

DAYALBAGH
EDUCATIONAL INSTITUTE



ANNUAL REPORT

2020-2021

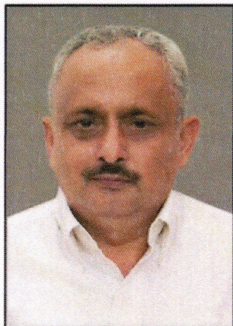


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Director's Message



The Vision, Mission and Developmental Goals of an educational institute are intimately associated with the development of the character of the individual, the community and ultimately, of the nation and society at large. In its ideal form, education should promote an environment of justice, peace, love and trust instead of war, unrest and other activities that destabilize society. DEI education is rooted in its Educational Policy of 1975, that incorporates the ideals and best practices of the Dayalbagh community. The DEI Education Policy follows a Systems approach that integrates social and environmental systems with formal systems of education. The Systems approach to education at DEI also leads to sustainable, frugal innovation through optimization of economy, energy and resources, benefiting society at large and emphatically enunciates the centrality of values-based education that is practised throughout DEI, from pre-nursery to higher education. Uplift of weaker sections, skilling for all ages, upholding of values such as temperance and tolerance, and respect for India's cultural and religious diversity are a part of DEI's foundations, as are agriculture and dairy farming. These are also incorporated into DEI's compulsory, Institute-wide core courses providing our students with invaluable exposure and the opportunity to interact with surrounding social, ecological and economic systems.

Despite the damaging shadow of the pandemic, we at Dayalbagh Educational Institute managed to maintain the academic calendar together with its vast e-cascade network that out-reaches 479±1 locations across the globe ensuring that we did not waste even a single day in providing our students a smooth transition to Audio/ "Supervised" Video online classes during the widely prevalent lockdowns and has served to connect students, teachers and all members of the extended community. The pandemic cast an unflattering light on the harsh asymmetries in our society. The plight of migrant workers, loss of employment and loss of life brought deep pain and uncertainty to our lives. DEI came forward to offer skilling programmes to applicants who could not get admission in regular academic and skilling programmes. Graduate students who could not get admission were given stipends against work done in DEI's agriculture farms, and for other activities. DEI's programmes for village development, start-ups, Digital India, and empowerment of women, SC and ST continued at the same pace as before COVID-19 struck.

DEI signed several Memorandum of Understanding (MoU) with national and international institutions/universities enabling enhancement of research and educational programmes at the institute. DEI is playing the leadership and coordination role in the design and implementation of the Code India initiative. Recently, the Institute has contributed in UGC's Book on "Quality Mandate for Higher Education Institutions in India". The book contains fifteen chapters of which one entitled, 'Systems Approach to Skilling and Vocational Education in India' was contributed by Dayalbagh Educational Institute. The chapter has been highly lauded by the experts of different fields.

In recent times DEI has set up several Biodiversity Parks, Vegetable and Herbal Gardens, Fruit Orchards, Sites for medicinal plants, and Poly-houses spread across approximately 200 acres of land. Its initiatives in the field of Agroecology by establishing a biodiversity park called 'AnupamUpvan', not only help restore environmental balance and generate rich diversity of flora and fauna but they have also come to our rescue to maintain our academic calendar during the phases of COVID-19. Classes and examinations 'under the greenwood trees', thus, become the testimony of the changed narrative of modern education.

A serious, solemn, and sustained initiative of our Institute is in the direction of realizing the lofty ideal of 'Feeding 11 billion people through Lacto-vegetarian nutritious food.' Our Scientific-Axiom (heralding the "Fifth Industrial Revolution" based on Lacto-Vegetarianism/"Shakahar", for feeding a "healthy diet" for an Estimated Population of 11 Billion People) needs to be seriously invoked for keeping abreast & putting into practice Abstract Mathematics of Topological Graph Theory, to achieve Requisite-Success in terms of Requisite Degrees of Freedom/Independence (e.g. via ISM, TQM & AHP), on Urgent Basis.

(Prof. Prem Kumar Kalra)

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 kilometres 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.



Brief History

Soon after Dayalbagh was founded 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 and 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; B.Ed. (B.T.) classes were added in 1951 and the first batch of B.Sc. 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 B.A. and B.Ed. Programmes. Subsequently, in 1958, M.Ed., in 1969 M.A. (Psychology/English/Hindi) and in 1976, M.A. (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 B.Sc. (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. The Institute has since been accorded the membership of the Association of Indian Universities. The Institute comprises faculties of Arts, Commerce, Education, Engineering, Science, Social Sciences and AYUSH. From the session 1986-87, the DEI Technical College, a diploma level Engineering

Institution, from the session 1995-96, the DEI Prem Vidyalaya Girls' Intermediate College, and from the session 2012-13, the REI Intermediate College (Boys) have also been brought under the academic and administrative control of the Institute. The Vocational courses were started in the year 1993. The Women's wing of Technical College – Women's Polytechnic was started in the year 2004, and in the same year, the Institute initiated a major programme of Distance Education to benefit students residing at urban-suburban interfaces. The vocational education programmes of DEI started in 2004, foresaw many elements of the AICTE NVEQF and MHRD Community College schemes launched almost a decade later and is an effort to effectively implement the following national missions for the Socio-Economic Development of the Country:

- The National Mission of Sarv Shiksha Abhiyan – Universal Elementary Education under the Right to Education Act
- Make in India
- Skilling India
- Digital India
- Clean India (Swachh Bharat Abhiyan)
- Unnat Bharat Abhiyan
- Beti Bachao Beti Padhao Abhiyan
- Green India

In 2009, the Dayalbagh Educational Institute was placed in the First Category of 38 “Deemed to be 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”. Also, a Deen Dayal Upadhyay Kaushal Kendra was sanctioned to DEI by MHRD to offer B.Voc., M.Voc. and PhD degrees in skilling. In 2019, 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, 2019, the Institute was placed at 77th rank in the Category of University, 84th rank in the Category of Engineering. Electrical and Mechanical departments of the Faculty of Engineering have been accredited by National Board of Accreditation (NBA). The Institute is open to all irrespective of caste, creed, race, religion, economic position or social status.

Philosophy

The Institute has introduced a scheme of innovative and comprehensive education at university and other technical and general school/college education levels which,

- aims at excellence but not at the cost of relevance.
- inculcates dignity of labour and encourages initiative and creative work.
- is multi-disciplinary, which prepares individuals for the increasingly techno-oriented society of tomorrow without uprooting them from their agricultural moorings.
- aims at generating in the 'Students' the basic values of humanism, secularism and democracy by exposing them to the principles of all the major religions of the world and to their own cultural heritage, thus developing in them an integrated personality of well-adjusted men and women whose 'world has not been broken into fragments by narrow domestic walls'.

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 to provide linkages to all stakeholders' potential 'Values and Quality' to the kinetic permanent state in a dynamically-oriented and refreshed equilibrium through integrated hierarchical system of education enabled by economic and flexible (jugaad) innovation technology founded firmly on DEI's Education Policy. DEI, a leading Entrepreneurship and Consciousness, Teaching-cum-Research Institute, is a model University, measured by its 'excellence, but not at the cost of social relevance' reaching up to the last, the least, the lowest and the lost; pursuing research and discovery with frugal innovations contributing with principle of achieving more with less for nation and community-building and beneficial to public at large with cultural reforms enriching and empowering weaker / under-privileged sections, women and children. In

the year 2004, DEI defined its VISION 2011. This policy heralded many features that have later been incorporated in the Nation's education policy and programs. DEI has been a visionary and forerunner in adopting innovative schemes in the field of education.

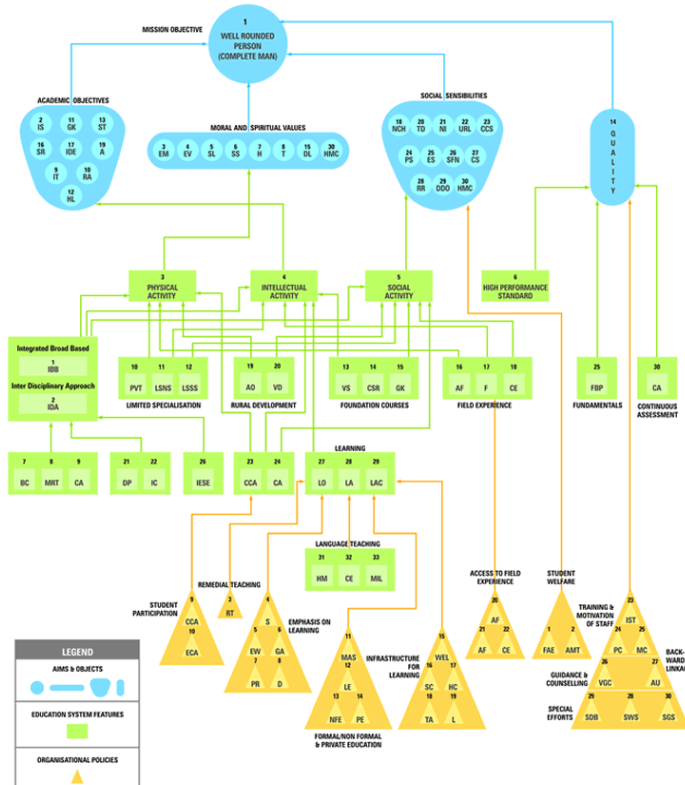
The DEI Education Policy

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 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:

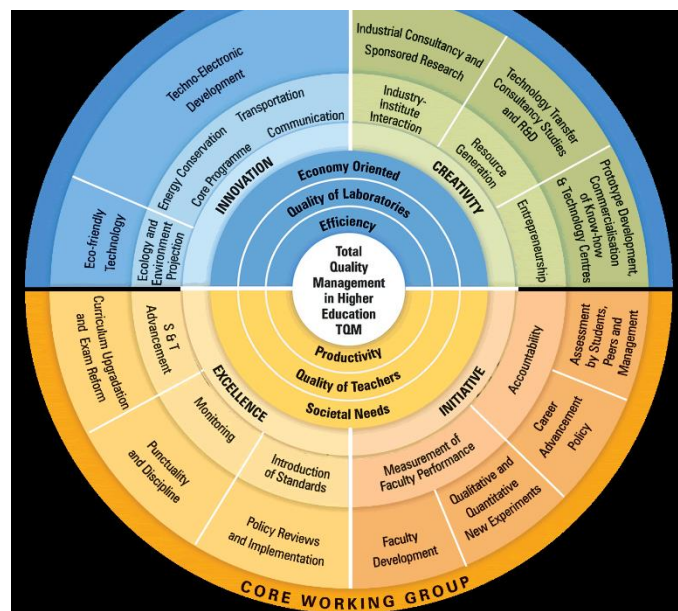
- Physical, intellectual, emotional and ethical integration of an individual to help
- Evolve the complete man with values of humanism, secularism and democracy, to better equip him to solve social, economic and environmental challenges.
- Truthfulness, temperance and courage
- Ideals of humility, simple 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

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.

Interpretive Structural Model for Educational Policy of DEI



A Conceptual model for the Total Quality Management (TQM) framework through which DEI endeavours to achieve quality in Higher Education (Professor P. S. Satsangi, 2002, 'TQM in Higher Education and Technical Educational')



At DEI, in addition to the traditional 3R's of Reading, Writing and Arithmetic, emphasis is laid on the importance of conserving and incrementally nurturing the state of self-actualization of a child from the time of birth. Since the needs, motivation and education vary from individual to individual throughout their lives, DEI attempts to make the initial conditions as favourable as possible. Therefore, education here begins at the tender age of three weeks as the *Superman Evolutionary Scheme*, under which infants from the age of 3 weeks to five years and their parents, undertake various activities in the community agricultural fields as part of their daily routines. It is our observation that such activities, along with the emphasis that we place on minimalism, better worldliness, selflessness, sacrifice and frugal innovation, inculcate and nurture mental and spiritual development.

The Institute offers a whole range of central facilities to its students. These include Central Library, Computer Centre, Games and Sports facilities, Gym, Vehicle parking, Security & Surveillance, 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.

Extrinsic and Intrinsic Education

The educational framework of the Institute addresses physical, mental and spiritual needs through a blend of intrinsic and extrinsic education. While extrinsic education, includes tangible outcomes such as skilling, numeracy, employability and subject matter expertise, is generally provided across all educational systems, careful crafting of an educational framework is required to include intrinsic development as formal part of the curriculum. Intrinsic education is central to DEI's approach and focuses on inculcating in students' values, qualities and attributes such as truthfulness, justice, tolerance, brotherhood, and selflessness that lead to the development and progress of the community. It is obvious that intrinsic education is an intangible and latent, life-long, self-learning process for which

seeds should be instilled at inception and nurtured throughout the learning process. The combination of DEI's intrinsic and extrinsic education ensures development of a 'person-for-community' approach, rather than 'person-for-self'. The various activities and programs implemented at the Institute also effectively contribute to the attainment of UN Sustainable Development Goals (UN SDGs) which provide the blueprint to achieve a better and more sustainable future for all.

At DEI, we encourage a spirit of selfless service and "sacrifice for the larger good, and a frugal, Earth-friendly approach to life. Our education blends 'magnification' which is the development of subtle levels of the inner (microcosmic) self, and 'scaling—up', which refers to processes in the physical world (macrocosm) that lead to profit and pleasure. Holistic education at DEI blends both these aspects of personal development, with the maxim '*Fatherhood of God and Brotherhood of Man*' being an overarching guide. With a fee structure that is the lowest in the country in comparison to the other institutions of higher learning, DEI offers hope to the last, the least, the lost and the lowest.

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, Melathiruvankatanathapuram, 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 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 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:

Vision 2031

The Dayalbagh Educational Institute has embarked upon a bold initiative, VISION 2031, and formulated a comprehensive and progressive Strategic Plan for 2012-2031, with the goal to become a top teaching-cum-research Institute through an exemplary system of education. To establish Total Quality

Management across all activities of the University, the Plan encompasses undergraduate and postgraduate education, research, infrastructure, information and communication technology and campus development. The Institute has accepted this challenge and is confident of achieving success with the cooperation of faculty, staff, students, alumni and other interested partners.

Working towards a sustainable world

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. 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:

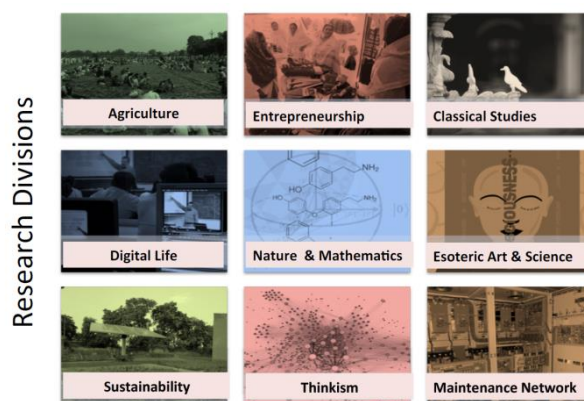


Research with Impact, Engaging with our Communities

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, Ecosteric 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 2nd 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 check-ups, 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 economic 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.

Education@DEI in the time of COVID-19

DEI's commitment and investment since 2004 in Information Communication Technology (ICT) in education paid rich dividends during the COVID-19 pandemic. With "Be Prepared" as one of its guiding tenets, DEI was braced to weather the storm even before it hit. Ready 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. Extensive use of various Virtual Classroom platforms since 2004 gave us the edge in adapting to the challenges posed by lockdowns without any loss of time and quality. Also handy in the initial phase of academic activities were supervised, on-line open-book and take-home exams and Daily Home Assignments that are part of DEI's evaluation system.

Admissions too, proceeded as scheduled even under the new normal: DEI managed almost 40,000 applications for 4000 seats across all its programmes and courses through online, supervised entrance exam, followed by interviews. The Institute delivered education practically at the doorstep of its students, following norms of supervised online education without any misuse of OCT.

The pandemic cast an unflattering light on the harsh asymmetries in our society. The plight of migrant workers, loss of employment and loss of life brought deep pain and uncertainty to our lives. DEI came forward to offer skilling programmes to applicants who could not get admission in regular academic and skilling programmes. Graduate students who could not get admission were given stipends against work done in DEI's agriculture farms, and for other activities. DEI's programmes for village development, start-ups, Digital India, and empowerment of women, SC and ST continued at the same pace as before COVID-19 struck.

One of the global impacts of COVID-19 has been universal adoption of Work From Home (WFH). This has resulted in a paradigm shift psychologically as well as physically, as interaction moved from in-person to virtual mode. Prolonged confinement has had a deep impact on mental states of people. A new kind of 'virtual society' has come into being, with on-line meetings, seminars, workshops and conferences becoming the norm, changing the way people and businesses conduct operations. With marketplaces shifting to the virtual world, e-commerce has become mainstream. The pandemic has conclusively demonstrated how people can benefit through minimalism, conservation and innovation in life and work.

On 19th September, 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's spontaneous appreciation is worth quoting. He remarked: "There should be a DEI in every district of India". On 23rd September, 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".

It is worth mentioning that the Dayalbagh and DEI perspective and culture is embedded in its unique lifestyle that has been evolved according to the needs of the changing times but never at the cost of certain basic elements that remain immutable even in the face of changes elsewhere. The philosophy of "Waste nothing" has always remained cardinal to our lifestyle that aims at reducing wasteful consumption of all-natural resources viz., energy, water, food and in short, all resources. It is through this way of living we curate and scale up DEI-CUM-Dayalbagh MODEL OF Sustainable modern healthcare habitat and self-defence. With given multiple choices, at DEI, we take the golden mean path which helps in sustainable development and is also in consonance with what Dr. Sam Pitroda reflected in his remarks on the activities of DEI and its educational framework.

Agriculture, Consciousness and Entrepreneurship

Agriculture, Consciousness studies and Entrepreneurship are the three thrust areas of DEI. These areas link up past with future, frugal engineering with cutting-edge technologies, tilling, toiling (using one's hands) and tinkering with higher-order, sophisticated thinking. A healthy body and mind, practices such as ultra-transcendental meditation leads to inner well-being and a stress-free lifestyle, enabling progress because of non-interference of negativities.

The Dayalbagh agriculture produce includes grains, fruits, vegetables, flowers and medicinal plants in 1200 acres of land. Agriculture produce during the lockdown period was abundant in quantity and variety. The total Green Fodder yield including *Rabi, Kharif and Ziad* grew to 40184 qts. in 2019-20, which is the highest in comparison to the previous five years of agricultural output. The social work carried out by Dayalbagh community and DEI students, staff and faculty members not only contribute to healthy lifestyle but also to food security, healthcare and selfless services to mankind. The Dayalbagh community's schedule of twice-a-day agriculture fields activity along with congregational prayers open to all, has considerably helped the members of the community not only in maintaining their physical health and mental alertness but also in enhancing their consciousness awakening, inner peace and a spirit of optimism in life.

Gaushala, another pillar in the process of sustainable development of DEI and Dayalbagh, has about 1100 cows. In the last 10 months the average milk production has been 1,465 litres per day with a peak also of 1,957 litres. The gaushala milk is consumed by the community and DEI Dairy. The Dairy has pasteurizing, homogenising, testing and packaging facilities for milk and milk products. DEI's dairy products with value addition like flavoured milk, butter, chocolates, ice-cream, fudges, truffles, basundi, burfi, hot-milk, curd, ghee, shrikhand and many others are manufactured afresh every day. Nothing stops the dedicated spirit of service, and even in the face of the COVID-19 crisis. 698 liters of milk has been processed in a single day and 180 liters on daily basis in DEI Dairy. Similarly, 232 liters tea were made for distribution to field workers in a single day and 110 liters on daily basis. "On an average 6000 liters of milk and 3500 liters of tea have been processed in a month during the pandemic. The butter production has gone up to 4000 cakes of fifty grams per week.

AIR and WATER QUALITY Monitoring and Assessment at Dayalbagh

"At Dayalbagh we have a Modern Health Care Habitat with provisions for health security and personal security with built-in self defence mechanism". This objective is achieved through SIGMA SIX Quality, Values and Attributes wherein Water and Air Quality are monitored regularly at Dayalbagh.

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. Outdoor self-defence physical training provided a huge sense of personal safety and security.

Innovation leads to development. The integration of UV light sources and sanitizers provided a three-dimensional impact in the sanitization of classrooms and offices. The use of masks to cover mouth and nose and wearing of helmets became mandatory for the prevention of COVID-19. It may be noted that these practices and sanitization processes started in DEI in the month of December 2019, much before the pandemic struck! DEI-associated Self-Help Groups (SHG) and village development activities under Apparel & Toys Manufacturing Association (ATMA) fulfilled the need for masks for the community and the Institute. DEI is a successful participant of TEQUIP ill programme and DST Mission Innovation Projects. All through the COVID-19 pandemic, Institute activities continued uninterrupted.

Achievements and Awards during the pandemic

DEI faculty and students participated in the MIT hackathon COVID-19 Challenge- India: Turning the Tide' and won several awards and recognitions.

A team led by Prof. K Soami Daya won this award in Track E. Mr. Ashish Kumar won in Track B, Mr. Prateesh Kumar and Ms. Amolly Gupta won in Tack J.

