsel and guide Youth (male and female both) about various Formal/ Non-Formal Education Programs, Vocational Training Programs and Skill Development Programs offered by the Institute and other Institutions of the Country. They also make them aware of various Employment opportunities available according to their qualification, knowledge and skill. Chaupal mainly consists interaction on tenets of Bhagvad Geeta for developing culture, ethics, and values among people of nearby Villages and Neighborhood Community. In this program, Faculty members of Sanskrit and Hindi Department and also the Experts of Theology and Culture interact with people on ethical issues by way of teachings of Bhagvad Geta. Sometimes, people of nearby villages and neighborhood community and also the volunteers present devotional/ folk songs on various themes. Faculty Members and Staff of Home Science Department and the Team of Life Long Learning and Extension (LLLE) Section of the Institute train the Women and Youth about Training/ Skill Development Programs on Stitching, Sewing, Textile Printing, Soft Toys Making, Food Processing and Preservation, Craft Work, Handmade Decorative Items and Use of Waste Material.

The FMACs are highly appreciated by Government Officials, Team of Officials from AYUSH, Medical Practitioners, Social Activists, Dignitaries of NGOs, Scientists from Government Research Institutions (DRDO, CDRI, IARI etc.), Dr. Ram Shankar Katheria, Minister for States, Ministry of Human Resource Development and also Visitors from France, US, Germany, Hong Kong etc. They interacted with villagers, students and beneficiaries in the camp and congratulated for contribution of the Institute for under- privileged.

### **CHILDREN DEVELOPMENT SERVICES**

For the multifaceted development of children of deprived section of society, financially downtrodden, children of nearby villages and neighborhood community Hole in the Wall Program, Children Recreation Facilities and Spoken English Facilities are offered.

In Hole in the Wall program, children are provided multimedia computers with big displays, speakers, and specially designed /selected computer applications and the right environment for rapid peer learning. The facility with supervision and peer learning environment provides them a great opportunity to give up their hesitation or inhibition, quickly pick up computer skills and become conversant in basic Information and Communication Technology (ICT) skills. Our method of conducting Hole in the Wall Program is Unique and Effective in the sense that we not only provide the infrastructure and environment, but also guide, monitor, and track the progress of Children by using a well-designed and structured program in a way to carefully build their skills step-by-step. The program is designed to teach carefully the Children step-

by-step the handling of Mouse (proper positioning of the mouse pointer, clicking, drag and drop, etc.), Handling of Keyboard and Typing, Basics of operating system, utilities, launching and closing applications, shutdown procedure, multi-media controls, copying files to pen drive, etc. Then they are introduced to advanced topics. Some of the interesting applications/topics used for the purpose include:

- Interactive Multimedia Edutainment Applications,
- Paint Applications with some of them having menus commands in Hindi language,
- Mathematical Puzzles, Memory Puzzles, Sudoku etc.
- Interactive Pictionary, Talking Dictionary,
- Popular Hindi and English Animated Rhymes, Songs and Stories,
- Documentaries Films on a various topic, e.g., Cleanliness, Health & Hygiene, Environment, Importance of Education, National Awareness, General Knowledge etc.
- Microsoft Office (Word, Power Point and Excel)
- Use of Internet, Creating an Email Account and Use of Email, Web Searching etc.



### Children Recreation Services

In Children Recreation Facilities this program, children are provided Traditional Toys such as Carom, Chess, Ludo, Chinese Checker etc. to play and developing a sense of group living. They are also provided Mind Games such as Blocks, Puzzles etc. for developing their mental/ learning



abilities in group. The facility with supervision and peer learning environment Provides them a great opportunity to refresh and make them sensible to understand others. Considering the fact that Healthy Mind persists in Healthy Body, we also started physical games for children. Sometimes, the teachers and Volunteers also train the children about Use of Waste Material, Making of Soft Toys, and Handmade Decorative Items.

- **Spoken English Facilities**

In English Speaking Services this program, Basic English Language of children is developed through Teaching and Interaction, and the Conversation skills are developed through Peer/ Group Interaction. Children are also provided Tablets equipped with Specially Designed English Speaking/Interactive Software for developing English Speaking abilities and the learning the proper pronunciation of words.

### **SEVEN-DAY UBA SPECIAL CAMP**

A Seven-Day UBA special camp was organized from December 19-25, 2019 on the theme “**Health, Hygiene & Sanitation**”. Dr. Vasant Kumar Swarnkar, Superintending Archaeologist, Agra, was the chief guest of the Inaugural function.