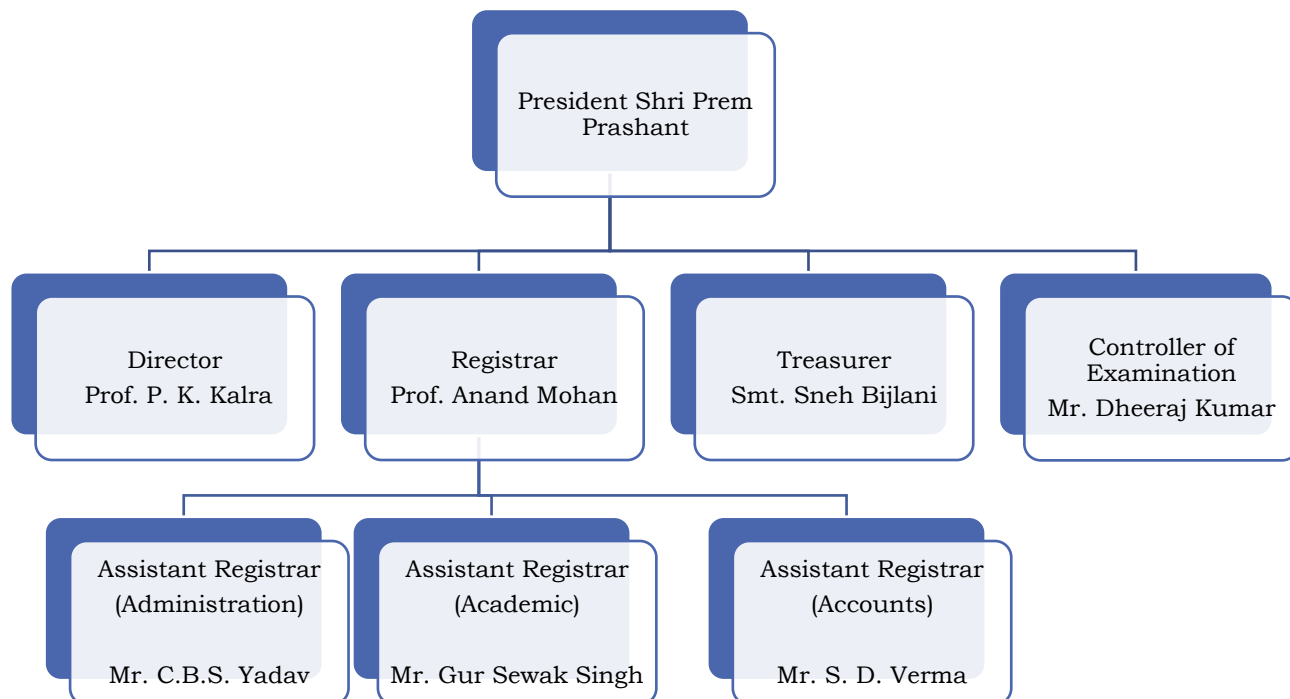
Self-Help Groups based in the tribal areas of Madhya Pradesh were awarded a contract to stitch uniforms for schools by the local government.

Master's programmes were started in Business Incubation, and B. Tech in Agriculture Engineering.

DEI also signed several MoUs with national and international institutions/universities, organized the bi-annual Dayalbagh Science of Consciousness Conference on May 22, 2020 and January 01, 2021, conducted webinars and organized lectures by several distinguished speakers.

Organizational Structure

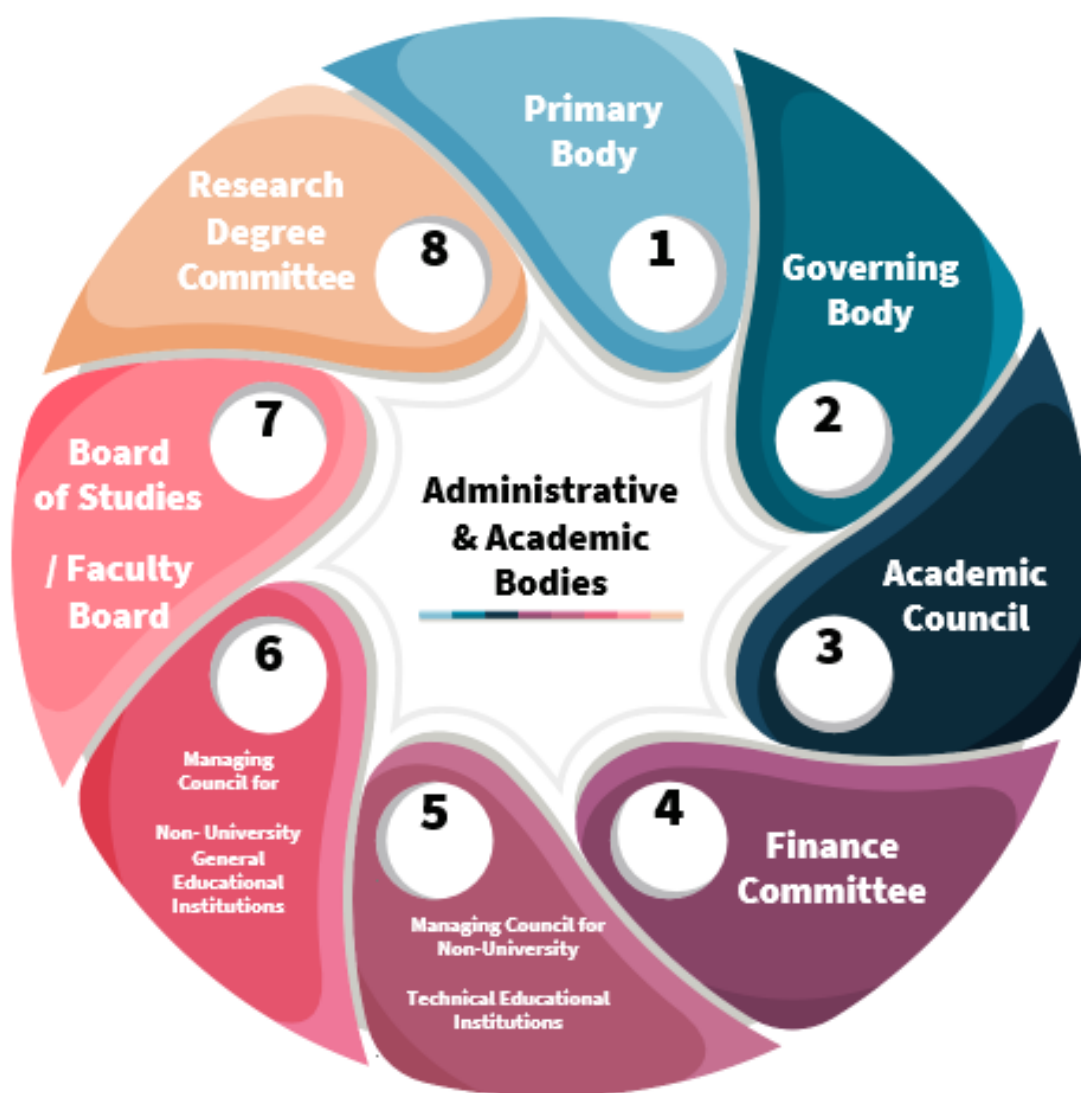
The senior administration of the Institute consists of the following.



Administration:

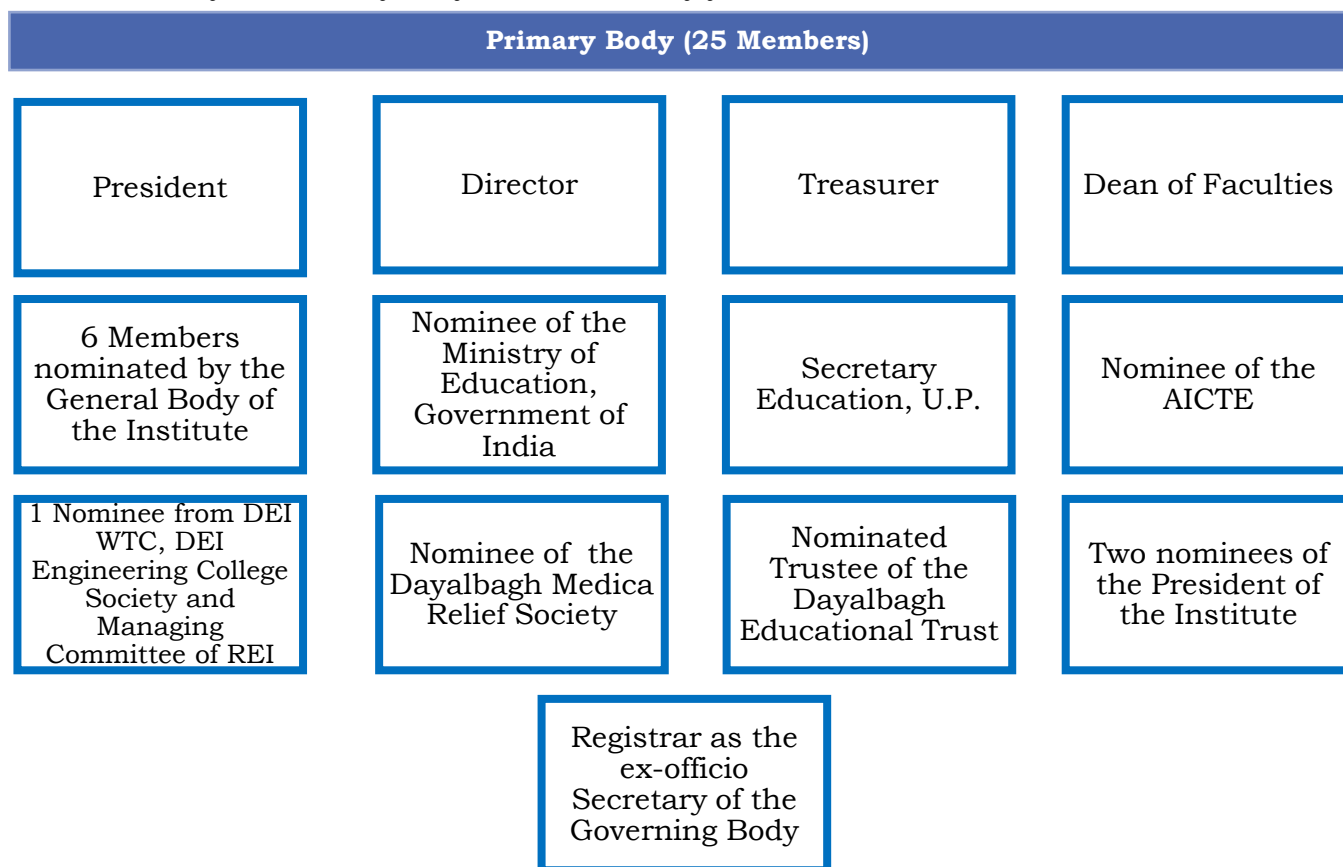
Administrative Officer (Computers): Mr. H. K Khanna, M.Sc.
Assistant Registrar (Administration): Mr. C.B.S Yadav, M.A
Assistant Registrar (Academic): Mr. Gur Sewak Singh, B. Com
Assistant Registrar (Accounts): Mr. S.D Verma, M.A

Administrative and Academic Bodies



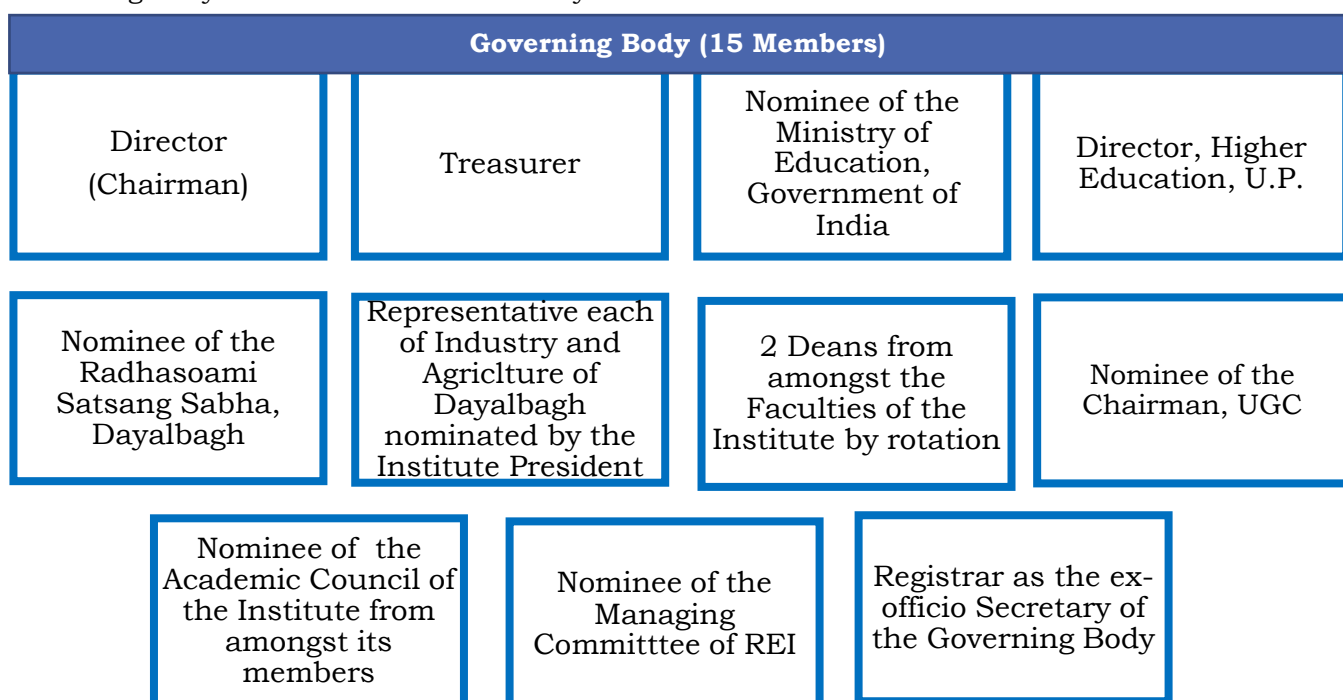
Primary Body

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.



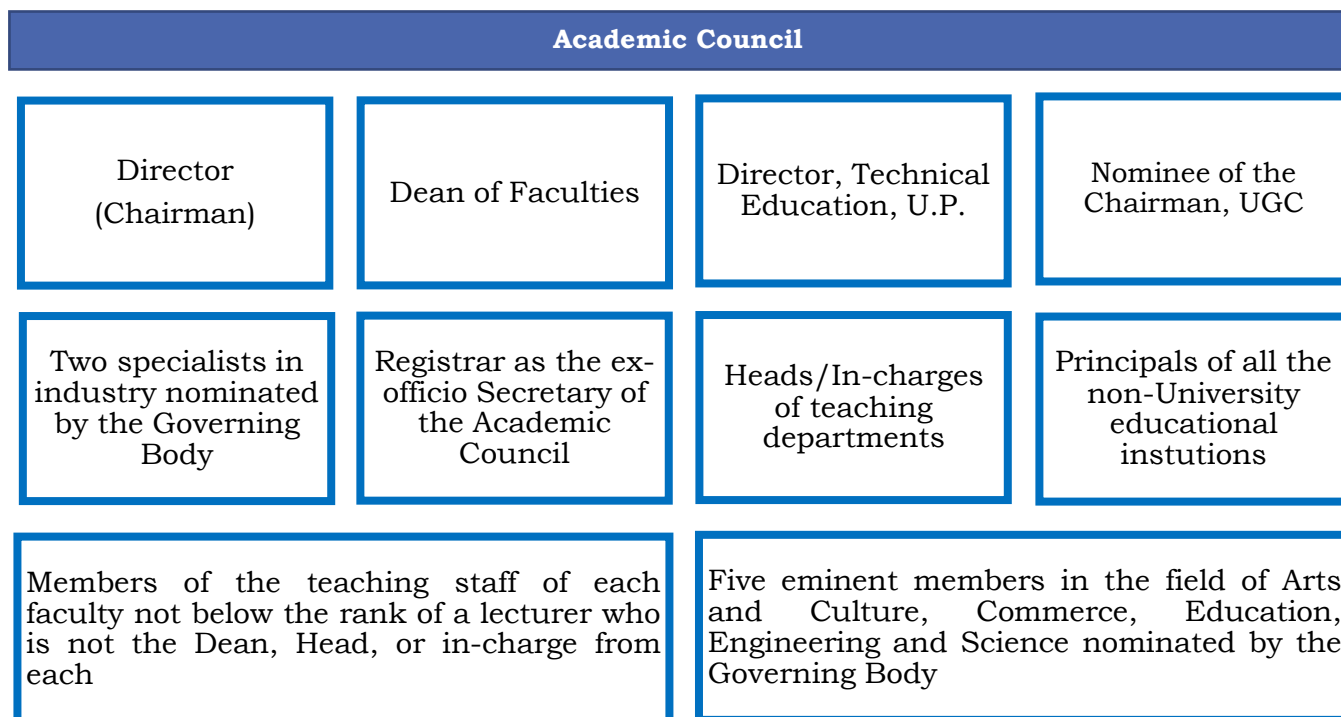
Governing Body

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.



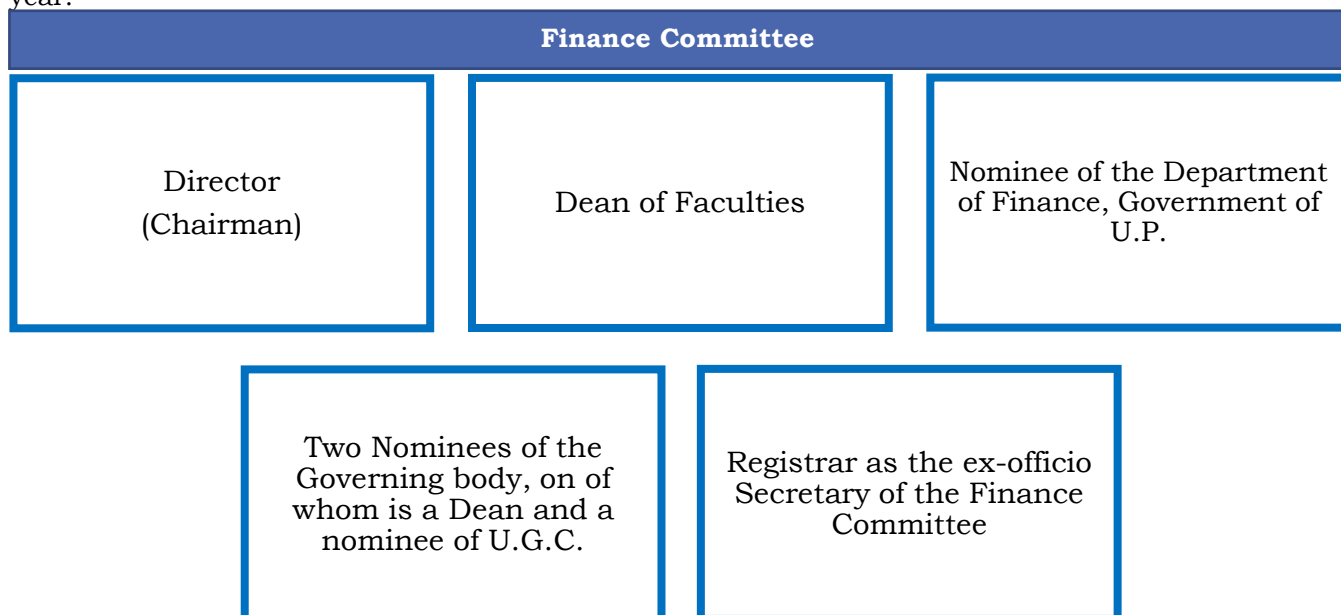
Academic Council

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



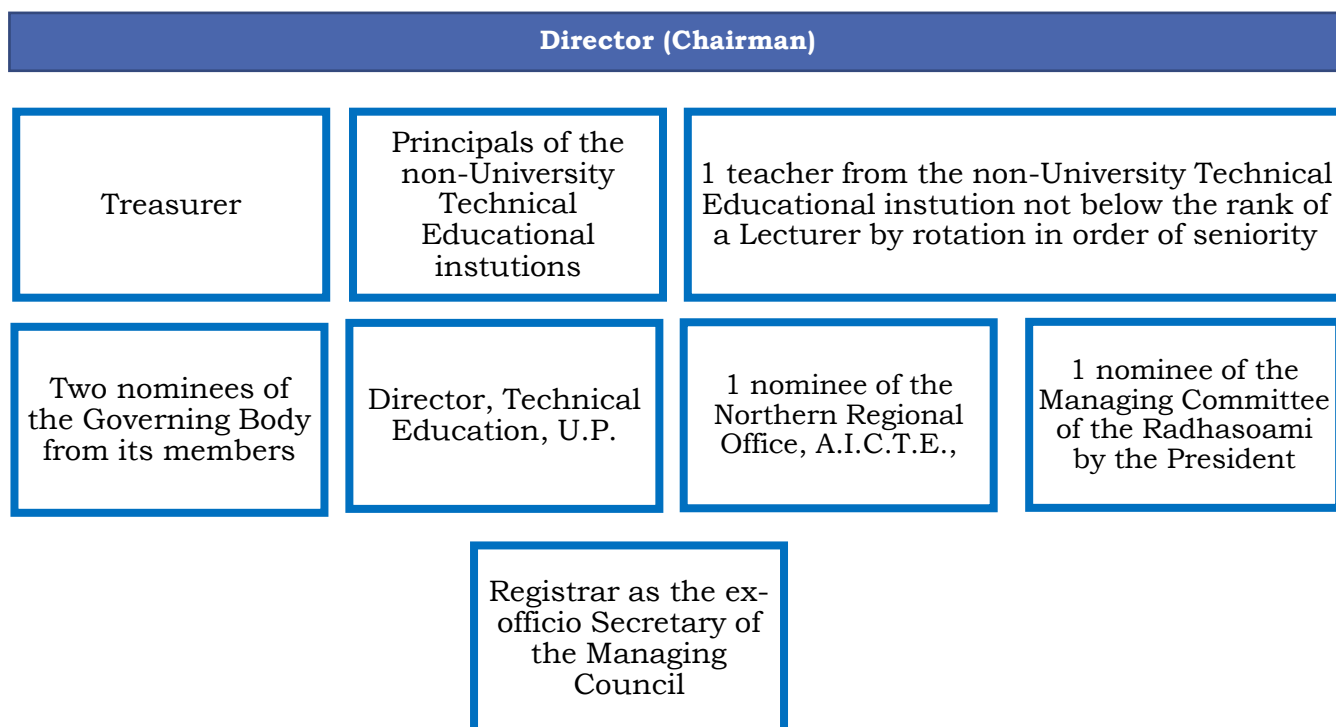
Finance Committee

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



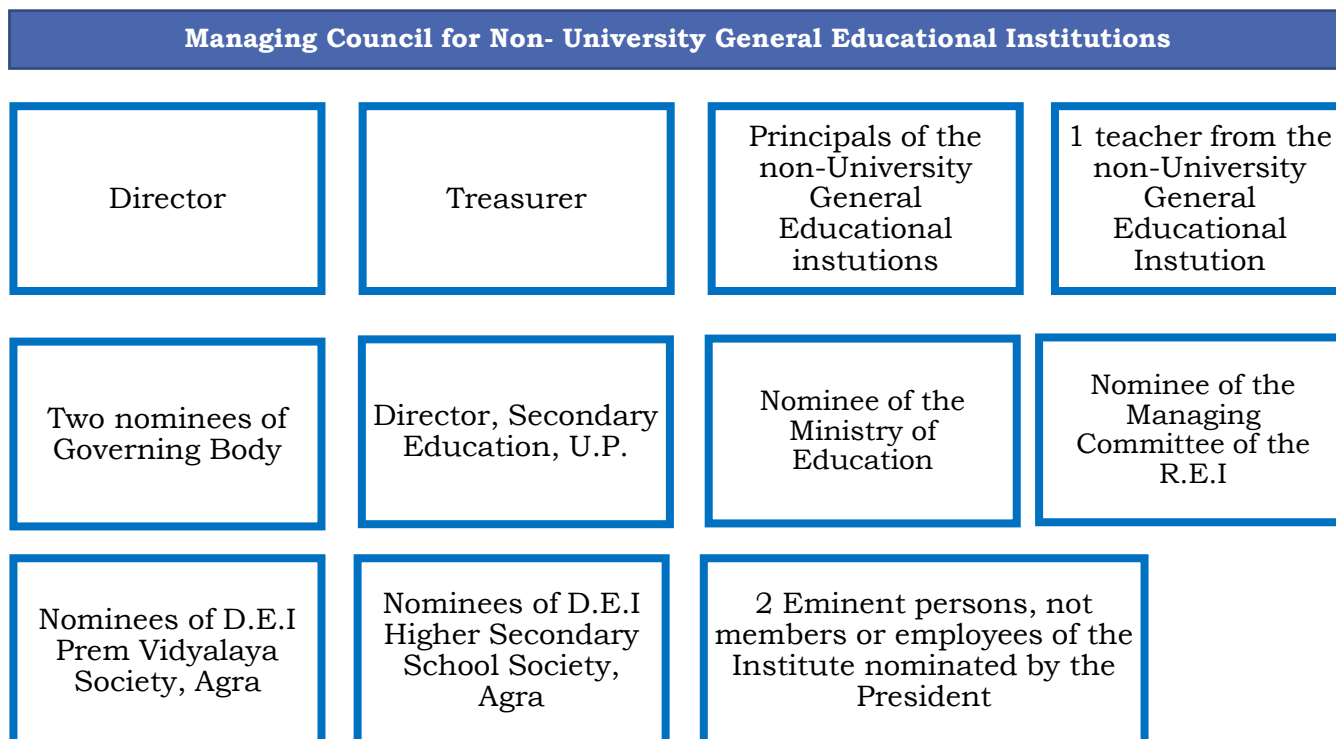
Managing Council for Non-University Technical Educational Institutions

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



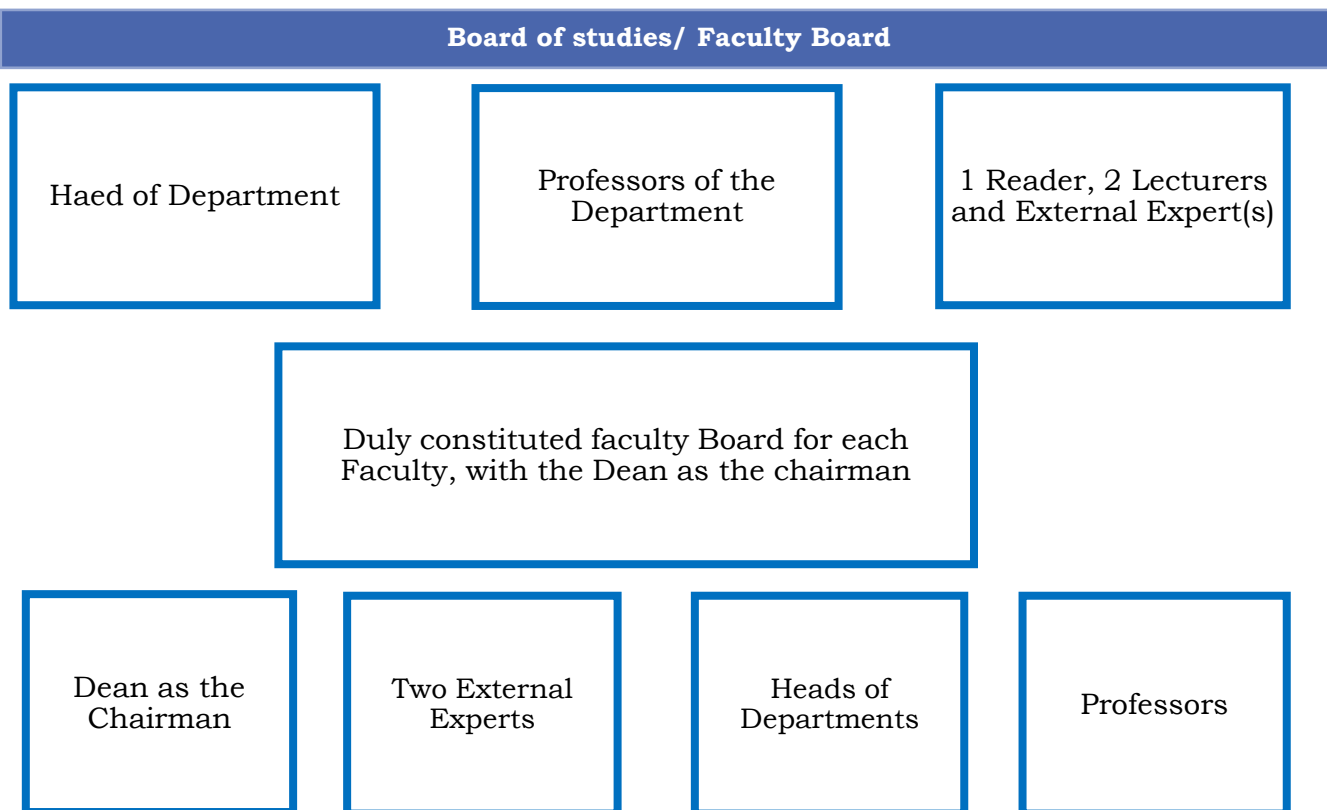
Managing Council for Non- University General Educational Institutions

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



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:

- ❖ 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

XXXIX Convocation

The 39th Convocation of Dayalbagh Educational Institute was held in a simple yet dignified and majestic ceremony on 22 January, 2021. 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 Rani Sahiba. Shri. Amit Khare, Secretary, Ministry of Human Resource Development (Higher Education), Govt. of India, was the Chief Guest on this occasion. The event also witnessed the presence of several dignitaries of DEI as well as Dayalbagh. Considering the fact that the clouds of the Covid-19 scare are still dangling above, as the members of a responsible Institute, committed towards the causes like social awareness and sustainable living, DEI authorities ensured that all safety measures were followed during the organization of this most cherished event. Not only the number of persons to be present inside the hall at a single point of time was curtailed to a safe figure, the precautions like having pre-medical check-up, maintaining physical distance and wearing masks and headgears were also duly taken.

The Convocation ceremony began after the robed Academic Procession reached the Convocation Hall and the members, including the Chief Guest, took their respective seats. After the rendering of the Institute's Prayer, Prof. P.K. Kalra, Director DEI, sought permission from Dr. Vijay Kumar, President DEI and declared the Convocation open. The Director then presented his comprehensive report highlighting how DEI has successfully presented the model of sustaining under the new normal, be it the online teaching, the admission process, or the evaluation system. The fact that the Institute has efficaciously adapted to the challenges posed by the Pandemic at different stages and attained all the feats without the loss of time and quality, was clearly projected in the report. The honorable Director also highlighted how DEI contributed great efforts towards dispelling the plight and disillusionment caused by the increased asymmetries in our society in the current harsh scenario. He also drew the attention towards the fact that the principals of minimalism, conservation and innovation followed at DEI and Dayalbagh in all the endeavors, have imparted to us this power of survival amidst the threats.

This was followed by the conferring of various Degrees, Medals and Awards and signing of the Scroll of Honour by the Director. The list began by conferment of Degree of D. Sc./D. Litt. (Honoris Causa) to 11 esteemed persons namely, Prof. Vaideshwaran Rajaraman, Prof. Vijay Bhatkar, Prof. K. Rajmohan Padiyar, Prof. Ashok K. Agrawala, Prof. Karmeshu, Prof. A.P. Bhatnagar, Prof. Mark Juergensmeyer, Prof. David Christopher Lane, Prof. Andrea Christopher Lane, Prof. Suhash Chandra Dutta Roy and Prof. Surendra Prasad. This year 4843 students received their degrees in different programmes of the Institute. Total 123 Director's Medals were awarded and the number of students receiving the degrees of Doctor of Philosophy (Ph.D.) this year was 72. Ms. Shreyanshi Bansal and Ms. Anam Saifi were awarded the President's Medals for securing highest Grade point at the All-Undergraduate Examinations and All Postgraduate Examinations, 2020 respectively. Mr. Apar Singh and Ms. D. Shabd Pyari received the Founder's Medals for being the Best All-rounder students among the first-Degree Students of the Institute graduating in the year 2020.

Another unique feature was added to this year's Convocation as the Distinguished Alumni Awards were given to ten dignitaries under three categories. 'The Alumni of DEI Award' was presented (jointly) to Shri. P.P. Dhir for community service and to Prof. Sukhdev Roy for Academic performance. 'The Friends of DEI Award' was presented (jointly) to Prof. V.B. Gupta, Prof. Harjinder Singh Sekhon and Prof. Pami Dua. 'The Service to DEI and Community Award' was given (jointly) to Col. S.P. Satsangi and Shri. Janak Raj Singh. Prof. D.K. Srivastava, Prof. V. Charan Prasad and Dr. V. Dakshina Murty were presented awards as 'To be treated as Alumni' for their long administrative and Academic association with the Institute. Mr. Amit Khare and Mr. M. Asad Pathan were then presented the 'Lifetime Achievement Awards' on behalf of the Systems Society of India.

Following this, the Chief Guest was formally introduced by the President and was invited to give his Convocation Address. In the impressive speech by Mr. Khare, he clearly acknowledged that DEI has been much ahead of times in terms of its philosophy and vision and agreed that many of the ideas of NEP 2020 are already enshrined in the ethos of the Institute. Finally, the Vote of Thanks was proposed, and the

ceremony was declared closed by the Honorable Director. In the evening, the students of DEI organized an Exhibition followed by a short Cultural Programme that together showcased the multi-faceted talent and skills of the students and provided a glimpse of the strong legacy of socio-cultural ethos that is carried by all the learners at DEI.

Diamond Jubilee Memorial Lecture



Dayalbagh Educational Institute organized two distinguished lectures in February 2021, commemorating the fortieth year of acquiring the status of a Deemed to be University, being celebrated as DEI@40. The most prestigious institutional lecture series established in 1976-77 to commemorate the Diamond Jubilee of Education in Dayalbagh has now been rechristened as Distinguished Lecture Series of Dayalbagh Educational Institute (Deemed to be University) [erstwhile Diamond Jubilee Memorial Lecture Series of DEI].

The first lecture for this year under the series was organized on 6 February 2021 and was delivered by Prof. Kalyanmoy Deb, Herman E. and Ruth J. Koenig Endowed Chair Professor in the Department of Electrical and Computer Engineering at Michigan State University, USA. Prof. Deb's research interests are in evolutionary optimization and their application in multi-criterion optimization, modelling, and machine learning. He has been a visiting professor at various universities across the world and was awarded IEEE Evolutionary Computation Pioneer Award for his sustained work in EMO, Infosys Prize, TWAS Prize in Engineering Sciences, CajAstur Mamdani Prize, Distinguished Alumni Award from IIT Kharagpur, Edgeworth-Pareto award, Bhatnagar Prize in Engineering Sciences, and Bessel Research award from Germany. He is fellow of IEEE, ASME, and three Indian science and engineering academies. He is renowned worldwide for his research that includes over 552 research papers with citations exceeding 152,000 and an h-index of 124.

Prior to the lecture, an email communication between Most Revered Prof. PS Satsangi Sahab, Chairman, Advisory Committee on Education, Dayalbagh Educational Institutions and Prof. Kalyanmoy Deb was presented before the audience. In his response, Prof. Deb had noted the following:

"I am so happy to receive the message from Prof. Satsangi. I still remember meeting him in DEI for another occasion about 15 years ago. I am aware of his association with MSU and my chair position from Mr. Roger Koenig connects directly with Prof. Satsangi with his work with Prof. Herman Koenig at MSU.

I hope to visit DEI and meet him and others when the travel restriction is lifted.

I am also indebted to DEI for this opportunity to deliver the Diamond Jubilee Memorial Lecture today. I am looking forward to it.

Kindly convey my deepest respect and appreciation to Prof. Satsangi for his many years' ground-breaking work both spiritually and technically."

In his lecture entitled "Quest for Knowledge: Explaining How Certain AI Systems Work", Prof. Deb focused on fundamental questions such as what is the source of all knowledge? How do we find it and distil it? Prof. Deb provided a historical perspective on the problem of knowledge distillation, and how it relates to today's fast-growing AI-human symbiosis. Prof. Deb then went on to expand the development of optimization methods – the process of systematically reducing the complexity of the problem to arrive at

adequate or optimal solutions that maximize the competing parameters of interest. The impact of Prof. Deb's research has had far reaching implications – from sustainable forest management, knowledge discovery in the automobile, to effective gameplay strategies for cricket and Tic-Tac-Toe! In the last part of his talk, Prof. Deb turned his focus to perhaps one of the most challenging issues facing today's Artificial Intelligence (AI) revolution. It is now well known that complex AI systems, in particular deep neural networks (DNNs), can be trained to solve challenging problems while employing several million hidden parameters. Given their complexity, they are however akin to large '*black-boxes*' that are capable of solving difficult problems but cannot describe *why* or *how* they arrive at those particular solutions. As AI systems start being employed on a large-scale, this lack of an explanation at inference poses a real challenge. With the eventual goal of creating *explainable* AI systems, Prof. Deb has employed his optimization methods, in particular a non-linear decision tree (NLDT) approach, in the service of obtaining robust solutions to several complicated problems but without sacrificing human-interpretability. Critically, for each of these problems the NLDT approach outperformed the multi-parameter DNN computational model. In sum, Prof. Deb's curiosity-driven approach to knowledge distillation using optimization methods inspired and captured the imagination of the audience.

During the interaction following the lecture, Most Revered Prof. PS Satsangi Sahab was pleased to shower Ambrosial Blessings with an Exhortation towards integration between human qualities and values & innovation. The brain apertures activated through the practice of Ultra-transcendental Meditation were diagrammatically Presented and Explained. In the brain, we have the frontal cortex and then the parietal cortex. On the other hand, right opposite the frontal cortex is the temporal cortex and from there then deeper into the head is a "supranatural cortex" that is from the temporal to the occipital lobe. Most Revered Prof. Satsangi also Graciously Advised to rise beyond the mundane level of industrial practice and worldly issues so that it opens the door to everlasting peace and eternal harmony.

The lecture was delivered through videoconferencing where Prof. Kalyanmoy Deb was joined by representatives of the alumni and friends of DEI at his residence near Michigan State University. The group also presented a memento to Prof. Deb as a token of appreciation on behalf of the Institute. The programme for the first lecture concluded with a brief cultural show followed by the National Anthem.

The second lecture under the series was organized on 9 February 2021 and was delivered by Dr. Manu Prakash, Department of Bioengineering and Senior Fellow at Woods Institute for the Environment at Stanford University, USA. Dr. Manu Prakash is a recipient of the MIT Ideas Sustainability Prize, the prestigious MacArthur Fellowship (commonly referred to as the genius grant), Rotary International Humanitarian Award for Contributions in Science, Technology and Robotics and the Microbiology Society Unilever Colworth Prize among several other awards and honours. Dr. Prakash is dedicated towards inventing, building and scaling-up frugal science tools to democratize access to science such as Foldscope, diagnostics of deadly diseases like malaria and convening global citizen science communities to tackle planetary scale environmental challenges such as mosquito or plankton surveillance by citizen sailors mapping the ocean in the age of Anthropocene. He has also made notable contributions in response to the COVID-19 diagnostic challenges. In consideration of DEI's extensive outreach programmes and an indomitable will to reach out to the last, the least, the lowest and the lost, he has been a zealous collaborator and often interacts and inspires students at Rajaborari (M.P.) and other rural and tribal centres of DEI.

Prof. Prakash in his talk entitled "Frugal Innovation: Democratizing Curiosity-Driven Science" outlined his interpretation of sustainable frugal innovation, defining it as the process achieving the same or comparable performance as state-of-the-art devices, but at a fraction of the cost. He motivated this approach through the story of the invention of the bicycle and what it did for mobility in terms of access; his team aspires to do for the world's most pressing issues – healthcare and education. Despite the strides made over the last century, many parts of the world remain bereft of access to quality healthcare either because of lack of reliable sources of electricity, or sophisticated diagnostic equipment. With an ambitious goal of providing access to "healthcare under a tree", the Prakash Lab designs solutions for extremely resource- constrained settings, ranging from field diagnostics to hand on science education. Some projects include Foldscope (low-cost microscope), Oscan (scanning oral cavity for cancer), Punchcard microfluidics (chemistry kit), VectorChip and Abuzz (detecting and identifying mosquito species),

Paperfuge (low-cost centrifuge), MalariaScope (diagnostics), PlanktonScope (capturing the ocean's diversity) and a recent rapid and accurate low-cost saliva test for COVID-19.

Traditionally, high-quality education has been associated with high cost of delivery which exacerbates the economic disparity between aspiring learners. The lab's work has been instrumental in bringing this gap by using Science and nurturing curiosity through the thrill of discovery available at a very affordable cost. One of the most widely known innovations from the Prakash Lab is a paper origami microscope (foldscope) that has been used by DEI school students not only in Dayalbagh but also in the deep rural areas of Murar (Bihar) and the tribal hinterlands of Rajaborari (Madhya Pradesh), providing frequent opportunities for interaction with Stanford University students and faculty. Children at these schools, being able to practice hands-on science with their own scientific instrumentation, become more sensitive to issues such as hygiene and sanitation and the use of scientific method in agriculture and dairying. The young students also serve as ambassadors of science in their families and communities. Dr. Prakash concluded the lecture with posing a challenge to the young students to come up with the next landmark frugal innovation.

The lecture was delivered through videoconferencing where Dr. Manu Prakash was joined by representatives of the alumni and friends of DEI at Stanford University. The group also presented a memento to Dr. Prakash as a token of appreciation on behalf of the Institute. A short programme was presented following the lecture, showcasing the talent and culture at Dayalbagh Educational Institute and concluded with the National Anthem.

Both the distinguished lectures were transmitted globally through the Dayalbagh cascade network and had participation of thousands of live audiences.

Founder's Day

31 January 2021 was celebrated as the Founder's Day in DEI. Every year, this day is celebrated in the fond memory of the Institute's Founder Director, Most Revered Dr. M. B. Lal Sahab, on His birthday. The whole campus embraced the scholarly aura along with the hues of festivities as all the buildings were decorated with colourful displays and buntings and all the departments and laboratories were open for the public view.

Commendable efforts were made by the DEI fraternity to showcase the perfect blend of research-mindedness, innovative creativity, and vocational skills instilled in the students of different programmes. The gathering was catered with the overview of various segments of DEI education through films, posters, brochures, working models and products arranged in the large number of exhibit stalls installed at the open areas of the campus which made it very convenient to follow full precautions in view of the ongoing pandemic. The grand exhibition included the exhibits by the different Faculties, Colleges and Schools of DEI along with the departments providing central facilities. 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. The exhibits included fields such as Robotics, Artificial Intelligence, Photonics, Art & Craft, Food Processing, Drawing and Painting, Bamboo Technology, Dairy Products and special models and prototypes on environment, sustainability, climate economy, water and air quality, etc.

In order to promote the Skill India Programme, stalls were also allotted to the DEI students and Alumni who have established their start-ups with the direct or indirect help from the Institute. Various creative games and entertaining dramatic performances (*Nukkad Natak*) were also organized on this occasion. At the same time, the organization of Bhakti Sangeet by the staff and students of DEI ensured that the event carried the spirit of spiritual purity away from the worldly razzle- dazzle.

Independence Day Celebrations

The 75th Independence Day was celebrated at Dayalbagh Educational Institute on 15 August 2021 with zeal and enthusiasm while adhering to the Covid-19 norms. Shri G.S. Sood, President, DEI and RSS Sabha, hoisted the National Flag as the Chief Guest on the occasion. A grand March Past was presented by the students of different faculties, schools, and colleges of DEI.



Shri Sood highlighted the significance of the sacrifices made by the freedom fighters and praised the role played by DEI in propagating value-based education in the country. Director of DEI, Prof. P.K. Kalra mentioned the new initiative taken by DEI in the form of Art, Beauty, and Creativity (acronym ABC) and emphasized that we should all be ingenious and creative in bringing our own original creation to the world. Winner trophies were given to the winning teams of the March Past. Among the boys, Technical College and DEI Band jointly won the prize whereas in the category of girls, DEI Prem Vidyalaya was declared the winner. A Special March Past Prize was also given to DEI Saran Ashram School Children. Special prizes were also given to the winners of 'Swatantrata ka Amrit Mahotsav' event that was organized earlier. The names of the winners are as follows-

1. K. Gurumehak, REI
2. Shabd Sharma, REI
3. Chavi Saraswat, Science Faculty
4. Garima Singh, DEI Prem Vidyalaya
5. Surya Yadav, Education Faculty
6. Tamanna Tomar, RSAW School
7. Khushi Kumari, Prem Vidyalaya
8. Agam Preet, REI
9. Avdesh Singh, Education Faculty
10. Agam Singh, REI

Republic Day Celebration

The 72nd Republic Day was celebrated by the staff and students of Dayalbagh Educational Institute with intense zeal along with strict adherence to norms of social distancing. Shri Devendra Kumar Singh Kushwaha IAS, Agra Development Authority was the chief guest on this occasion. The National Anthem was sung in unison by all as the tricolor was unfurled. The NCC Cadets upheld the guard of honour followed by the Sant Supermen troupe of young and vibrant kids and students from various schools, college and 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. Students of REI Intermediate College, DEI band, Faculty of Arts, DEI and PV Girls Intermediate College were declared winners of the March Past. The Chief Guest felicitated the winners of athletic events and appreciated the value-based education of DEI. Prof. P.K. Kalra, Director DEI thanked the students and staff for their enthusiastic participation and motivated them to work diligently despite challenges. Other eminent dignitaries present were Prof. Anand Mohan, Registrar, DEI, Mrs. Sneh Bijlani, Treasurer, DEI; Shri Dheeraj Kumar, Controller of Examinations; Chief Proctor (Boys), Prof. J. K. Verma and all Deans and Heads of Departments. The gathering was also treated with some melodious patriotic songs. Later, all the dignitaries took part in Tree plantation programme to mark the commitment towards the environment.