A number of dignified guests along with authorities of the institute graced the occasion. In this camp, about 1500 Unnat Bharat Abhiyan and NSS Volunteers participated and rendered services in adopted villages and slums which included Bahadurpur, Khaspur, Nagla Talfi, Lal Garhi, Manoharpur, Nagla Jageshwar, Nagla Haveli, Jaganpur, Shanti Nagar, Basera, etc. The UBA volunteers also contributed in “Swacchh Rail Swacchh Bharat Mission” of Government of India by participating in Cleanliness Campaign and making passengers aware of this Mission at Agra Cantt railway station. The UBA volunteers also participated in cleaning drive at Agra fort and Archaeological sites as well as took part in cleaning the Yamuna bank.



The major activities conducted in this camp in adopted villages, slums, neighborhood communities, public places, Agra Cantt., Railway station included: cleaning of roadsides and community/ public places, cleaning and fumigation of drains, waste water management, maintenance of trees, socio- economic survey and awareness programs through discussion, rallies, street plays, etc. on various issues such as Cleanliness, health and hygiene, primary Education, Beti Bchao-Beti Padhao, women empowerment, environment protection, career counselling, hole-in-the-wall and computer literacy, job-oriented training, distribution of old clothes, toys and books, awareness of voters’ rights and responsibilities, digital India and skill

India. Students also visited the villages and interacting with the villagers and aware them for the Cleanliness, health and hygiene, primary education, Beti Bchao-Beti Padhao, women empowerment, environment protection, request them to come medical camp every Sunday to get more solutions of the problems and also aware about the government schemes which can help them a lot. Students ask their problems which villagers are facing in the village.

In the second session of camp, speech and poster making competitions and invited talks of



Eminent speakers on various social issues were organized. The topics during camp were Traffic and road safety, gender equality and women's empowerment, corruption eradication, climate change and pollution and health and hygiene awareness.



In the third session of the camp creative performances and cultural competitions organized on various themes, such as, Indian vocal: solo and group, mono-acting, western vocal: solo and group, instrumental performance: solo and group and skit competition. Smt. Babita Sahu, SP Vigilance, DVNL Agra was the chief guest of the Valedictory Function. The program was graced by a number of guests, authorities of the institute and representatives of adopted villages and slums.

### **One-day Orientation-cum-Workshop under UNNAT BHARAT ABHIYAN (UBA 2.0)**

A One-day orientation-cum-workshop was organized on December 2, 2019 for the participating institutes to initiate work in the adopted village clusters. The main objective of the orientation program was to make the participating institutes aware about Unnat



Bharat Abhiyan (UBA 2.0) by giving them a demonstration of work at DEI under UBA along with a demonstration of web portal framework for preparation of the “Action Plan”. Around 56 faculty members from 36 different institutions attended the workshop. Mr. Ajayveer Singh Yadav, Deputy Director Social Welfare, Agra region, Govt. of Uttar Pradesh was the Chief Guest. The workshop was divided into two sessions. In the first session, lectures by experts were conducted in the seminar hall complex of DEI.



Prof. V.K. Vijay, National Coordinator, UBA, and Prof. Priyanka, RCI- National Coordinator, IIT Delhi, attended the workshop through video conferencing mode. They presented the idea of UBA, the framework of plan of action, funding, and convergence, and interacted with the participants to answer all the queries. Then as subject expert group, representatives of DEI presented their and interacted with the participants. Prof. Poornima Jain, elucidated about Unnat Gaon – Unnat Bharat, Prof. Prem Saran Tirumalai described DEIs contribution in enhancing livelihoods of local streets food vendors, Prof. Ranjit Kumar explained climate change mitigation and rural development challenges, Prof. K. Soami Daya, presented past, present and future framework of DEI in the field of rural development, Prof. Preetam Satsangi and Prof. Gaurav Pratap Rana explained the use of renewable energy at DEI and in rural development and Dr. Yogita Jain along with Dr. Preeti Satsangi presented the idea of circular economy for rural development and DEI’s contribution in paper making recycling articles, edible cutlery, paper from rice straw, compost, coco-ware, herbal soaps and vertical gardening. In the Post lunch, second session, all the participants were taken for field visit to various facilities at DEI. This One-day orientation-cum-workshop was organized by Dr. Ashok Jangid, Department of Physics and Computer Science and Coordinator, RCI-DEI UBA 2.0.



## SOCIAL AWARENESS AND DEVELOPMENT PROGRAMS IN ADOPTED VILLAGES & SLUMS

The students and staff of the Institute on regular intervals render Shramdan Services and organize Awareness Programs on various issues. These programs are organized through Discussions, Pamphlets, Posters, Banners, Rallies and Street Plays. The major issues covered include:

- Intensive Cleaning in adopted Villages, Slums and Neighborhood Community.
- Sanitation, Hygiene, Health, Malnutrition, Evils of Evils of Tobacco, Smoking, Drug Addiction, Traffic Rules, etc.
- Critical health issues, e.g., Tuberculosis, AIDS and STD.
- Tree Plantation, Pollution and Environmental issues.
- Social Issues, Family Planning, Literacy, Women Empowerment, Beti-Bachao-Beti- Padhao.
- Digital Financial Literacy, Vocational Training and Skill Development Programs.
- Sometimes, we distribute Old Clothes, Toys, Books, Stationery etc. to financially downtrodden and people/ children of deprived section of society.
- Awareness in pandemic situation COVID-19.