Institute's Achievements

MoU with the University of Edinburgh

Dayalbagh Educational Institute and The University of Edinburgh, Scotland, UK signed a Memorandum of Understanding (MOU) through a ceremony organized via multi-way videoconferencing on 03 November 2020. With this agreement, the Universities entered into a formal partnership strengthening a historical relationship that dates back more than seven decades. The MoU celebrates this landmark and momentous relationship with the following words at the beginning of the agreement document the University of Edinburgh (UoE) recognize the historical relationship between the two institutions and the gracious legacy in academic leadership and social reform of Most Revered Professor Makund Behari Lal, an alumnus of the University of Edinburgh and the Founder of Dayalbagh Educational Institute.



The MoU envisages the principles of collaboration and co-operation and to be open with each other. The two institutions envision sharing of information, experience and skills, to learn from each other and develop effective working practices, work collaboratively to identify solutions, eliminate duplication of effort and be aware of risk and costs while complying with all applicable laws and best practices. The ceremony was blessed with the Gracious presence of Most Revered Prof. P.S. Satsangi Sahab, Chairman, Advisory Committee on Education, Dayalbagh Educational Institutions. Prof. James Smith, Vice Principal International; Prof. Pankaj Pankaj, International Dean for South Asia and Ms. Amrita Sadarangani, Regional Director South Asia and others representing the University of Edinburgh joined the ceremony along with faculty and administration of Dayalbagh Educational Institute. The University of Edinburgh has been influencing history since it opened the gates to its first students in 1583 and consistently ranks in the top tiers of global Universities.

MoU with the University of Birmingham, UK



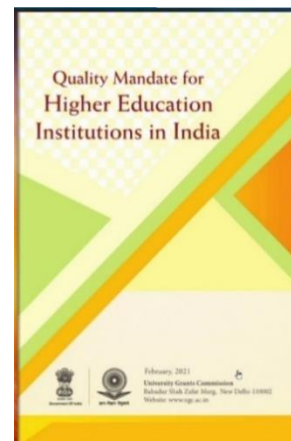
A ceremony to mark the momentous occasion of signing of a Memorandum of Understanding (MoU) between Dayalbagh Educational Institute and the University of Birmingham, UK was organized on 30 March 2021 through videoconferencing, with participation of senior members of the administration and faculty from both sides. Through the agreement, both Universities have agreed to consider opportunities for knowledge exchange, exchange of staff and students, joint educational cooperation and any other form of engagement that might be amenable to both parties. Over a short span of time, several collaborative projects are already being

developed between DEI and The Edward Cadbury Centre for the Public Understanding of Religion at the University of Birmingham and it is expected that the agreement will expand the partnership to other areas of mutual interest between the Universities.

Most Revered Prof. P. S. Satsangi Sahab, Chairman, Advisory Committee on Education, Dayalbagh Educational Institutions conveyed His “best wishes and congratulations for the grand success of the proposed collaborative MoU signing”.

DEI Contributes for UGC's Book on Quality Mandate for Higher Education Institutions in India

On the auspicious day of Basant Panchami (16 February, 2021), UGC launched a book entitled *Quality Mandate for Higher Education Institutions in India*. The book was released by Shri. Rajeev Kumar, Vice Chairman of Niti Aayog, Government of India. The book contains fifteen chapters. One of the chapters entitled, 'Systems Approach to Skilling and Vocational Education in India' was contributed by Dayalbagh Educational Institute. This chapter, which was highly lauded by the experts of different fields, has been penned by Prof. P.K. Kalra, Dr. Mugdha Sharma, Prof. K. Soami Daya and Prof. J.K. Verma.



On the occasion of the Book Launch, Prof. Kalra expressed that the 1975 Education Policy of DEI is like a conclusive document for all sorts of educational reforms. Many years back, this policy proposed the concept of compulsory Core Courses in the curriculum from Pre-Nursery level up to Graduation. This concept had garnered considerable praises during the time of 1986 National Education Policy and a proposal on similar lines has been firmly included in the New Education Policy as well. Prof. Kalra also stated that the inclusion of the Core Courses in the education provided at DEI helps the students to evolve themselves as responsible and alert human beings, having social sensibility, as well as it also fulfils the purpose of imparting value and quality-based education that cultivates all round development. He stressed the fact that skill-development has been a vital segment of Education Policy of DEI from the very beginning and then provided an impressive overview of all the dimensions of DEI's holistic model of education.

The gathering during this event included Prof. D.P. Singh, Chairman UGC, along with the other UGC officials, Vice Chancellors of different Universities, the writers of different chapters of the launched book and many other officials of the Government of India.

Staff and Student Strength and Composition

Number of Teaching Faculty	
Teaching Staff	288
Assistant Professors	135
Associate Professors	20
Professors	20
Guest Faculty	46
Non-Teaching Staff	
Total Non-Teaching Staff	270

A. NUMBER OF STUDENTS ENROLLED IN THE DEI CAMPUS (SESSION 2020-2021)

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	3283	401	103	300	134	4087
		W	4212	880	102	692	201	6129
		T	7495	1281	205	992	243	10216
GENERAL	3	M	1581	179	57	164	76	2057
		W	2192	463	58	417	126	3256
		T	3773	642	115	581	202	5313
SC	4	M	449	60	18	61	13	601
		W	603	138	15	115	22	893
		T	1052	198	33	176	35	1494
ST	5	M	51	03	01	01	01	56
		W	37	06	00	05	04	48
		T	88	09	01	06	05	104
BC	6	M	1053	135	27	66	44	1281
		W	1086	197	27	135	40	1445
		T	2139	332	54	201	84	2726
PH	7	M	22	06	00	00	00	28
		W	17	01	00	01	00	19
		T	39	07	00	01	00	47
Minority	8	M	49	09	00	03	00	61
(Muslim)		W	50	16	01	05	03	72
		T	99	25	01	08	03	133
Other	9	M	78	09	00	05	00	92
Minorities		W	227	59	01	14	06	307
		T	305	68	01	19	06	399
TOTAL	(3+4+5+6+7+8+9)		7495	1281	205	992	243	10216

B. UG & PG- Students enrolment 2020-2021- Information Centres (Excluding ICTs)-Distance

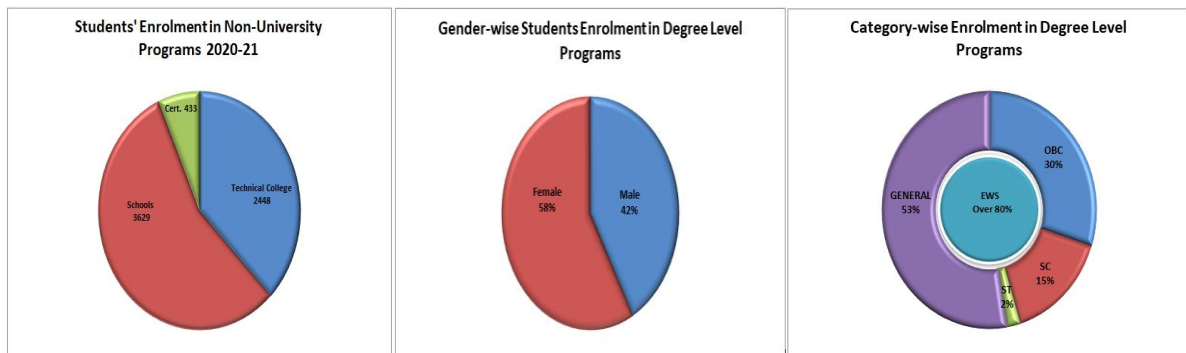
Category	General		BC		SC		ST		PH		Minority (Muslim)		Minority (Other)		Total		Total
1	2		3		4		5		6		7		8				
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	
UG	97	108	49	65	33	36	05	11	0	0	02	0	06	10	192	230	
PG	63	59	27	17	13	09	01	0	0	0	01	0	0	03	105	88	
Total	160	167	76	82	46	45	06	11	0	0	03	0	06	13	297	318	

C. Students Registered in Technical Schools and certificates

Technical College (Diploma) : 2448
 Schools : 3629
 CART (Certificates) : 382

Total (A+B+C) = :16778

For the academic session (2020-2021) the students' enrolment in the Regular, ICT and Open/Synchronous Learning Centres is 16,778 with an increase of 9% from the previous session. A graphical distribution of students' enrolment is depicted below.



LIST OF STUDENTS (2012-21) RECEIVING MEDALS AT THE THIRTY NINTH CONVOCATION

DIRECTOR'S MEDAL

For securing highest grade point in -

		Roll No.	Name of the Student	CGPA
1.	High School Examination, 2020	1800195	SHREYA GUPTA	9.99
2.	Intermediate Examination, 2020	1800983	ARPIT KAPOOR	9.86

For securing highest grade point in -

3.	Technical Diploma Level Examinations, 2020	1703188	LAVINA CHUGH	9.54
4.	P.G.D.B.L.O.R. Examination, 2020	1900404	RONY VARGHESE	8.25
5.	P.G.D.J.M.C. Examination, 2020	1901051	MOHMMAD TAUFIQUE	9.75
6.	P.G.D.J.M.C. Examination, 2020	1901041	AKANKSHpA GUPTA	9.75
7.	P.G.D.T.D.P. Examination, 2020	1901101	SONAL DOGRA	9.10
8.	P.G.D.Th. Examination, 2020	1950545	YOGESH NARULA	9.46
9.	Diploma in Ayurveda (Up-Vaidya) Examination, 2020	1803389	TEJAL GOSWAMI	9.53
10.	Diploma in Elementary Education Examination, 2020	1802052	PRIYANKA SHARMA	9.42
11.	P.G.D.C.S.A. Examination, 2020	1904402	SHIVANI SHROTIYA	9.05
12.	P.G.D.B.E. Examination, 2020	1902744	RITIKA AGARWAL	9.56
13.	P.G.D.U.P.M Examination, 2020	1902072	DAMINI BHARDWAJ	9.54
14.	P.G.D.H.R.S.W Examination, 2020	1901656	MAUSAM GUPTA	9.24
15.	P.G.D.W.M. & S.E. Examination, 2020	1906844	EKTA SHARMA	8.82
16.	P.G.D.S.H.E Examination, 2020	1904040	SAJAL	9.69

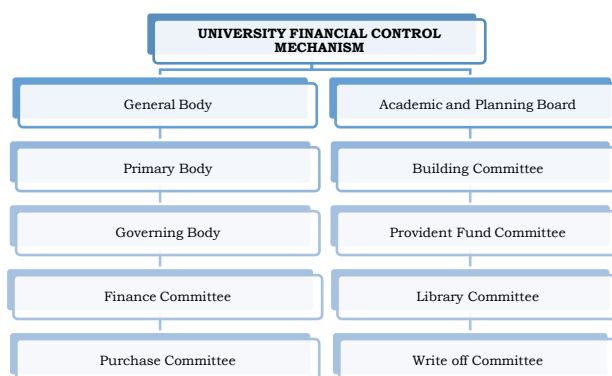
For securing highest grade point in CULTURAL EDUCATION & COMPARATIVE STUDY OF RELIGION in -

17.	Diploma in Elementary Education Examination, 2020	1802052	PRIYANKA SHARMA	9.42
18.	Technical Diploma Level Examination, 2020	1705335	SONALI PAINGORIYA	9.15
19.	B.A. Examination, 2020	1801818	ANANYA SHARMA	9.48
20.	B.Sc. (Home Science) Examination, 2020	1801167	ZEBAR	8.97
21.	B.F.A. (Applied Art)	161434	ANKITA BHATIA	8.45
22.	B.F.A. (Painting)	161453	PREETI GUPTA	9.10
23.	B.F.A. (Sculpture)	161440	JYOTI SHARMA	8.98
24.	B.Com. Examination, 2020	1804215	MAHIMA SATSANGI	9.00
25.	B.Com. (Corporate Accounting & Law) Examination, 2020	1801078	SNIGDHA KATIYAR	7.85
26.	B.Tech. Examination, 2020	164085	APAR SINGHAL	9.47
27.	B.Tech. (Part Time) in Electrical Engineering Examination, 2020	154268	SATGURU SARAN	7.66
28.	B.Sc. Examination, 2020	1804074	PRAGYA SINGH	9.14
29.	B.Sc. Honours in Applied Botany Science Examination, 2020	1703896	SHWETA TOMAR	9.10
30.	Integrated Dual Dip.-Degree Voc. Dip. In I.T. & B.Sc. Comp. Sci. Examination, 2020	1702417	SALONI SHARMA	9.53
31.	B.B.A. Examination, 2020	1805339	NANDINI JAIN	9.33
32.	B.A. (Social Science) Examination, 2020	1803033	AMRASHA SHARMA	9.44
33.	B.Voc. (Apparel Design) Examination, 2020	1704448	POOJA GOYAL	8.74
34.	B.Voc. (Food Processing) Examination, 2020	1704553	CHANCHAL CHAUDHARY	8.60
35.	B.Voc. (Textile) Examination, 2020	1704487	BEAUTI KUMARI	7.70
36.	B.Voc. (Renewable Energy) Examination, 2020	1703288	RUCHI JHA	8.87
37.	B.Voc. (Agriculture Technology) Examination, 2020	1703640	SANDHYA TYAGI	8.74
38.	B.Voc. (Internet of Things) Examination, 2020	1703667	ANKIT BIRLA	8.96
39.	B.Voc. (Dairy Technology) Examination, 2020	1702105	PRIYANKA RATHORE	9.01
40.	B.Voc. (Automobile) Examination, 2020	1703392	ARPIT SINGH	8.33
41.	B.Voc. (Water, Sanitation & Waste Management) Examination, 2020	1703355	SANDEEP MUDGAL	7.98
For securing highest grade point in -				
42.	B.A. Examination, 2020	1801818	ANANYA SHARMA	9.48
43.	B.Voc. (Apparel Design), Examination, 2020	1704449	PRAGATI DUBEY	9.28
44.	B.Voc. (Food Processing), Examination, 2020	1704551	ADITI GUPTA	9.10
45.	B.Voc. (Textile), Examination, 2020	1704501	MONIKA GUPTA	9.07
46.	B.Voc. (Renewable Energy), Examination, 2020	1703291	SADHVI TIWARI	9.03
47.	B.Voc. (Automobile), Examination, 2020	1703386	AMIT AGARWAL	8.82
48.	B.Voc. (Agriculture Technology), Examination, 2020	1703627	KAUSHIKI YADAV	8.83
49.	B.Voc. (Internet of Things), Examination, 2020	1703667	ANKIT BIRLA	8.96
50.	B.Voc. (Dairy Technology), Examination, 2020	1702105	PRIYANKA RATHORE	9.01
51.	B.Voc. (Water, Sanitation & Waste Management) Examination, 2020	1703327	ANANT AKASH	8.95
52.	B.Sc. (Home Science) Examination, 2020	1801164	SHAGUN RAO	9.29
53.	B.Com. Examination, 2020	1850058	SHIVAM GOYAL	9.54
54.	B.Com. (Corporate Accounting & Law) Examination, 2020	1801076	SAURAV CHAUDHARY	8.32
55.	B.Com. (Corporate Accounting & Law) Examination, 2020	1801083	TUSHAR GUPTA	8.32
56.	B.Ed. Examination, 2020	1803246	N. RITU MURTY	9.23
57.	B.Tech. in Civil Engineering Examination, 2020	164056	VAIBHAV SHARMA	9.17
58.	B.Tech. in Electrical Engineering (with Spl. in Computer Science) Examination, 2020	146440	C. JYOTHIKA	9.47

59.	B.Tech. in Electrical Engineering (with Spl. in Computer Science) Examination, 2020	164085	APAR SINGHAL	9.47
60.	B.Tech. in Mechanical Engineering Examination, 2020	164201	AAKARSH KUMAR DUBEY	9.35
61.	B.Tech. in Footwear Technology Examination, 2020	164172	SHALINI MITTAL	9.08
62.	B.Tech. (Part Time) in Electrical Engineering Examination, 2020	154263	KRISHAN KANT TYAGI	7.71
63.	B.Sc. Examination, 2020	1804061	MITALI VARSHNEY	9.71
64.	Integrated Dual Dip.-Degree Voc. Dip. In I.T. & B.Sc. Comp. Sci. Examination, 2020	1702417	SALONI SHARMA	9.53
65.	B.B.A. Examination, 2020	1805339	NANDINI JAIN	9.33
66.	B.A. (Social Science) Examination, 2020	1803033	AMRASHA SHARMA	9.44
67.	B.A. Honours (Drg. & Ptg.) Examination, 2020	1703739	DEEKSHA AGARWAL	9.31
68.	B.A. Honours (English) Examination, 2020	1703787	NEHA MAHESHWARI	9.43
69.	B.A. Honours (Hindi) Examination, 2020	1703772	SUMAN VERMA	9.30
70.	B.A. Honours (Music) Examination, 2020	1703724	ANJALI KUMARI	9.29
71.	B.A. Honours (Sanskrit) Examination, 2020	1703780	LALITA	9.63
72.	B.F.A. (Applied Art) Examination, 2020	161434	ANKITA BHATIA	8.45
73.	B.F.A. (Painting) Examination, 2020	161453	PREETI GUPTA	9.10
74.	B.F.A. (Sculpture) Examination, 2020	161440	JYOTI SHARMA	8.98
75.	B.Sc. Honours (Home Science) Examination, 2020	1703917	MAHIMA GAUTAM	9.42
76.	B.Com. Honours Examination, 2020	1700406	AKANKSHA AGRAWAL	9.73
77.	B.Com. Honours (Corporate Accounting & Law) Examination, 2020	1702036	AYUSHI BEHL	8.67
78.	B.Sc. Honours in Applied Botany Science Examination, 2020	1703896	SHWETA TOMAR	9.56
79.	B.Sc. Honours (Botany) Examination, 2020	1702344	SHREYASHI BANSAL	9.81
80.	B.Sc. Honours (Chemistry) Examination, 2020	1702306	PRAGATI BHARADWAJ	9.29
81.	B.Sc. Honours (Computer science) Examination, 2020	1702278	MANISHA	9.55
82.	B.Sc. Honours (Mathematics) Examination, 2020	1702245	DIKSHA JETHNANI	9.69
83.	B.Sc. Honours (Physics) Examination, 2020	1702229	ARUNIMA	9.50
84.	B.Sc. Honours (Zoology) Examination, 2020	1702351	SOMYA KULSHRESHTHA	9.50
85.	B.B.A. Honours Examination, 2020	1702699	CHHAVI AGARWAL	9.67
86.	B.B.A. Honours Examination, 2020	1702741	SHAIL TAHILIANI	9.67
87.	B.A. Honours (Social Science) (Economics) Examination, 2020	1702993	LOVEY JUREL	9.58
88.	B.A. Honours (Social Science) (Political Science) Examination, 2020	1702975	ANJALI VERMA	9.53
89.	B.A. Honours (Social Science) (Political Science) Examination, 2020	1702986	JINI JAIN	9.53
90.	B.A. Honours (Social Science) (Psychology) Examination, 2020	1702977	ARSHITA SATSANGEE	9.73
91.	B.A. Honours (Social Science) (Psychology) Examination, 2020	1703832	SANYA AGARWAL	9.73
92.	B.A. Honours (Social Science) (Sociology) Examination, 2020	1703018	SOUMYA MAHESHWARI	9.68
93.	M.A. (Drawing & Painting) Examination, 2020	1801183	BHANU PRIYA	9.60
94.	M.A. (English) Examination, 2020	1801205	SUGANDHA KHERA	9.29
95.	M.A. (Hindi) Examination, 2020	1801224	POONAM BAGHEL	9.23
96.	M.A. (Music) Examination, 2020	1801243	ARTI GUPTA	9.56
97.	M.A. (Sanskrit & Culture) Examination, 2020	1801277	MEGHA JAIN	9.72
98.	M.A. (Theology) Examination, 2020	1650591	PAYAL SHARMA	9.68
99.	M.Sc. (Home Science) Examination, 2020	1801294	POOJA KUMARI	9.24
100.	M. Com. Examination, 2020	1805706	PRIYANSHI SARASWAT	9.40

101.	M.Ed. Examination, 2020	1800475	KRATI JADON	9.42
102.	M.Tech. (Engineering Systems) Examination, 2020	1805581	AKASH JAIN	9.68
103.	M.Sc. (Botany) Plant & Microbial Biotechnology Examination, 2020	1803447	NISHI TOMAR	9.69
104.	M.Sc. (Chemistry) Examination, 2020	1803476	KUMARI RUCHI	9.46
105.	M.Sc. (Computer Science) Examination, 2020	1800003	SAKSHI AGARWAL	9.01
106.	M.Sc. (Mathematics) Examination, 2020	1803526	DIMPLE SHARMA	9.75
107.	M.Sc. (Physics) with spl. in Electronics Examination, 2020	1803591	ANAM SAIFI	9.85
108.	M.Sc. (Zoology) Examination, 2020	1803543	ANJALI CHAUDHARY	9.41
109.	M.B.A. (Business Management) Examination, 2020	1704246	HARSHIT SHARMA	9.40
110.	M.B.A. (Agricultural Management) Examination, 2020	1801508	SHALINI PANDEY	9.17
111.	M.A.(Social Science) (Applied Economics) Examination, 2020	1801381	AYUSHI KUKREJA	9.52
112.	M.A.(Social Science) (Political Science) Examination, 2020	1803167	RIYA MISHRA	9.29
113.	M.A.(Social Science) (Psychology) Examination, 2020	1803181	BHAVYAA KULSHRESTHA	8.87
114.	M.A.(Social Science) (Sociology) Examination, 2020	1803220	SEEMA	9.39
115.	M.Voc. (Textile) Examination, 2020	1802554	NISHITA JAIN	9.08
116.	M.Voc. (Food Processing) Examination, 2020	1802537	PRERNA SINGH	8.72
117.	M.Voc. (Dairy Technology) Examination, 2020	1803627	VIKAS VERMA	9.29
118.	M.Phil (Drawing & Painting), Examination, 2019	1807404	RENU VERMA	9.06
119.	M.Phil (Home Science), Examination, 2019	1807444	PRACHI VARSHNEY	9.81
120.	M.Phil (Music), Examination, 2019	1807466	SHREYA PANDEY	9.70
121.	M.Phil (Music), Examination, 2019	1807464	PRIYANKA SINGH	9.70
122.	M.Phil. (Education) Examination, 2020	1900564	MUKESH VERMA	7.94
123.	M.Phil. (Political Science) Examination, 2019	1807701	KRITI	9.70
PRESIDENT'S MEDAL				
For securing highest grade point in -				
124.	All Undergraduate Examinations, 2020	1702344	SHREYASHI BANSAL	9.81
125.	All Postgraduate Examinations, 2020	1803591	ANAM SAIFI	9.85
D.E.I. FOUNDER'S MEDAL				
126.	Best All-Rounder among the First Degree Students of the Institute Graduating in the Year 2020	164085	APAR SINGHAL	9.47
		1700424	B. SHABD PYARI	9.29

Institute Finance



a. Institute Funds

Institute Funds

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

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"> 1. Fees 2. Income from interest 3. Contributions by trust 4. Contributions by Alumni Associations

During the financial year 2020-2021 the Institute received Rs. 5109.00 lakh as Maintenance Grant from UGC and Rs. 2.99 lakhs as Capital Assets and Revenue. The UP Government sanctioned a grant of Rs. 2013.96 lakhs as Regular Salary Grant and Rs.1.25 lakhs for NSS. The income from investment from non-government sources amounted to Rs. 805.99 lakh. The Unit Cost was Rs. 80,974/- (without salary). Total budget of the Institute for the year 2020 - 2021 was Rs 7.40 Crore out of which Rs 4.65 Crore have been spent on Infrastructure. Infrastructure Budget for TEQIP grant ended on 31.3.2021, was Rs. 1.77 Crore which has been utilized during the project duration

b. Progress in Research

During the session the Institute has undertaken 58 sponsored research projects worth Rs. 30.67 Crore sponsored by DST, MHRD, UGC, ICSSR, Ministry of Textiles, ISRO, MNRE, DBT, AICTE and UPSDM, AICTE, Ministry of Tourism. A summary of the Projects is given below:

S. No.	Sanctioning Agency	Amount Sanctioned (in Lakhs)
1.	DST	177.70
2.	MHRD	163.85
3.	ICSSR	4.10
4.	ISRO	18.60
5.	AICTE	27.92
6.	SERB	17.30
7.	MNRE	204.15

C. Fellowships and Scholarships

During the session 2020-2021, DEI, students received fellowships in the form of JRF, SRF, PDF and Inspire fellowships. A summary of the fellowships and scholarships is given below:

S. No.	Sanctioning Agency	No. of Students	Payment Mode
1.	UGC-NET, Junior Research Fellowship	59	Web Portal
2.	Post-Doctoral Fellowship for SC & ST	02	Web Portal
3.	Maulana Azad Fellowship	03	Web Portal
4.	Rajiv Gandhi National Fellowship	14	Web Portal
5.	Swami Vivekanand Single Child Girl's Child Fellowship	13	Web Portal
6.	National Fellowship for OBC	11	Web Portal
Total		90	

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.

Programmes Offered by The Faculty

- Undergraduate: B.A. Honours (Arts/Fine Arts)/ B.Sc. Honours (Home Science), B.F.A., B.Voc. (AD), B.Voc. (FP&P)
- Post Graduate: M.A., M.Sc. (Home Science), M.Voc. (AD), M.Voc. (FP&P)
- M.Phil. & PhD: in all six subjects
- PG Diploma Courses: PGDT, PGDJMC, PGDDFM and PGDTPD
- Integrated course in Theology: PGDTDC – M.A. - M.Phil.
- Modular Courses: Vyavasayik Hindi, Creative Writing, Translation, Traditional Indian Miniature Painting, Folk Songs of India, Repair and Maintenance of Musical Instruments, Gayaki of Agra Gharana, Photography & Photo Journalism, Block Printing.

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. 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 (PGDTPD), 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 Equipment, Lithography Machine, Pottery Wheels, Ball mill, Pot mill, Pug mill, Gas Furnace, Electric furnace for Ceramics Design.

Seminar/Symposia/Conference Organized

1. AICTE Training and Learning (ATAL) Academy Online Faculty Development Programme (FDP) on Painting, 27- 31 Oct.2020.
2. AICTE Training and Learning (ATAL) Academy Online Faculty Development Programme (FDP) on Mural, 5 -10 Nov.2020.
3. AICTE Training and Learning (ATAL) Academy Online Faculty Development Programme (FDP) on Photography, 9 - 13 Feb.2021.

Publications

Namita Tyagi, A.A. Almelker Ka Kala Sansar, Innovation: The Research Concept, A Multi-Disciplinary Monthly Journal, May, 2021, ISSN NO.2456-5474

Participation in Conference/ Workshops/ Seminar/Symposia/ Webinar

1. Dr. Namita Tyagi, Dr. Sonika and Mr. Amit Johri, participated in AICTE Training and Learning (ATAL) Academy Online Faculty Development Programme (FDP) on Mural, 5 - 10 Nov.2020
2. Dr. Namita Tyagi, Dr. Sonika and Mr. Amit Johri participated AICTE Training and Learning (ATAL)Academy Online Faculty Development Programme (FDP) on Photography and Media Communication, 9 - 13 Feb.2021
3. Dr. Namita Tyagi, Dr. Sonika and Mr. Amit Johri, participated AICTE Training and Learning (ATAL)Academy Online Faculty Development Programme (FDP) on Photography and Media Communication, 23 - 27 Feb.2021

4. Ms. Geetika Gumber participated in Faculty Development Program on Traditional Indian Wisdom on Teaching & Learning from Central University of Rajasthan
5. Ms. Geetika Gumber participated in Faculty Development Program on Apparel Design and Textile Design from ATAL Academy.
6. Ms. Farheen Ishtyak participated in Faculty Development Program on 'Traditional Indian Wisdom on Teaching and Learning' organised by TLC, Central University of Rajasthan, in 2020.
7. Ms. Geetika Gumber participated in short term course on Functional & Technical Textile- Design, Structure, Testing & Applications in IIT, Delhi
8. Ms. Geetika Gumber participated in Induction/Refresher program on "Advance Ecological Techniques in Textile Chemical Processing for Sustainable development", organized by department of Technology, K.S. Rangasamy College of Technology.
9. Ms. Farheen Ishtyak participated in "Use of Personal Protective Clothing in Fight Against Pandemic" organised by IQAC Committee and Department of Textile and Apparel Designing in 2020 at Sir Vithaladas Thackersey College of Home Science.
10. Ms. Farheen Ishtyak participated in "An Integrated Approach to Holistic Wellness During COVID Pandemic" by IQAC committee and Department of M.Sc. Specialized Dietetics in 2020 at Sir Vithaladas Thackersey College of Home Science.
11. Ms. Farheen Ishtyak participated in "Fashion Trends Post COVID" by IQAC Committee and Department of M. Design (Fashion Design) in 2020 at Sir Vithaladas Thackersey College of Home Science.

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 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 organized an Online FDP on "Photography & Media Communication " from 23 Feb 2021 to 27 Feb 2021 in collaboration with AICTE Training and Learning (ATAL) Academy.
- Annual Drama Festival (Joint Venture of English, Hindi and Sanskrit Department): The Annual Drama Festival was organized by the English, Hindi and Sanskrit departments, Faculty of Arts, DEI from 17-19 March, 2021. Even the hovering threat of Corona Virus could not dissuade the drama lovers from participating in this thrilling cultural and theatrical bonanza. All the precautions as per the pandemic protocol were duly followed during the organization of this much awaited event. Total seventeen plays were performed in this competition. The highlight of this year's Drama Festival was the August Presence of Most Revered Prof. P.S. Satsangi Sahab, Chairman, Advisory Committee on Education, DEI and Most Respected Mrs. Satsangi through virtual mode on all three days which provided the much-needed impetus for the success of the event.

Participation/Session Chaired in Conference/ Workshops/ Seminar/Symposia/Webinar

- Dr. Sonal Singh attended One Week Online Faculty Development Programme on "ICT ENHANCED TEACHING LEARNING AND CREATING MOOCs" organised by Ramanujan College, University of Delhi from August 18 - 25, 2020.
- Dr. Sonal Singh, Dr. Shashi Srivastava, Dr. Lowleen Malhotra, Dr. Meena Pydah and Dr. Namita Bhatia attended Online FDP on "Photography & Media Communication" organised by English Department, DEI from 23 to 27 Feb 2021.
- Dr. Sonal Singh attended a Two-Day Online Workshop on Integrating Drama in Teaching-Learning organised by SoE, DEI from 29 to 30 November, 2020.

- Dr. Meena Pydah and Dr. Namita Bhatia attended refresher course in English literature and language theme "Reimagining the margins: perspectives from literature, culture and society" organised by UGC-HRDC, JMI, DELHI from 26 Nov-10 Dec 2020.
- Dr. Shashi Srivastava attended One week FDP on Communicative English organised by Department of English, Shri Shankarlal Sundarbai Shasun Jain College for Women, Chennai, from December 03, 2020 to December 09, 2020, an Online Refresher Course in English organised by HRDC, Aligarh Muslim University, Aligarh from January 12 to 25, 2021, a One-week Online Faculty Development Programme in English Studies, "Remapping the Indian Novel in English" organised by Kirori Mal College, University of Delhi and the Faculty Development Centre, Mizoram University, Aizawl from June 21 to 25, 2021 and attended 7-Day Faculty Development Programme on Research Trends in English Studies organised Department of English and Foreign Languages, Bharathiar University, Coimbatore by from July 22 to 29 2020.
- Dr. Shashi Srivastava, presented a paper entitled "Hold the Falling Beads...Exhorts Ezekiel" in International Seminar on Literatures from Indian Subcontinent: A Review of Different Dimensions Organized by the Department of English, Iswar Saran P.G. College, Prayagraj, (U.P.), from January 08-10, 2021 and a paper entitled "We are the Architects of our Lives" (with reference to Preeti Shenoy's Life is What You Make It" in National Virtual Seminar on Encumbrance to Emancipation: The Alchemy of Women's Writing in India, Organized by P G and Research Department of English, Bishop Heber College, Tiruchirappalli on March 17, 2021 and participated and presented a paper "TV Series: An Allure of the Adaptation for the Denizens (with reference to "Malgudi Days") in International Conference on Recent Research Trends in Adaptation Studies, organized by Vellore Institute of Technology, Chennai, from May 29 - 30, 2021.
- Dr. Namita Bhatia, attended 5-DAY ONLINE FDP ON "Inculcating Universal Human Values in Technical Education" organised by AICTE from 1 - 5 Feb, 2021.
- Prof. J.K. Verma, chaired the panel discussion in The Third International Conference of the Dayalbagh Science of Consciousness (DSC 2021) Dayalbagh Educational Institute (DEI), Deemed to be University, Agra, India Christian-Albrechts-University at Kiel (CAU), Germany, and University of Waterloo, Canada on May 21, 2021, Prof. Gurpyari Jandial, co-chaired the panel discussion while Dr. Bani Dayal Dhir gave an Invited Talk on "Sharan Ashram Ka Sapoot: Interpretation from Literary-Consciousness Perspectives".
- Dr. Bani Dayal Dhir Chaired the Plenary Talk in the 44th National Systems Conference (NSC) Systems for Sustainable Healthcare Habitats organised by Systems Society of India and DEI from 22-23 May, 2021 and Dr. Sonal Singh, chaired Oral Presentations: Education Systems.

Department of Hindi

The Department of Hindi 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।

Publications

- प्रो.शर्मिला सक्सेना द्वारा लिखित भाग्य पर नहीं परिश्रम पर विश्वास करें -पुस्तक की प्रमुख विशेषताएं दृष्टिकोण पत्रिका इम्पैक्ट फैक्टर ५.०५१ यू. जी. सी. केयर लिस्ट -१ में प्रकाशित हुआ संपादक -डॉ.अश्विनी महाजन दिल्ली विश्वविद्यालय दिल्ली अंक- जनवरी-मार्च २०२१ पृष्ठ -२८३९-२८४१।
- डॉ.नमस्या द्वारा लिखित शोध पत्र -स्त्री मन के विश्लेषक -गिरीश कर्नाड -दृष्टिकोण पत्रिका इम्पैक्ट फैक्टर ५.०५१ यू. जी. सी. केयर लिस्ट -१ में प्रकाशित हुआ संपादक -डॉ.अश्विनी महाजन दिल्ली विश्वविद्यालय दिल्ली अंक- जनवरी-मार्च २०२१ पृष्ठ -२८२८ ।
- डॉ.रंजना पाण्डेय द्वारा लिखित मनुष्य के महत्व की कथा, शब्द शिखर पत्रिका में प्रकाशित हुआ आई. एस. एस. एन. 0976-5719 संपादक- आनंदप्रकाश त्रिपाठीप्रकाशन संस्कृति संस्थान, नाहरबाग, अयोध्या वर्ष 2021 त्रैमासिक।

- प्रो.शर्मिला सक्सेना द्वारा लिखित शोध पत्र दृश्य से अदृश्य का सफर में व्यक्त मनोवैज्ञानिकता दृष्टिकोण पत्रिका इम्पैक्ट फैक्टर ५.०५१ यू. जी. सी. केयर लिस्ट -१ में प्रकाशित हुआ संपादक -डॉ.अश्विनी महाजन दिल्ली विश्वविद्यालय दिल्ली अंक-२ मार्च-अप्रैल २०२१ पृष्ठ -१९-२२।
- डॉ. नमस्या द्वारा लिखित शोध पत्र मलखान सिंह के काव्य में प्रतिरोध के स्वर शोधदिशा पत्रिका आई. एस. एस. एन-०९७५ -७३५ यू. जी. सी. केयर में प्रकाशित हुआ संपादक -डॉ. गिरिराज शरण अग्रवाल बिजनौर उत्तर प्रदेश अंक-५६ अक्टूबर-दिसम्बर २०२१ पृष्ठ -३३१-३३९।
- डॉ. सुमन शर्मा द्वारा लिखित शोध पत्र बृज भाषा की काल जाई रचना उद्धव शतक : भाव एवं भाषा -शोधदिशा पत्रिका आई. एस. एस. एन-०९७५ -७३५ यू. जी. सी. केयर में प्रकाशित हुआ संपादक -डॉ. गिरिराज शरण अग्रवाल बिजनौर उत्तर प्रदेश अंक-५६ अक्टूबर- दिसम्बर २०२१ पृष्ठ -२७१-२७६।

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 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.

A Diet Counselling Cell was established by the department to provide nutritional guidance.

Participation in Seminar/Symposia/Workshop/Conference

Dr. Madhulika Gautam presented the following research papers in International Conference on New Normal in India: Development & Dimensions in Information Technology, Management, Commerce, Science and Social Science organized by S.S. Jain Subodh Girls P.G. College Sanganer, Jaipur on 19-20 March, 2021:

- Domestic violence against women in the era of COVID-19 lockdown.
- Role of social media for awareness regarding prevention and control of COVID-19 pandemic.
- Safety precautions taken by adults during Covid-19.

She also presented two research papers in international conference on Innovative Approaches in Applied Sciences and Technology organized by Educational Research Society Meerut 250004 India and Babasaheb Bhimrao Ambedkar University (A Central University) Lucknow on 03-05 Dec, 2021, entitled "Pre maternal services availed by ICDS beneficiary and non-beneficiary women of Agra District" and "Assessment of Maturity of Vocational Attitude among Senior Secondary School Students in Agra District".

- Dr. Seema Kashyap participated in International Webinar on Upscaling Food Science and understanding Food Product regulations in Global Markets. June 2020, organized by Dept. of Food & Nutrition, Faculty of Family & Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodra.

- 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. Hemlata Chand participated in National Webinar on "National Education Policy 2020: Features and Prospects" organized by Central University of South Bihar on 02.08.2020. She also participated in International Webinar on Developing a research Line of Inquiry organized by AAIDD on 18.08.2020, International Webinar on Breaking Speech Barriers in Digital Age: The Role of Technology organized by AAIDD on 27.08.2020, an online workshop on Top 7 Tools and Techniques for High Impact Research Writing and Publication, organized by ARISTROCAT Research, on 16.10.2020, and a national webinar on Challenges of Neonatal care and Infant Protection organized by University of Mysore on 19-20.11.2020.
- Dr. Richa Verma delivered a lecture in National Webinar on "Intellectual Property Rights" on 26th April, 2021 organized by IQAC and Department of Library, Smt. Radhadevi Goeneka College for Women, Akola, Maharashtra and was invited as Speaker in the National Webinar on "Impact of Stress on Human Behaviour and Management" held on 28 July, 2020, organized by Department of Home Science & Psychology, Govt. Autonomous Girls P.G. College of Excellence Sagar (M.P.)

Publications

- Shakya, A. & Swami, C. 2021. Designing for Khadi Kurtis inspired from Mughal silhouettes for contemporary women wear, International Journal of Home Science, 6(2), 1-7.
- Shakya, A. & Swami, C. 2021. Sustainable Product Development through Creative Up-Cycling of Fabric Waste, International Journal of Textile and Fashion Technology (IJTFT), 11(2), 39-48.
- Shakya, A. & Swami, C. 2021. Disposal Behaviors and Practices of Post-Consumer Apparel Waste, Journal of Emerging Technologies and Innovative Research, 8(8), 117-124.
- Charul Chaudhary, Aneeta Khatak, Raj Bala Grewal and Rakesh Gehlot. 2021. Development of value added Ready-to-Cook (RTC) convenient mix by using barley, oat and Flaxseeds. The Pharma Innovation Journal. 10(1); 228-231.
- Aneeta Khatak, Charul Chaudhary and Raj Bala Grewal. 2021. Evaluation of anti-nutrient and mineral content in different pearl millet varieties. The Pharma Innovation Journal, 10(2); 660-664.
- Gautam, P & Verma, R. 2021. De-identifying from Siblings: Leading to the End of Cain Complex. Research Review International Journal of Multidisciplinary. 53-55.
- Madan, S., Verma, R., Mathur, G. 2021 "Junk Food Consumption Pattern by Undergraduate Students of Dayalbagh Educational Institute, Agra." Indian Journal of Public Health Research & Development, 241-246.
- Madan, S., Verma, R., Mathur, G. 2021. Knowledge and practices of oral hygiene among undergraduate students of dayalbagh educational institute, Agra. Indian Journal of Dental Sciences, 93-97.
- Srivastava, A. and Verma, R. 2021. Understanding Emotional Roots of Human Immune System. Virology & Immunology Journal, 5(2); 1-5.
- Lakhchaura, P. and Gahlot, M. 2021. A study on comfort properties of oak Tasar silk waste and acrylic blended fabrics. Journal of Applied and Natural Science, 13(2), 476 - 481.
- Gupta, A. and Kashyap, S. 2020. Growing up in a single parent family: A determining factor of adolescent's wellbeing. Advance Journal of Social Science. 3(1); 138-144.
- Gautam, M. 2020. Differential frequency of obtaining knowledge of ICDS beneficiaries by AWWs in selected rural and slum area of Agra District. Indian Journal of Extension Education, 56(3); 153-156

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

The nucleus of Commerce Education is the accounting and financial analysis & reporting and modelling 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 Commerce⁴. The department offers

- B.Com. (Hons),
- B.Com. (Hons) (Corporate Accounting and Law),
- B.Com. (Hons) (Transdisciplinary)
- B. Voc. (Accounting and Taxation),
- M.Com (General)
- M.Com. (International Business),
- M.Com. (Corporate Accounting and Law),
- 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 software's (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. 16 Research Scholars of the department are qualified JRF, 24 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.

Participation in Seminar/Symposia/Workshop/Conference

- Dr. Rachna Gupta, attended online 5 days Faculty Development program on UNIVERSAL HUMAN VALUE for DEEKSHARAMBH organized by NIT Patna during 23-27 November, 2020, a National level webinar on Investor Awareness Program on 25th November, 2020 organized by Bundelkhand College, Jhansi, Uttar Pradesh and National Webinar on "Innovation in Accounting and Auditing" organized by Universities Commerce and Management Teachers' Association (Gujrat State) and Shri H.K. College, Ahmedabad on 22nd April 2021.
- Dr. Rakesh Kumar presented paper entitled "COVID-19 Lockdown Announcement and Stock Market Volatility of Selected Industry : An Event Study" in E-Conference on "Organizational Renaissance in the Post COVID Era" organised by Delhi Institute of Advanced Studies, New Delhi held on 10 April, 2021 and a paper entitled "COVID-19 Lockdown Announcement Effect on NIFTY Healthcare Index : An Event Study Approach" in International Management Conference 2021 organised by Centre for Management Studies, Jamia Millia Islamia, New Delhi held on 21 to 24 May, 2021 and participated in the First Online two-week Refresher Course in Commerce & Management Studies from 21st January 2021 to 04th February 2021 organised by UGC HUMAN RESOURCE DEVELOPMENT CENTRE, Jamia Millia Islamia, New Delhi.
- Dr. Sanil Kumar attended One Day National level Webinar on "Online Teaching and Delivery Effectiveness – Post Covid'19" on July 04, 2020, organized by Internal Quality Assurance Cell of Anna Vinayagar College of Education, Ganapathipuram, Tamilnadu, One Day National level Webinar on "Strategies for Managing Personal Finance Including Mutual Funds during & after COVID - 19" on October 24, 2020, organized by Internal Quality Assurance Cell of IFTM University, Moradabad (Uttar Pradesh) in association with Association of Mutual Funds in India and participated in the First Online two week Refresher Course in Commerce & Management Studies from 21 January 2021 to 04 February 2021, organised by UGC HUMAN RESOURCE DEVELOPMENT CENTRE, Jamia Millia Islamia, New Delhi.
- Ms. Roopankshi Pareek (Research Scholar) attended international webinar on Financial Service Industry & cyber security. Organised by Dr CBS cyber security Services LLP, Gurukula Kangri Vishwavidyalaya & Dayalbagh Educational Institute. 22-23 August, 2020, attended 5 days online

workshop on SPSS for Beginners. Organised by Vidwaan Consulting, Raipur. 22-26 July, 2020, Seven-day national workshop on Research Methodology for Social Science Organised by Excel Research Management Association & Dayalbagh Educational Institute. 3-9 July, 2021 and attended one week FDP on "Basic Research Methods & Data Analysis. Organised by Delhi Institute of Advanced Studies. 20-26 February, 2021.