## FIT INDIA (WALKATHONS, CYCLOTHONS, MARATHONS)

The FIT INDIA movement was launched by the Hon'ble Prime Minister on 29th August 2019. Under this movement staff and students participated in a rally of Cyclothons/ Walkothons/ Marathons.



## TREE PLANTATION

Under this program plants which are antioxidants and increase the immunity of the body were planted.



# Annexure I

## RULE:11

### GOVERNING BODY - LIST OF MEMBERS

Page-1

TERM: 2019-2020 Total Members: 14 Quorum: Eight As on 1-JUL-2019

	Status of Nomination		Name of the Member
(a)	1.	Director (Ex-officio) 9458553555	Professor P.K. Kalra Director Dayalbagh Educational Institute Dayalbagh, Agra-282 005
(b)	2.	Treasurer (Ex-officio) 9897468691	Smt. Sneh Bijlani Treasurer Dayalbagh Educational Institute Dayalbagh, Agra-282 005
(c)	3.	Two Deans from amongst the Deans of the Faculties of the Institute by rotation in alphabetical order of the names of the Faculties. (Ex-officio) (Term-One year: 2019-20: Engg. & Science	Prof. V. Soami Das Dean, Faculty of Engineering Dayalbagh Educational Institute Dayalbagh, Agra-282 005  Prof. Vibha Rani Satsangi Dean, Faculty of Science Dayalbagh Educational Institute Dayalbagh, Agra-282 005
	4.	-do-	
(d)	5.	One nominee of the Ministry of Education, Govt. of India. (From July, 2017) Mob.: 09415158687 Email: rrsingh1954@gmail.com	Dr. Ram Rakshpal Singh Professor of Botany Lucknow University, 15/153, Indira Nagar, Lucknow-226016, U.P.
(e)	6.	One nominee of the Chairman, UGC	<b>As per UGC, Reg., 2010 (Not needed)</b>  Dr. Vandana Shrama Director Higher Education, U.P. Directorate of Higher Education Post Bag No.005 PRAYAG RAJ-211 001
(f)	7.	Director, Higher Education, Uttar Pradesh (Ex-officio) 0532-2623874, 2421213 (Fax) Phone: 9452906572 Email: info@dheup.com	

**GOVERNING BODY - LIST OF MEMBERS (Contd.)**

Page-2

TERM: 2019-2020

Total Members: 14

Quorum: Eight

(As on 1-JUL-

2019)

(g)	8.	One nominee of the Academic Council of the Institute from among its members as specified in Rule 13(c) and (d). (Term: 2018-2021) (w.e.f. 1.7.2018) 9897269797	Prof. Sant Prakash Department of Zoology Faculty of Science
(h)	9.	One nominee of the Radhasoami Satsang Sabha, Dayalbagh, Agra 9359546630	Dr. Vijai Kumar 3/218, Prem Nagar Dayalbagh, Agra-282 005
(i)	10.	One nominee of the Managing Committee of the Radhasoami Educational Institute of Agra, Dayalbagh, Agra (Mob.: 9425323538) (E-mail: gs.solanki53@gmail.com)	Justice Gulab Singh Solanki 179, Rani Bagh (Main) Khandwa Road, Indore-452020 (M.P.)
(j)	11.	One representative each of Industry and Agriculture of Dayalbagh, to be nominated by the President of the Institute. Phone: Res. (011) 26148542 Off. (011) 26149648 Mob. 09810029790 <a href="mailto:rksinha@gmail.com">rksinha@gmail.com</a>	Shri Ravi Kumar Sinha B-2/6, (Ground Floor) Vasant Vihar NEW DELHI-110 057
	12.	-do- 9837308578	Prof. S.S. Bhojwani 3/43, Prem Nagar Dayalbagh, Agra-282 005
(k)	13.	Three persons, not being members or employees of the Institute to be nominated by the President of the Institute from amongst eminent educationists and technologists <b>(Residual term up to 30.6.2020)</b>	Professor Pami Dua C-58, Soami Nagar New Delhi-110017
	14.	-do- 9219500838	Professor V.B. Gupta 3/173, Prem Nagar Dayalbagh, Agra-282 005
	15.	-do- 9557707948	Professor P. Sriramamurti 4/112, Vidyut Nagar Dayalbagh, Agra-282 005

-----X-----