- Ms. Priyanshi Saraswat (Research Scholar) attended National Webinar on Stock Markets organised by Shine Projects in May, 2021 and Seven days National Workshop on Research Methodology for social sciences (Online Mode). organised by Excel Research Management Association, India and Dayalbagh Educational institute. 3-9 July, 2021 and an international webinar on Financial Service Industry & cyber security. Organised by Dr CBS cyber security Services LLP, Gurukula Kangri Vishwavidyalaya & Dayalbagh Educational Institute. 22-23 August, 2020, and National Webinar on Data Analysis using STATCRAFT. Organised by the Dept. of Sociology & Political Sci DEI University in collaboration with STATCRAFT, Bangalore. 17 August, 2020, National Webinar on Strategies for managing Personal finance including Mutual Funds during and after COVID-19. Organised by IFTM University, Moradabad in association with association of Mutual funds in India. 24 October, 2020 and National Workshop on ProQuest/UMI: Helping Researchers in discovering and writing impactful dissertation and thesis. Organised by Dayalbagh Educational Institute & ProQuest. 19 October, 2020.

Recognition (Fellowships, Memberships, Editorial Boards, Reviewers)

- Prof. L. N. Koli Visited NAAC Peer Team as a member coordinator at M.M. Modi College, Patiala on 11th & 12th November, 2021.
- Prof. L.N. Koli, Department of Accountancy & Law, Faculty of Commerce Started two Online Journals:
 1. ShodhPratigya Shree (शोधप्रतिज्ञाश्री) The "National Journal of Multi-Disciplinary Area" (NJMDA). Subjects- All themes of Arts, Humanities and Social Science.
 2. Vanijay Shree (वाणिज्यश्री) The "National Journals of Commerce and Management" (NJCM). Subjects- All themes of Accounting, Finance, Taxation, Business Economics, Corporate Law and Management.

Students Achievements:

1. Mr Pranav Tyagi, Final Year student of B. Voc. (Accounting and Taxation) has got placement with "Think and Learn Private Limited" (Unit of BYJU'S) as Business Development Trainee-Sales. He is the first student of the first batch of B. Voc. (Accounting and Taxation) being graduated in academic session 2020-21.
2. The following students have won different positions in various competitions.

Name	Activity	Date	Organisation	Position
Priyanka Yadav	Essay writing	August, 2020	Classmate under unlock creativity essay competition	3rd
Pranajal Jain	Teacher's day best message competition	September, 2020	ICFAI business school	1st
Kamakshi Nagaich	Classmate essay competition	August, 2020	Classmate under unlock creativity essay competition	1st
Muskan Mohan	Dancing	November, 2020	GLA Mathura	2nd
Muskan Mohan	Dancing	February, 2021	NTA Dance competition	2nd
Sunidhi puri	Odssey social enterprise I-diya	May, 2021	Amity university, Jaipur	2nd
Anshima Johri	Value Day English Elocution	November, 2020	Dayalbagh Educational Institute	3rd

Publications

- Prasad Saurabh and Kumar Sanil, 2021. A Comparative Study of Segment Reporting Disclosure Practices of Selected Information Technologies Companies in India, Pramana Research Journal, ISSN: 2249-2976, Volume No. 11 (1).
 - Kannoja, Shikha; Kumar, Rakesh and Kumar, Sanil 2021. A Study on GRI Sustainability Reporting Practices of Information Technology Companies of India. Book- Corporate Social & Environmental Reporting. Volume No. 1, pp 78-92, ISBN- 978-93-88361-52-1.
 - Rakesh Kumar, 2021. Corporate Sustainability with Green Accounting Book- Corporate Social & Environmental Reporting. Volume No. 1, ISBN- 978-93-88361-52-1.
 - Rakesh Kumar, 2021. Weak form of market efficiency of Indian Stock market: Evidence from metal and mining sectors, Journal- Pacific Business Review.
 - Pramod Kumar, 2021. Banking Fraud and its Preventive and Detective Mechanism in Indian prospective, Journal-The Management Accountant, ICAI, Kolkata.
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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. The faculty has been granted the status of School of Education under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching, MHRD (GoI) in Feb 2019.

Achievements

1. The Faculty of Education initiated an online and upgraded version of DEI FOERAA, Annual Issue 2021.
2. School of Education, Faculty of Education acquired 3 copy rights and 10 ISBNs for e-content development for Teachers.
3. 6 Interdisciplinary research projects were conducted Under School of Education, FOE under both Centres (Centre for Artificial Intelligence in Education, CKART and Centre for Knowledge Acquisition, Retention & Transformation, CKART).
4. Mr. Bajarang Bhushan, Dr. Neha Jain, Mrs. R. Jeyam, Dr. Neetu Singh, Dr. Anjana Verma, Dr. Jyotika Kharbanda, Dr. Parul Khanna, Dr. Shweta Agarwal are currently working on Five Institute Level Projects.

Invited Talks and Session Chair

- Prof. Sona Ahuja was invited to deliver talk on Implementation Strategies for Inclusivity: DEI Model on July, 26, 2021 in webinar series of UNESCO and AIU, theme - Inclusivity, Equality and Equity in Diverse Population in the Education Sector. She was also invited as a Lead Speaker for Webinar on Scholar's Mosaic 2021 Annual Young Researchers' Meet July 17-19, 2021 organized by Department of Education (CASE, IASE & IUCTE), Faculty of Education & Psychology, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat where she delivered a talk on Research Ethics on July 18, 2021. She was invited as a Resource Person for Online Session on Surat-Shabd-Yoga Meditation and Executive Functions in 'International Webinar on Yoga, Meditation for the Rehab & Wellbeing of Persons with Disabilities' organized by Deva International Society for Child Care on International Yoga Day, June 20, 2021 and as a Resource Person for online sessions on Publication Ethics: Identification, Violation, Complaints & Appeals organized by Indian Institute of Teacher Education, Gandhinagar, May 20, 2021.
- Dr. Sona Dixit delivered a Radio talk on Human Rights at 90.4 Agra ki Awaz on 16 December, 2020
- Dr. Neha Jain was a resource person in National webinar on Effect of COVID 19 on Teacher Education organized by Anand College of Education, Keetham Agra held on 23 July 2020, National webinar on "National Education Policy 2020" organized by DIET, Ajeetmal, Oraiya on 15 September, 2020 and Teacher's Colloquia on "Restructuring Mathematics class by the use of Innovative Methodologies" organized by Prem Vidyalaya, DEI on 24 February, 2021.
- Dr. Anjana Verma was a Resource Person in a National Workshop organized by Agra Public Teachers Training College, Artoni, Agra on 26-27 September 2021, and Five day 'International Internship for Communication' organized by SCAD college of Education, Tirunelveli from 08 – 12 February, 2021.
- Dr. Shweta Agarwal presented a paper entitled 'Innovative Activities in Modern Classes: Multidimensional Approach' as a Resource Person in a National Workshop organized by Agra Public Teachers Training College, Artoni, Agra on 26-27 September 2021.
- Dr. Kalpana Gupta delivered Lecture on Stress Management through Yoga in FDP organized by Drawing and Painting Dept, DEI on Oct10, 2020 and October 31, 2020. She has also given online Live Session on Yoga on International Yoga Day for Kids Corner Happy Sr Sec School, Firozabad on 21 June, 2021. She was a resource person in 5 Days Yoga camp organized by Bharat Vikas Parishad, Bulandshahr from 1 to 5 June 2021.

- Dr. Preeti Manani delivered a lecture on 'Stress Management & Emotional Resilience' in AICTE Sponsored on-line Faculty Development Programme on "Emotional Resilience" on 25-29 September 2021 organized by Institutional Development Planning & Ranking Cell, MJP Rohilkhand University, Bareilly. She also delivered lectures on 'Reflections on leadership growth plan' and 'Create a leadership growth plan to tackle a real work challenge' in an on-line Faculty Development Programme on "Transformational Leadership" on 02-06 September 2021 organized by Department of B.Ed./M.Ed. & Centre of Excellence for Women Studies MJP Rohilkhand University, Bareilly.

Seminar/Symposia/Conference/Webinar Organized

- Dr. Sona Ahuja conducted 12 monthly Teachers Colloquia for In-service School Teachers.
- Dr. Sona Dixit was convener of Webinar on NEP2020- Teacher role, challenges and response (30th March, 2021) under PMMMNMT, SoE, FoE, DEI and Online Workshop on "Integrating Drama in Teaching-Learning" (29-30 November 2020) under PMMMNMT, SoE, FoE, DEI
- Dr. Neha Jain was convener of One Day Workshop on Design Thinking and Problem Solving in Education organized on 24th March 2021 under PMMMNMT, SoE, Faculty of Education, DEI, one day online Workshop on Fundamentals of Artificial Intelligence in Education organized on 28th December 2020 under PMMMNMT, SoE, Faculty of Education, DEI.
- Dr. Kalpana Gupta was the Convener of 2 Days International workshop on Self Health Care and Yoga on 20-21 Oct, 2021 Organized under SOE, DEI, Dayalbagh, Agra.
- Dr. Anjana Verma organized Online International workshop on Integration of Animation in teaching learning organized from 28-29 January 2021.
- Dr. Preeti Manani organized a Webinar on Netaji's Teaching on occasion of yearlong celebration of 125th birth anniversary of Netaji Shubhash Chandra Bose on 29-07-2021 at AIBAS, Amity University, Uttar Pradesh and coordinated a lecture on Power Dressing under guest Placement cell on 30-09-2021 at AIBAS, Amity University, Uttar Pradesh and participated in the Lecture "Creating a Vibrant Knowledge Society - An Indian Strategy for 21st Century" delivered by Dr K Kasturirangan, Chairman, National Education Policy (NEP)-2020 organized by SRM University-AP, in association with India's national newspaper, "The Hindu" on 24 July, 2021. She also participated in open house discussion on National Professional Standard for Teachers organized by Central university of Rajasthan in collaboration with NCTE, Delhi. 14th December 2021.

Seminar/Symposia/Conference/Webinar Attended

1. Dr. Sona Dixit paper 'Pedagogical Challenges and initiatives in Education: A Post COVID Scenario' at International Academy of Business (IAB) Annual Conference, Washington, D.C., USA, held on 28-30 October, 2021. She also attended "Five days Online National Research Assistance program" at Matterhere, promoted by ICT and Digital literacy sponsored by Google AdSense (27-31 May, 2021)
2. Dr. Neha Jain has attended Refresher course on Teacher Education organized by Aligarh Muslim University (Human Resource Development, HRDC) from 3 – 16 August 2021.
3. Dr. Shweta Agarwal has participated in one week Faculty Development Programme on "Digitalisation of Education Content through Open-Source Tools" organized by Department of commerce A.M.U., Aligarh from 6 -10 August, 2020. She also participated in VIBGYOR Series of International & National Webinar, 2020 on "Psychological tools and techniques to Outbreak COVID-19" organized by Association of Environment Professionals & Network for Education and Social Transformation, New Delhi held on 27 July, 2020. She attended a two-day International Webinar on "Yogic Exercises as A Preventive Measure to Improve the Immune System to Overcome COVID-19" conducted by Noida College of Physical Education, Dhoom Manikpur, G.B. Nagar on 29 -30 July' 2020. She also attended national webinar on "Research Competencies and Publications" organized by faculty of education, Teerthankar Mahaveer University, Delhi Road, Moradabad, Uttar Pradesh on 31st July, 2020 and participated in National Webinar on "Gender Sensitization: Issues and challenges in 21st century" Under the auspices of Internal Quality Assurance Cell organized by Kr. R.C. Mahila Degree College, Mainpuri held on 27 Sep 2020 and a National Webinar on "Physical and Mental Health during COVID Lockdown: A practical Approach" organized by Education and Sports of Government College, Jaipur, Rajasthan held on 29 September, 2020.
4. Dr. Kalpana Gupta participated in FDP on Mural-AICTE Training and Learning (ATAL) Academy, organised by DEI Agra from 6 -10 October, 2020, and in FDP on Painting - AICTE Training and Learning (ATAL) Academy organized by DEI from 27- October, 2020. She also participated in online Quiz on Yoga Awareness organized by DD Mahila PG College Firozabad and participated in Conference organized by RIE, NCERT, Bhopal in September 28-29, 2020. She also participated in FDP on

Acquiring Life Skills for Professions AICTE Training and Learning (ATAL) Academy organized by University of Petroleum and Energy Studies from 22 – 26 November, 2021, FDP on Effective Leadership and Excellence in Technical Education, organised by Women Engineering College, Ajmer, AICTE Training and Learning (ATAL) Academy from 15-19 September, 2021. She attended National Webinar on Builders of Modern India organized by Vivekanand Manav Prakash Sansthan, Kota, Raipur on 24 November 2020 and participated in a Two Days International Online Workshop on Integration of Animation in Teaching Learning organized by SOE, DEI from 28-29 January, 2021. She also participated in National Webinar on Prospects of Fine Arts on 12 June 2021 organised by Vaishnav Institute of Fine Arts, Indore and in a 2 days international Webinar on Different Dimensions of Personality Development conducted by Nisha Joshi Yoga Academy, Indore from 10 -11 July 2021. Dr. Kalpana Gupta attended Online Faculty Induction Program, sponsored by UGC, organised by HRDC, AMU Aligarh from 12 January-16 February, 2021. She also attended online Refresher Course on Learning outcomes and Educational Reforms organised by HRDC, AMU Aligarh from 18 November – 2 December 2020.

5. Dr. Preeti Manani presented a paper on Virtual Classes and Rural Public School Students: A Reality check in International Multidisciplinary Web Conference on COVID-19: Future Roadmap organized by G.E.S's Shri Bhausaheb Vartak Arts, Commerce and Science College, Borivali (W), Mumbai on May 21- 22, 2021. She also participated in 5 days Online Faculty Development Programme on Research Methodology, Organized by School of Education, Lingaya's Vidyapeeth. May 10th-14th, 2021
6. Dr. Sona Dixit completed a Specialization on Methods and Statistics in Social Science from University of Amsterdam through Coursera during June -Nov 2021. She also attended Annual Refresher Programme in 'Pedagogical Innovations and Research Methodology (Interdisciplinary)'Guru Jambheshwar University of Science and Technology, Hisar, Haryana from 1 Dec 2020 to 31 March 2021.
7. Dr. Neha Jain is working on a Minor Project on the topic "Development of Frugal Innovation based Educational Games packages and its impact on Scholastic Achievement of Upper Primary Students. She acted as a Teacher Coordinator for the course 'Introduction to Computer' run by Seneca College of Education Canada and 05 students completed the course and got certificate.
8. Dr. Anjana Verma completed Refresher Course in Teacher Education from 21 August-4 September 2021, organized by Aligarh Muslim University.
9. Dr. Shweta Agarwal has completed with distinction (A+ grade) a one-month online Induction Training/ Orientation Programme sponsored by Ministry of Education, PMMMNMTT organised by Teaching Learning Centre, Ramanujan College, University of Delhi in collaboration with 6 universities of India from 11-13 March, 2021.
10. Mr. Bajarang Bhushan participated in one day national seminar on Sustainable Development – A Green Approach organized by Thakur College of Science and Commerce, Mumbai on March 06, 2021 and presented paper on Climate Change Education: A Green Approach for Sustainable Development. He also participated in one day international webinar on The publishing process: the complete journey of an article organized by Wiley on September 1, 2021.

Labs Established

1. 5 well equipped Laboratories were developed by Faculty of Education under the project School of Education:
 - a) Emerging Technologies in Education Lab (ETED)
 - b) Curriculum Lab
 - c) Visual Arts Studio
 - d) Performing Arts Studio
 - e) Psychology Lab)
 - f) Yoga Resource Centre
2. Prof. Sona Ahuja has set up Heuristic Learning Centre in DEI PV Primary School

Publications

1. Prof. Nandita Satsangee has co-authored a book Art Integrated Resource plan Guide [ISBN 978-93-92152-13-9] with Prof. Ranjeet Stasangee, Dr. Pratima Singh, Dr. Parul Khanna, Ms. Beena Bao and Ms. Abhilasha Satsangi.
2. Prof. Nandita Satsangee has co-authored a book Evaluation in Art Integrated Learning [ISBN 978-93-92152-08-5] with Abhilasha Verma and Ms. Beena Bao.

3. Prof. Nandita Satsangee has co-authored a book Art Integrated lesson Plans [ISBN 978-93-92152-02-3] with Prof. Ranjeet Stasangee, Dr. Pratima Singh, Dr. Parul Khanna, Ms. Beena Bao and Ms. Abhilasha Satsangi.
4. Prof. Nandita Satsangee has co-authored a book Icebreaker Activities for Classrooms [Copyright, Registration No. L- 104773/2021] with Ms. Beena Bao and Ms. Abhilasha Satsangi.
5. Brazdau, O., Ahuja, S., Opariuc, C.D., Jones, V., Sharma, S., Monsanto, C., Andrews, S. and Fiveson, K., 2021. An Exploratory Analysis of Collective Patterns of Conscious Experience Using a Self-Report Questionnaire. *Frontiers in Psychology*, 12.
6. Saroj Sharma and Sona Ahuja, 2021. Attributes and Pedagogical Practices of Successful Teachers, Education India: A Quarterly Refereed Journal of Dialogues on Education, 10(1), 425-441, February, 2021. ISSN 2278-2435 with Saroj Sharma.
7. Jain, S., Markan, C.M., Ahuja, S. and Tripathi, M., 2021. Identifying Neural Correlates in Stroop Task. In *Advances in Systems Engineering* (pp. 21-29). Springer, Singapore.
8. Chetan Pyari शिक्षा के क्षेत्र में कृत्रिम बुद्धि के शैक्षिक उपयोग और शैक्षिक समस्याएं, Kala ISSN 0975-4520
9. Dr. Sona Dixit has authored "Handbook on Integrating Drama in Teaching -learning" published by School of Education, DEI
10. Dr. Sona Dixit has published a Chapter "New Dimensions and Patterns of Geography in New Education Policy 2021" in book entitled, New Dimensions and Patterns of Geography in New Education Policy 2021 published by Social Research Foundation, Kanpur. ISBN No-978-81-954010-8-6.
11. Sona Dixit 'आगरा जिले के माध्यमिक विद्यालयों में भेदभावपूर्ण व्यवहार पर विद्यार्थियों के प्रत्यक्षीकरण का अध्ययन' in Shodh Sanchar Bulletin. (listed in UGC Care) Vol 11 (ISBN 2229-3620).
12. Sona Dixit, शिक्षण अधिगम में कटपुतली कला - एक साहित्यिक विमर्श' in Shodh Sarita, Vol Issue 29 (ISBN 2348-2397) (listed in UGC Care)
13. Dr. Anjana Verma has published a book entitled Annotated Webliography ISBN 978-93-92152-00-9 co-authored with (late) Dr. Pratima Singh
14. Dr. Anjana Verma has published a book entitled TREASURE TROVE- A Manual for preparation of Educational Toys based on Sanskrit Sholakas. ISBN- 978-93-92152-11-5 Co- Authored with Ms. Abhilasha Satsangi
15. Dr. Shweta Agarwal has published an E-Book- BRAIN BASED LEARNING for School of Education (SoE) ISBN 978-93-92152-09-2
16. Bajarang Bhushan, 'Educational Outreach in a Tribal Village Cluster: A Case Study of Rajaborari Estate for Establishing a Role Model for Government Initiatives in international Journal Shiksha Shodh Manthan. 2395-728X, 2021.
17. Bajarang Bhushan 'Teacher Education through ODL', International Journal Learning Community, 0976-3201(Print)2231-458X(online), 2021.
18. Bajarang Bhushan "Getting Sustainable Development through Climate Change Education" Academia Letters <https://doi.org/10.20935/AL3479>, 2021.
19. Bajarang Bhushan 'हाशिये का समाज' का शैक्षिक सन्दर्भ और भाषाई चुनौतियाँ in National Journal अपनी माटी 2322-0724 in 2021.
20. Bajarang Bhushan, Strengthening Teachers through Yoga Education: A Dayalbagh Educational Institute Initiative in National Journal Shiksha Shodh Manthan. 2395-728X, 2021.
21. Preeti Manani, Mental well-being & loneliness during lockdown: A correlational study' in Adhigam, Vol. 19. 150-158.
22. Preeti Manani, Virtual Classes and Rural Public-School students: A Reality check' in Ajanta, Vol. 10(2), 35-40.

Students Achievements

1. 5 B. Ed. students (Pragya Singh, Gurleen, Shivani, Lalita and Kirti) have completed joint project on Web and video Publishing on the Internet in collaboration with students from Seneca College, Canada.

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: Ph. D. (Fulltime) and Ph. D. (Part Time) and Integrated B. Tech., M. Tech. and Ph. D. programmes.

Department of Electrical Engineering

Achievements /Recognitions

Prof. D K Chaturvedi

Invited Talks

- Planery talk on IoT – State of Art Department of Electronics & Communication Engineering is organizing a National Conference on “Recent Advances in Electronics & Communication Engineering” on 29 January 2021, AMU, Aligarh.
- Department of Electrical & Electronics Engineering, G.L.Bajaj Institute of Technology & Management, Greater Noida is organizing a Short Term Training Program (STTP) on “Moral, Values, Attitude and behaviour Sciences”. Three STTPs
 - a) Topic-1 for Series-1 STTP during 08-02-2021 to 13-02-2021 - Ethics and Moral Values – 08-02-2021
 - b) Topic-2 for Series-2 STTP during 22-02-2020 to 27-02-2021 – Business and Professional Ethics – 24-02-2021
 - c) Topic-3 for Series-3 STTP during 08-03-2021 to 13-03-2021 – Linkage between Theology, Science and Technology on 12—03-2021.
- Solar power Forecasting, Planning and Control, AICTE sponsored STTP on the 'Role of Energy Management Systems in Smart Grid' to be held through online mode during 7-12 June 2021 and being organized by the Department of Electrical Engineering, F/o Engineering & Technology, Jamia Millia Islamia, New Delhi.
- Online Faculty Development Program on “Emerging Trends In Electrical & Electronics Engineering” at Hindustan College of Science & Technology, Farah (Mathura) on 27th July 2021. Topic of talk Solar Power generation and planning.
- Resource person for FDP "on Advancement and future research scope in Electrical & Electronics Engg." from September 6th to 10th 2021 at Raj Kumar Goel Institute of Technology, Ghaziabad, Uttar Pradesh. Delivered a talk on solar power variability and load management on 6th Sept. 2021.

National Advisory committee member

- Technical Programme Committee member of Springer - Third International Conference on Advanced Computational and Communication Paradigms (ICACCP 2021) during 22nd to 24th of March 2021, Department of Computer Science & Engineering, Sikkim Manipal Institute of Technology, Sikkim, India.
- National Advisory committee member of International Conference on Data Science, Machine learning and Applications-2021, 10th - 11th June 2021, Organized by CSE and CS/IT Department, Rabindra

Nath Tagore University, Raisen, Madhya Pradesh in Association with Institute for Engineering Research and Publication (IFERP).

- National Advisory Committee Member of International Virtual Conference on Emerging Trends in Engineering and Management Sciences (IC-ETEMS 2021), 23rd - 24th JULY 2021, Organized by Institute for Engineering Research and Publication (IFERP).
- National Advisory Committee Member of 2nd International Conference on Future Communication & Computing Technology (ICFCCT-2021) 27th - 28th October 2021, Mumbai, Organized by Institute for Engineering Research and Publication (IFERP).
- Subject Expert for CSE for Guest Professor Selection committee at Khandari Campus of Dr. Bhim Rao Ambedkar university, Agra, 21-10-2021 at 11:00 AM.

Workshops/ Seminar/ Conference Organised

- Prof. D K Chaturvedi Organised a 3-Days Workshop cum webinar on virtual labs at D.E.I. (Deemed to be Univ.) on 31st July, 7th and 14th Aug-2021. Speakers are Prof. Rajeev Upadhyay, Director, Hindustan College of Science and Technology, Farah, Mathura, Prof. Ibraheem, Dean Faculty of Engineering, Jamia Millia Islamia, New Delhi, Prof. Praveen Bansal, MITS, Gwalior, Prof. R.N. Yadav, MANIT, Bhopal and Alok Kanti Deb, IIT, Kharagpur.
- IEEE Workshop on Modelling and Simulation with MATLAB Emerging Applications has been successfully completed from 18th to 28th October, 2021
- IEEE Student Branch hosted an IEEE webinar by Dr. Gaurav Vats, Research Scientist in the Department of Physics and Astronomy at Katholieke Universiteit Leuven, Belgium on "Solid-State Energy Conversion and Signal Modulation Using Ferroelectrics." on 16th January 2022
- Faculty Development Program: A FDP under AICTE ATAL scheme was organised during 5th July 2021 to 9th July 2021 on Microgrid an Opportunity: Electric Vehicle and Renewable Energy resources.

Patents

- K. Chaturvedi and Amit Yadav, "Kundalini Power Measurement System", TEMP/E-1/1179/2021-DEL.
- Amit Yadav, Kamal Sharma, Pankaj Gupta, Jyoti Vimal, D. K. Chaturvedi, "An Intelligent Electric Moving Machine (IEMM) Embedded System", Application No.202011057348 A.
- Amit Yadav and D. K. Chaturvedi, "A System for Electric Moving Machine with Artificial Intelligence Interface", TEMP/E-1/53573/2020-DEL, Application no. 202011048239.
- D.K. Chaturvedi and arjun Verma, A Method for Manufacturing Low-Cost Footwear for Bunion and Hammer Toe Foot Deformities, Australian patent Application no. 2021103736.
- D.K. Chaturvedi and Mayank Agarwal, Cost Effective Smart EVA Shoe for Women and Children Safety, applied for Indian Patent.

Book Chapters published

1. Rohit Rastogi, Devendra Chaturvedi, Mayank Gupta, Exhibiting App and Analysis for Biofeedback-Based Mental Health Analyzer, Handbook of Research on Advancements of Artificial Intelligence in Healthcare Engineering, 2020.

2. Rohit Rastogi, Devendra Chaturvedi, Mayank Gupta, Computational Approach for Personality Detection on Attributes: An IoT-MMBD-Enabled Environment Handbook of Research on Advancements of Artificial Intelligence in Healthcare Engineering, 2020.
3. Rohit Rastogi, Devendra Chaturvedi, Mayank Gupta, Tension Type Headache: IOT and FOG Applications in Healthcare Using Different Biofeedback Handbook of Research on Advancements of Artificial Intelligence in Healthcare Engineering, 2020.
4. Ali Karimpoure, D.K. Chaturvedi, "Controller Design According to Right/Left Coprime Factorization", Lect. Notes Electrical Eng., Vol. 683, David Harvey et al. (Eds): Advances in VLSI, Communication, and Signal Processing, 978-981-15-6839-8, 483865_1_En, (Chapter 1), 2020.
5. Rohit Rastogi, Mamta Saxena, D.K. Chaturvedi, Muskan Maheswari, Priyanshi Garg, Muskan Gupta, Rajat Srivastava, Mukund Rastogi, and Harshit Gupta, Yajna and Mantra Science on Healthcare Domain: A Futuristic Scientific approach with Indian Scenario", Springer Edited book on Fog Computing for Healthcare 4.0 Environment, 2021, 501-533. DOI: <https://www.springer.com/in/book/9783030461966#aboutBook>
6. Rohit Rastogi, D.K. Chaturvedi, Santosh Satya, Navneet Arrora, Healthcare Using Different Biofeedback for Tension-Type Headache: IoT and Fog Based Applications in South Asian Context, Springer Edited book on Fog Computing for Healthcare 4.0 Environment, 2021, 501-533. DOI: <https://www.springer.com/in/book/9783030461966#aboutBook>
7. D.K. Chaturvedi, Boudhayan Bandyopadhyay, "Analysis of Different Aspects of Smart Buildings and Its Harmful Effects on the Ecosystem" Lect. Notes Electrical Eng., Vol. 710, ArunKumar Singh and Manoj Tripathy (Eds): Control Applications in Modern Power System, 978-981-15-8814-3, 497933_1_En, 2020 (Chapter 36).
8. A. Chandiok, A. Prakash, Abul Hasan Siddiqi, and D. K. Chaturvedi, "Cognitive Computing Agent Systems: An Approach to Building Future Real-World Intelligent Applications", Edited book on Computational Science and Its Applications, Chapman and Hall/CRC, September 2020, DOI:10.1201/9780429288739-17.
9. Atul Prakash Prajapati, D. K. Chaturvedi, Cognitive Computing Powered NLP Based Autonomous Question-Answering System, Edited book titled Smart Computing and Self-Adaptive Systems, CRC Press, edited by Simar Preet Singh, Arun Solanki, Anju Sharma, Zdzislaw Polkowski and Rajesh Kumar, 2021
10. G. Manikanta, Ashish Mani, H. P. Singh, D. K. Chaturvedi, Amlan Chatterjee, Multipartite Adaptive Quantum-inspired Evolutionary Algorithm for Reduction in Power Losses of a Radial Distribution Network, Chapter 4 in edited book on Hybrid Quantum Metaheuristics: Theory and Applications, CRC Press, edited by Siddhartha Bhattacharyya, Mario Koppen, Elizabeth Behrman and Ivan Cruz, 2021.
11. Amit Yadav, D. K. Chaturvedi, Ajay Kant, Garima Jain and Anil Kumar, Intelligent Moving Machine (IMM) Based on Battery for an Efficient Regenerative Braking System, Edited book by Springer Nature Singapore Pte Ltd. 2021, A. Kumar et al. (eds.), Recent Advances in Mechanical Engineering, Lecture Notes in Mechanical Engineering, https://doi.org/10.1007/978-981-15-9678-0_23.

International Journal publications

1. Chaturvedi, D. K. 2020. Wheat Preservation Using Electric Field. *Int. J. Curr. Microbiol. App. Sci.* 9(1): 1861-1869. doi: <https://doi.org/10.20546/ijcmas.2020.901.208>
2. D.K. Chaturvedi, Tamanna Srivastava, Tanvi Kumari, Shubham Yadav, Technologies for the Energy Storage Solutions: A State of Art, *International Journal of Scientific & Engineering Research* Volume 11, Issue 5, May- 2020, 695-706.
3. D.K. Chaturvedi, Covid19 and Dayalbagh way of life, *International Journal of Scientific & Engineering Research* Volume 11, Issue 5, May-2020, 1560-1566.
4. Mogla Achal Maharaj Kishore, D.K. Chaturvedi and P.K. Dantu, Herbal Flavoured Milk and Sensory Evaluation, *International Journal of Current Microbiology and Applied Sciences* ISSN: 2319-7706 Volume 9 Number 5 (2020).
5. M. Gopiseti, A. Mani, H. P. Singh, D. K. Chaturvedi, "Effect of Voltage Dependent Load Model on Placement and Sizing of Distributed Generator in Large Scale Distribution System," *Majlesi Journal of Electrical Engineering (MJEE)*, 14 (4), 97-121, Dec. 2021.
6. Akash Singh Chaudhary, D. K. Chaturvedi, QR Code Based Solar Panel Data Monitoring System, *International Journal of Image, Graphics and Signal Processing*, 2020, 3, 20-26. DOI: 10.5815/ijigsp.2020.03.03.
7. Mogla Achal Maharaj Kishore, Hemant Kumar D.K. Chaturvedi and P.K. Dantu, Milk Preservation by Using HVEF, *International Journal of Current Microbiology and Applied Sciences* ISSN: 2319-7706 Volume 11 Number 5 (2020).
8. Rohit Rastogi, D.K. Chaturvedi, AI-Based Analysis for Novel Covid-19 and It's Heal through Yajna and Mantra Science, *International Journal of Reliable and Quality E-Healthcare (IJRQEH)*.
9. M. Gopiseti, A. Mani, H. P. Singh, D. K. Chaturvedi, "Simultaneous application of distributed generator and network reconfiguration for power loss reduction using adaptive quantum inspired evolutionary algorithm", *Int. J. Energy Technology and Policy*, Vol. X, No. Y, 2020.
10. Shahida Khatoon, Md. Istiyaque, Naimul Hasan, D. K. Chaturvedi and Salman Ahmed Khan "Optimal Output Vector Feedback Control Strategy for Double Inverted Pendulum" *International Journal of Advanced Science and Technology (IJAST)*, ISSN 2005-4238(print), Vol 29, No. 4(2020), pp. 10729-10740 ISSN Published.
11. D.K. Chaturvedi, "Covid19 And Dayalbagh Way of Life", *International Journal of Scientific and Engineering Research (IJSER)*, Volume 11, Issue5, May 2020 Edition (ISSN 2229-5518).
12. Md. Sharif Iqbal, D.K. Chaturvedi, "Condition Monitoring of Squirrel Cage Induction Motor Using Electrical Exogenous Variables", *International Journal of Spatio-Temporal Data Science*, Inderscience Publisher,
13. Gopiseti Manikanta, Ashish Mani, H P Singh, D K Chaturvedi, Optimal allocation of Distributed Generator and Network Reconfiguration in distribution system using Adaptive Quantum inspired Evolutionary Algorithm, *International Journal of Energy Technology and Policy*, Interscience Publishers Ltd. 2020.
14. D.K. Chaturvedi and M.P. Singh, Health Monitoring of Induction Motor Using Thermal Images, *International Journal of Engineering Research and Applications (IJERA)*, vol.11 (5), 2021, pp 50-56, DOI: 10.9790/9622-1105045056.
15. D.K. Chaturvedi and M.P. Singh, Development Of Integrated Soft Computing Approach For Stator Resistance Estimation Of Three Phase Induction Motor, *International Journal of Engineering Research and Applications (IJERA)*, Vol. 11, Issue 5, (Series-IV) May 2021, pp. 43-49, DOI: 10.9790/9622-1105044349.
16. D.K. Chaturvedi and M.P. Singh, Parameter Estimation of Three Phase Induction Motor with Hybrid Soft Computing Techniques, *International Research Journal of Engineering and Technology (IRJET)*, Volume 8, Issue 5, May 2021, DOI: <https://www.irjet.net/archives/V8/i5/IRJET-V8I5456.pdf>.
17. D.K. Chaturvedi and M.P. Singh, Bearing Fault Detection Of Three Phase Induction Motor Using Sound Signals, *International Research Journal of Engineering and Technology (IRJET)*, Volume 8, Issue 5, May 2021, DOI: <https://www.irjet.net/archives/V8/i5/IRJET-V8I5457.pdf>

18. D.K. Chaturvedi and M.P. Singh, On – Line Parameter Evaluation Of Three Phase Induction Motor With GNA, International Research Journal of Engineering and Technology (IRJET), Volume 8, Issue 5, May 2021, DOI: <https://www.irjet.net/archives/V8/i5/IRJET-V8I5458.pdf>.
19. Shradha Kishore, D.K. Chaturvedi, Comparison of Traditional and Evolutionary Tuning Techniques for a Didactic Magnetic Levitation System, International Journal of Scientific & Engineering Research (IJSER), Volume 12, Issue 2, February 2021.
20. Rohit Rastogi, Mamta Saxena, D.K. Chaturvedi, Mayank Gupta, Akshit Rajan Rastogi, Mukund Rastogi, Ankur Sharma, Sheelu Sagar, Kirlian Experimental Analysis and IoT: Part 1, International Journal of Reliable and Quality E-Healthcare (IJRQEH), Volume 10, Issue 2, April-June 2021, pages 29-43.
21. Rohit Rastogi, Mamta Saxena, D.K. Chaturvedi, Mayank Gupta, Akshit Rajan Rastogi, Mukund Rastogi, Ankur Sharma, Sheelu Sagar, Kirlian Experimental Analysis and IoT: Part 2, International Journal of Reliable and Quality E-Healthcare (IJRQEH), Volume 10, Issue 2, April-June 2021, pages 44-60.
22. D.K. Chaturvedi, M.P. Singh, Shikha, Amra Gupta, Sakshi Goswami, Km Sapana, Khusboo Gautam, "Intelligent e- Pest Repellent System." International Journal of Engineering Research and Applications (IJERA), vol.11 (5), 2021, pp 21-24. DOI:10.9790/9622-1105072124.
23. D.K. Chaturvedi, E. Guru Dayal, Mayank Pratap Singh "Solid Waste Management (SWM): A Review" Vol. 11 - No. 6 (June 2021), pp. 10-17, International Journal of Engineering Research and Applications (IJERA), ISSN: 2248-9622, www.ijera.com, DOI: 10.9790/9622-1106021017.
24. V. Srinath, Manmohan Agarwal and D. K. Chaturvedi, Analysis and simulation of a single-phase seven-level inverter controlled by modified sinusoidal PWM technique, International Journal of Modeling, Simulation, and Scientific Computing, 3 (2021) 2150024 (20 pages), World Scientific Publishing Company, DOI: 10.1142/S1793962321500240.

International Conference publication

1. K. Chaturvedi, Ali Karimpour, Mayank Pratap Singh, Health Monitoring of Induction Motor Using Sound Signals, International Conference on, Communication and Signal Processing (VCAS 2019), organized by MNIT, Allahabad
2. Rastogi, Rohit and Saxena, Mamta and Gupta, US and Sharma, Sushil Kumar and Chaturvedi, Devendra K. and Singhal, Parul and Gupta, Mayank and Garg, Priyanshi and Maheshwari, Muskan and Gupta, Muskan, Yajna and Mantra Therapy Applications on Diabetic and Other Disease Subjects: Computational Intelligence Based Experimental Approach (January 8, 2020). Available at SSRN: <https://ssrn.com/abstract=3515800>
3. D.K. Chaturvedi, Ali Karimpore and M.P. Singh, Health Monitoring of Induction Motor Using Sound Signals, International Conference on Contemporary Computing and Applications (IC3A-2020) to be held at Dr. APJ. Abdul Kalam Technical University, Lucknow, U.P., India during Feb 05-07, 2020.
4. D.K. Chaturvedi, Bandyopadhyay Boudhayan, Analysis of Different Aspects of Smart Buildings and its Harmful Effects on the Ecosystem, Springer Int. Conf. on Electric Power and Renewable Energy Conference-2020 (EPREC-2020), 29th - 30th May 2020, on Technologies and steps towards sustainability, organized by NIT, Jamshedpur.
5. Purnima Bhatnagar, D K Chaturvedi, Dayalpyari Srivastava and Shalini Nigam, A review of literature on Ethics and Consciousness in Artificial Intelligence, Int. Conf. on Dayalbagh Science of Consciousness, D.E.I. and Cohosted by univ. of Waterloo, Canada, 22-25 May 2020.
6. Amit Yadav, Garima Jain, D K Chaturvedi, and Dharvendra P Yadav, Obstacle Avoidance with Sensors using Soft Computing Techniques, International Conference on Smart Machine Intelligence and Real-Time Computing (Smart Com 2020), 26 - 27 June 2020, Govind Ballabh Pant Institute of Engineering & Technology.

7. Amit Yadav, Garima Jain, D K Chaturvedi, "Intelligent Moving Machine (IMM) Based on Battery for an Efficient Regenerative Braking System" RAME-2020, DTU, Delhi.
8. D.K. Chaturvedi, Tanveer Qamar, M.M. Gupta, "Neuro-Control of Inverted Pendulum", 10th International Conference on Soft Computing for Problem Solving - SocProS 2020, December 18-20, 2020, Indian Institute of Technology Indore, India.
9. D.K. Chaturvedi, Shubham Yadav, Tamanna Srivastava, Electricity storage system: A Gravity Battery, Fourth IEEE World Conference on Smart Trends in Systems, Security and Sustainability (WorldS4) 2020 – LONDON.
10. V. Srinath, Manmohan Agarwal, D.K. Chaturvedi, "Simulation and Design of Modified SPWM and Single-Phase Five-Level Inverter", 15th IEEE International Conference on Industrial and Information Systems ICIIS, Indian Institute of Technology Ropar, 26th to 28th November 2020.
11. Shahida Khatoon, Md. Istiyaque, Naimul Hasan and Devendra Kumar Chaturvedi "Optimal Swing-up Controller Design for a Self-Balancing Autonomous Mobile Robot" JTA Multidisciplinary International Conference, 16-18 February, 2020; Jamia Millia Islamia, New Delhi (India).
12. Manikanta Gopiseti, Ashish Mani, Hemender Pal Singh and Devendra Kumar Chaturvedi, "Effect of Mixed Load Model on Placement and Sizing of DG in Radial Distribution Network", Springer International Conference on Electrical and Electronics Engineering (ICEEE 2021).
13. Rohit Rastogi, Mamta Saxena, Devendra Chaturvedi, Mayank Gupta, Rohan Choudhary, Ujjawal Sharma, Neha Gupta, Mohit Jain, Pradeep Kumar, Mukund Rastogi and Prajwal Srivastava, "Computing Analysis of Yajna and Mantra Chanting as a Therapy: A Holistic Approach for All by Indian Continent amidst Pandemic Threats", SCEESD-2021
14. Shiwani Dr. Meenu Singh D.K. Chaturvedi, Design and Development of an AI based Expert system for Science Students and its effect on Higher Order Thinking Skills (HOTS) and Creative Insight (CI), Summer Session of DSC, 2021 (The Third International Conference on Dayalbagh Science of Consciousness, 2021) on May 21, 2021.
15. Amit Yadav, Raghvendra Sharma, S.M. Jain, D. K. Chaturvedi and Pankaj Gupta, Development of an Automatic Vehicle for Industrial Application using Labview, International Conference on Innovations in Smart Technology, Advanced Materials and Communication Engineering (ISTAMCE) 9th June 2021, Amity School of Engineering and Technology, Gwalior, Madhya Pradesh. (Best Paper Award in the category of Embedded systems Design).
16. Amit Yadav, Ajeet Gaur, D K Chaturvedi, Mayank P Singh, S M Jain and Trapti Jain, Design and Development of VI Controlled Intelligent Robot Systems for Real Time Applications, International Conference on Innovations and Ideas towards Patents (ICIIP-2021), ORGANISED BY Indira Gandhi Delhi Technical University for Women, Delhi, India, October 30th, 2021.
17. D.K. Chaturvedi, Mayank Agarwal, Cost Effective Smart EVA Shoe for Women and children safety", International Conference on Innovations and Ideas towards Patents (ICIIP-2021), ORGANISED BY Indira Gandhi Delhi Technical University for Women, Delhi, India, October 30th, 2021.
18. A.K. Singh, Ibraheem, D.K. Chaturvedi, S. Khatoon, Amit K. Sharma, Multi-Disc Eddy Current Braking System (ECBS) with Intelligent Controllers, International Conference on Innovations and Ideas towards Patents (ICIIP-2021), ORGANISED BY Indira Gandhi Delhi Technical University for Women, Delhi, India, October 30th, 2021.

19. Mayank Pratap Singh, Ram Naresh Mishra, D. K. Chaturvedi, Low-cost Air Sanitization System, Elsevier-Ssrn International Electrical and Electronics Engineering Conference (IEEEEC-2021), Delhi Technological University, Shahbad Daulatpur, Main Bawana Road, Delhi-110042 Oct 24, 2021.

National journal publications

1. Ram Naresh Mishra, D.K. Chaturvedi & Prabhat Kumar, Recent Philosophies of AGC Techniques in Deregulated Power Environment, Journal of The Institution of Engineers (India): Series B, 2020, 1-17, DOI: 10.1007/s40031-020-00463-8.
2. D.K. Chaturvedi, Arjun Verma, Design and Development of Prototype Through Additive Manufacturing of Bunion and First Metatarsal Phalangeal Joint” Journal of Indian Leather Technologists’ Association (JILTA), June 2021, Vol.LXXII, issue 6, pp.31-35.
3. D. K. Chaturvedi and M. P. Singh, Health Monitoring of Induction Motor using Thermal Images, The Journal of Central Power Research Institute CPRI, Vol. 16(2)/105-114, July-December 2020. DOI: 10.33686/pwj.v16i2.151493.
4. Amit Yadav, Ajeet Gaur, D K Chaturvedi, Mayank P Singh, S M Jain and Trapti Jain, Design and Development of VI Controlled Intelligent Robot Systems for Real Time Applications, INDIAN OFFICIAL JOURNAL OF THE PATENTS, 2021.
5. D.K. Chaturvedi and Mayank Agarwal, Cost Effective Smart EVA Shoe for Women and Children Safety, INDIAN OFFICIAL JOURNAL OF THE PATENTS, 2021
6. Arunesh Kumar, D K Chaturvedi, Amit Yadav, Pramod Singhal and Mayank P Singh, Multi-Disc Eddy Current Braking System (ECBS) with Intelligent Controllers, INDIAN OFFICIAL JOURNAL OF THE PATENTS, 2021.
7. Shiwani Singh, Meenu Singh and D. K. Chaturvedi, Historical perspective of Artificial Intelligence based Expert system, 44th National Systems Conference NSC 2021 at D.E.I. Agra.

CSR

1. Designed and developed
 - a. Low-cost Air sanitization system for Saran Asharam Hospital
 - b. Low-cost baby warming system.

Awards and Recognition

1. Dr. Prem Prakash Vuppuluri was ranked third in the biennial Metaheuristics Competition sponsored by the Association of European OR Societies, the French National Centre for Scientific Research CNRS-GDR and European Working Group on Metaheuristics, organized during June-October 2021 by the Metaheuristics Summer School, University of Catania, Italy. The objective of the competition was to design and implement an efficient metaheuristic solution to a specific real-world big data optimization problem. The top three ranks in the competition are awarded the MESS 2020+1 competition prize, which, in this case, is shared by two teams of researchers from UFF, Brazil and UVA, Spain respectively, and Dr. Prem Prakash from DEI, India.
3. Dr. Rajiv Kumar Chauhan was selected as Young Professional Star Award of the Month, September 2021 by IEEE UP.
4. A Team from Faculty of Engineering has Prizes Won the National Level Smart India Hackathon in one group in Smart India Hackathon.
5. Mr. Vikas Kumar Singh, M. Tech, was awarded first prize for his project Idea “Self-Sustainable Green House” in Green Cover Competition organized by IEEE Student Branch at Central University of Haryana, Mahendragarh held on 5th September 2021.

6. Mr. Raushan Kumar, M. Voc. Renewable Energy: Won Gold Medal in State Level and National Level India Skills National Competition organized by NSDC, Min of Skill Dev. & Entrepreneurship, GoI and will represent India in global competition.
7. Ms. Gauri Sharma has Joined University of McGill for Higher Studies in January 2020
8. Following eight students of Electrical Engineering are selected for internship under MITACS (Indo-Canadian Scheme of AICTE)
 - a. Mr Vageesh Amoriya: University of Qubec a Trois-Rivieres
 - b. Ms. Drishti Goel: Western University, Ontario
 - c. Ms. Vanshita Parmar: University of Manitoba
 - d. Mr. Aarat Satsangi: Ryerson University
 - e. Ms. Kusum Singh: University of Saskatchwan
 - f. Mr Swapnil Rajput: York University
 - g. Ms. Mehar Mishra, University of Waterloo
 - h. Mr. Harshit Agarwal: Université de Sherbrooke – Sherbrooke

Seminar/Symposia/Conference/Webinar Organized

1. IEEE Workshop on Modelling and Simulation with MATLAB Emerging Applications was organised successfully, from 18th to 28th October, 2021
2. IEEE Student Branch hosted an IEEE webinar by Dr. Gaurav Vats, Research Scientist in the Department of Physics and Astronomy at Katholieke Universiteit Leuven, Belgium on "Solid-State Energy Conversion and Signal Modulation Using Ferroelectrics." on 16th January 2022
3. A Faculty Development Program, under AICTE ATAL scheme was organised during 5th July 2021 to 9th July 2021 on Microgrid an Opportunity: Electric Vehicle and Renewable Energy resources.
4. Dr. Rajiv Kumar Chauhan chaired a session in 18th International Scientific-Technical Conference "Alternating Current Electric Drives" (ACED 2021) Ekaterinburg, Russia 24-27 May 2021.

Patents

Dr. Prem Prakash Vuppuluri and Prof. Patvardhan Chellapilla: were granted an Innovation Patent by IP Australia, No. 021105408, titled " A METHOD AND SYSTEM FOR BUILDING MINIMUM SPANNING TREES WITH LEAF CONSTRAINT IN EUCLIDEAN SPACE".

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 (M. Sc.) programmes in M. Sc. (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 B. Sc. (Computer Science) Hons., M. Sc. (Comp. Sc.), M. Tech. (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], Doctor of Philosophy (Ph. D.) 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 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
- PG Diploma in Environment & Green Technology
- 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 Phyto diversity 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, Pant Nagar Uttarakhand, India, Jain Irrigation, Jalgaun, 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 facilities or Laboratories created

Polyhouses with Fan Pad System

Staff Achievements/ Recognition:

- Dr. S.K. Soni was selected as Editorial Board Member for International Journal of Botany Studies-2021.
- Dr. Rajiv Ranjan was selected as Editorial Board Member for Medicinal Plants - International Journal of Phytomedicines and Related Industries and served as Reviewer for Horticulture Research and Molecular Biotechnology Journals.
- Dr. Sharmita Gupta received the Certificate of Excellence in reviewing in Asian Journal of Biology;2020 and One year membership of Indian Science Congress Association 2020.
- Ms. Archita Dixit received DSRFP Fellowship.
- Dr. V. K. Dalal was nominated editor in Biochemistry and Molecular Biology.
- Dr. Akbar Ali attended Simple Talks – 11 (an eco-educational talk series) Webinar on Biodiversity, Agriculture and Communities organized by CGBMT-School of Simple Living & Department of Botany, DEI, August 7, 2020.

Placements

The following students were selected for Placements

1. Ms. Pragati Yadav- UPPSC -TGT-2021
2. Manisha Sharma- Indian Forest Service-2021
3. Umesh Pratap Singh-Mother Dairy -2021
4. Mudit Sharma- Mother Dairy- 2021
5. Aman Yadav- Mother Dairy Fruit and Vegetables-2021
6. Dr. Nitesh Verma as Lecturer in MPS Group of Institutions

Seminar/Symposia/Conference/Special Lectures organized

- UGC SAP sponsored seminar on “Bioprospecting and bioactive compounds from microbes and plants, organized on 24 March, 2021 attended by all the students and faculty members.

Conference/Webinar/Seminar Attended

- Dr. Rajiv Ranjan participated Certificate Programme on “Data Analysis using STATCRAFT” organized by Department of Sociology and Political Sci. DEI Deemed Univ. Agra, held on 17th August 2020. He attended one-day online workshop for “Enhancing Research Communication Skills through Science Direct and Mendley, organized by Internal Quality Assurance Cell and School of Education DEI, Dayalbagh, held on 23rd May 2020. An Online National Webinar on “Research Ethics and Academic Integrity” organized by Government Degree College, Gosaikheda, Unnao, Uttar Pradesh and Government Kaktiya PG College, Jagdalpur, Bastar, Chattisgarh held on 9th June 2020 was also attended by him. He participated in Online International Symposium on “Biotechnological Potential of

Mushroom: An Emerging approach to fight against Covid- 19” organized by Sri Guru Teg Bahadur Khalsa College, Jabalpur, M.P., held from 23rd -24th May 2020. Dr. Rajiv Ranjan also participated in a 3days online National Level Workshop on “DNA Barcoding” organized by Department of Biotechnology, Islamiah College (Autonomous), Vaniyambadi, held from 22nd – 24th May 2020. He marked his presence in Online International Symposium on “Role of Plants as Medicine and Immunity Booster with Special Reference to COVID 19 Pandemic” organized by Sri Guru Teg Bahadur Khalsa College, Jabalpur, M.P., held from 26th -27th May 2020. He also participated in Online seminar on 1st July 2020 on Genomic assisted breeding for chickpea improvement organized by Bioingene. He attended International Faculty development program on Recent Trends in science and technology from 15 June 2020 to 20th 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. Dr. Rajiv Ranjan also graced his presence at National webinar on Improvisation in growing plants 2020 (IGP 2020) on 11th September 2020, organized by Gujarat university Botanicals Society (GUBS), Department of Botany, Bioinformatics and Climate change impacts management, Gujarat University, Ahmedabad, Gujarat and attended an International Webinar on “Human Health and Environment” Jointly organized by Department of Economics and IQAC, held on 5th June 2020. He also participated in an Online webinar on “Microbiologist in Everybody” organized by Biocon Academy and Biotechnika Info Labs Pvt Ltd on 3rd June 2020. He attended National Webinar on COVID 19 and Indian Agriculture: Challenges and opportunities on 9th June 2020, organized by Faculty of Agriculture, Udai Pratap college, Varanasi. He marked his presence in an E- quiz organized by Department of Biotechnology, Faculty of Applied Science, AIMST University in celebration of World Environment Day 2020 on 5th June 2020. He attended Two Days National Workshop on “Writing and Publishing Quality Research Papers in Scholarly Top Tier Journals” organized by RMD Sinhgad School of Management Studies, Warje, Pune, from 19th- 20th July 2020. He participated in E- conference entitled “International E- conference on Biotechnology, Bioinformatics and Biomedicines 2020” organized by Faculty of Applied Sciences, AIMST University, Malaysia, held on 24th -26th August 2020. He also Webinar on “Climate, Health and Sustainability” organized by Department of Chemistry, Dayalbagh Educational Institute, Agra, held on 4th June 2020. He participated in an 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 14th May, 2020 was also attended by Dr. Rajiv Ranjan. He attended National webinar on ‘Knowledge generation in education during COVID-19 Pandemic- Quality research’ organized by Department of Botany, St. John’s College Agra, held on 5th June, 2020. He was present in the Webinar on COVID-19: Roadmap to future Environment organized by Department of Botany, St. John’s College Agra, held on 5th June, 2020. He was also a part of 5-day international faculty development program cum workshop on Sustainable Environmental Engineering Practices (SEEP 2020) from 21st -25th September 2020, organized by Department of Civil Engineering, IIT-Rourkela, India. Webinar on Current perspective of Microbial diseases 2020 organized by Department of Microbiology, Yashwatrao Chavan College of Science, held on 5th June, 2020. Dr. Rajiv Ranjan presented a poster on A comparative study of pharmacological, phytochemical and biotechnological aspects of *Tribulus terrestris* and medicinal herbs, in the International Conference (BioSangam 2020) during Feb 21-23 2020 at department of biotechnology, MNNIT Allahabad, Prayagraj, India.

- Dr. S.K. Soni attended A CSE Webinar & Report Release, Organic & Natural Farming in India on September 8, 2020
- Dr. Sharmita Gupta and Lovely Singh presented a paper on “Comparative analysis of Synergistic effect of Bioactive Plant Extract of *Catharanthus roseus* and *Azadirachta indica* against different pathogenic 5 microbes” in 107th Indian science congress, Science and Technology: Rural Development from 03/01/2020 to 07/01/2020, held at University of Agricultural Sciences Bangalore. Sonal and Sharmita Gupta also presented paper entitled as “Biological characterization of virus infecting Garden quinine and its effect on nitrogen of host plant” in 107th 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 presented “*Argemone ochroleuca*: A review on its ethnopharmacological aspects in 107th 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 presented a paper on “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. Dr. Sharmita Gupta attended “Climate, Health and Sustainability”, webinar on

4.6.2020 by Department of Chemistry, D.E.I. She attended Webinar on “Novel COVID-19 and How to march ahead” on 9.6.2020 organized by DEI Ayush Webinar series I. She also participated in National Webinar on “Transboundary and emerging infectious diseases: challenges in diagnosis and control” organized by Indian Virological Society and Department of Microbiology, Assam Agricultural University on 18.11.2020 Dr. Sharmita Gupta attended CGBMT Webinar on 7.8.2020. She was also a part of International Webinar on “COVID-19 Pandemic: concern and perspectives” organized by college of animal biotechnology, Ludhiana and IVS on 23.1.2021.

- Dr. V. K. Dalal participated in Research Group; MIGAL-Applied Research Institute, Israel Aug 05-06, 2021. Attended “3rd International Webinar on Plant Science and Molecular Biology”, organized by Coalesce Research Group and Department of Natural compounds and Nutrition; Plant Science & Molecular Biology, July 29-30, 2021. He gave an Oral presentation in SAF-UGC workshop at Dept of Botany, DEI, Agra, India (March, 2021).

Faculty Development Program:

- Dr. Sharmita Gupta attended online refresher course on ‘Disaster Management’, 28 Sept-12 Oct, 2020 from UGC-HRDC, Kumaun University, Nainital. She also attended national level virtual faculty development programme on ‘Promising Success through Inclusive Development’, 15-21 Feb, 2021, organized by Dwaraka Doss Goverdhan Doss Vaishnav College, Chennai.
- Dr. Akhilesh Kumar participated in Faculty Induction and the refresher course Programme on Guru Dakshta from 02/11/2022 to 29/11/2022 from HRDC, University of Lucknow.
- Dr. Anupam Tiwari has been conferred as the Life member of Indian Science congress.
- Anamika Gupta participated in 40-hour online Faculty Development Programme (FDP) on “Advances in Bioinformatics” (10.05.2021-16.05.2021) organized by Department of biotechnology, NIT Warangal, sponsored by Ministry of Electronics and Information Technology, GoI.
- Dr. Akbar Ali attended One day webinar on Climate, Health and Sustainability. June 04, 2020, Department of chemistry, DEI, Agra. He also attended a National Conference on “Unani Medicine: Opportunities and challenges in times of COVID-19”. February 11, 2021, Vigyan Bhawan, New Delhi. He attended 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. Dr. Akbar Ali attended 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. He participated in One week International online training on Recent Physio-Molecular Digital Tools in Abiotic Stress Management for Crop Modeling organized by Centre for Advance Agricultural Science and Technology (CAAST), Centre of Excellence for Digital Farming Solutions for Enhancing Productivity By Robots, Drones and AGVs, VNMKV, Parbhani (MS) under National Agricultural Higher Education Project (NAHEP) of Indian Council of Agricultural Research (ICAR), New Delhi and World Bank during June 29 - July 3, 2020. He also took part in Training-cum-workshop "FDP - AMU Online Teachers Training" organized by Aligarh Muslim University, Aligarh from July 28-29, 2020.

Research projects

- Project entitled Maximization of Yield and Quality Traits of Hydroponically Grown Lettuce in the Poly House was granted to Dr. V. K. Dalal funded by: DEI Internal grant, INR 200000/
- Project entitled Socio-economic empowerment of the in the Rajaborari estate Madhya Pradesh through scientific and technological interventions was granted to Dr. Rajiv Ranjan as Co-PI (DST-SEED, Amount 2,19,22,599)
- Project entitled Development of steel slag-based cost-effective eco-friendly fertilizers for sustainable agriculture and inclusive growth was granted to Dr. Rajiv Ranjan as Co-PI (Amount 78.23 Lakh, Ministry of Steel)
- Project entitled Development of agriculture and industrial waste-based formulation to be used as fertilizer for sustainable agriculture was granted to Dr. Akhilesh Kumar (Amount 10 Lakh, Ministry of Steel)

Students achievements / Seminar/webinar/workshop attended

- Krishan Kant (CSIR NET JRF) participated in a Webinar on Techniques in Molecular Biology held during 25th – 29th May 2020 Organized by Department of Zoology, University of Rajasthan. Krishan Kant attended online webinar on Microbiologist in Everybody Organized by Biocon Academy and Biotecnika Info Labs Pvt Ltd on 3rd June 2020. He also attended an Online International Symposium on topic “Biotechnological Potential of Mushroom: An Emerging Approach to Fight against Covid-19” from 23rd May to 24th May 2020 organized by Department of Biotechnology Shri Guru Teg Bahadur Khalsa College, Jabalpur (M.P.). He participated in a webinar on “Mangrove Environment” organized by Department of Botany, A.V.V.M. Sri Pushpam college Poondi, Thanjavur on 5th June 2020. Attended a National Webinar on “Indian Herbs Immunity Booster during and Post COVID-19 in Indian Perspective” on 9th and 10th June 2020 organized by St. Aloysius Institute of Technology, Jabalpur. A Oneday International Webinar on “Current Perspectives of Microbial Diseases 2020” organized by Internal Quality Assurance Cell and Department of microbiology, Yashwant Rao Chavan college of Science, Karad on 5th June 2020 was attended by him. One day National E- Conference on Environmental Challenges, Problem and Remedies organized by the Department of Geography held on 12th June 2020 was attended by him. He was a part of National Webinar on “Modern Agricultural Technology: A Step Towards Rural Self-Reliance” organized by the Institute of Agriculture, Visva-Bharati (A Central University), Sriniketan, West Bengal, India during 12-14 June 2020. He also took part in International Webinar on ‘Role of Applied Sciences in current Scenario’ organized by Department of Applied Science and Humanities, Raja Balwant Singh Engineering Technical Campus, Agra (Uttar Pradesh) India on 18th June. He actively participated in National Seminar entitled “Biological Evolution: History and Processes” organized by Department of Botany, Govt. Swami Vivekanand Degree College, Berasia, Bhopal (M.P.) on March 02, 2021. He participated in One-day online workshop on “Industrial Revolution 4.0 for Smart Manufacturing and Interconnectivity” organized under ‘CSIR Integrated Skill Initiative programme’ by CSIR-Central Scientific Instruments Organization (CSIR-CSIO), Chandigarh on 19th March 2021. Krishan Kant presented poster in National conference on “Bioprospecting and Bioactive Compounds from Microbes and Plants” organised by Department of Botany, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra held on 24th March 2021. He attended National webinar on “Importance of biological diversity” held on 22 May 2022 organized by “PRAKRUTHI-THE ENVIRONMENTAL CLUB OF LBRCE” LB REDDY NAGAR, MYLAVARAM, KRISHNA DIST, ANDHRA PRADESH, INDIA. He took part in International Webinar on “Urban Farming- Cultivation of Medicinal plants in Hydroponics” held on 27th March 2021 Organized by SLI International webcasting Centre, Dept. of Botany, Sri Venkateshwara University, Tirupati, A.P., India. Participated in National Webinar on ‘Trends in Processed Food in Post-Independence India ‘Under ‘Azadi Ka Amrit Mahotsav’ organized by School of Interdisciplinary and Applied Sciences, Central University of Haryana on 24th May 2021. Participated in World Environment Day 2021 Celebration Web Seminar on Environmental Restoration and Circular Economy 5th June 2021. Also participated in World Environmental Day 2021 International Dialogue on Ecological Restoration 5th June 2021 under the Aegis of international consortium organized from Rajasthan, India by the hosting organizations department of environment Sciences, M. L. Sukhadia University, Udaipur, and Agrawal Kanya MahaVidyalay, Gangapur city Rajasthan. He actively participated in World Environment Day 2021 Celebration WED Seminar on Environmental Restoration and Circular Economy 12th June 2021. Krishan Kant attended Webinar on Guidelines for addressing Resource Efficiency, Secondary Raw Materials & Circular Economy in Industries 24th June 2021 Organized by International Society of Waste Management Air and Water (ISWMAW), Centre for Sustainable Development and Resource Efficiency Management, Jadavpur University (CSD&REM, JU) India. Attended International Webinar on Nature and Human interrelationship wrt Ecological Restoration on 26 June 2022 organized by Dept. of Zoology Sanatan Dharm Government College, Beawar and Agrawal Kanya Mahavidyalay, Gangapur city Rajasthan. He also attended an E-Workshop on ‘Current Challenges in Promotion and Protection of Intellectual Property Rights’ held on 21 October 2021.
- Navneet Kaur attended Webinar on “Eco educational talk series organized by Centre for Green Building Materials and technology, Bangalore” & “Dayalbagh Educational Institute (Deemed University) Dayalbagh, Agra” held on “14th, 22nd, 28th, August and 4th September 2020. She also attended Webinar on “Celebrating 18 years of successful BT Cotton Cultivation in India” organized by “Biotecnika Info labs Pvt Ltd” on “12th September 2020”.
- Parul Tyagi attended 5 days online workshop on “Basic Bioinformatics Tools and Techniques” on 01/11/2020/06/11/2020 organized by Pathfinder Research and Training Foundation. She participated in a Certificate Program on Data Analysis using STATCRAFT on 17th August 2020

Organized by the Dept. of Sociology & Political Sci. DEI Deemed Univ. Agra in collaboration with STATCRAFT, Bangalore. She also participated in a live webinar on “Understanding Plant-Virus interaction to identify novel antiviral weapon in the plant arsenal” by Dr. Basudev Ghoshal, Postdoctoral Scientist, Department of Molecular, Cell, and Developmental Biology (MCDB), University of California (UCLA), Los Angeles, USA on 13 July 2020. Parul Tyagi also attended the webinar on “How is CRISPR-Cas accelerating crop improvement?” presented by Dr. K. A. Molla on 29 June 2020 organised by Bioingene.com. she also participated in 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. She also attended a webinar 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 13th 2020.

- Anamika Gupta attended a webinar on ‘Learn from a cell press Editor: How to publish in and optimize resources for ground breaking journals by Dr, S.W. Cranford at Elsevier on 25th Feb 2021. She attended 5 days’ online workshop on Microbial genomics- 2020, organized by centre of Bioinformatics, computational and system Biology, Pathfinder research and training and foundation, Greater 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). She also attended a 3-week online certification course on Recombinant DNA technology And Genetic Engineering organized by Learn to upgrade and Wetlab Championship. She participated in a certificate program on Data analysis using STATCRAFT on 17th Aug 2020 organized by the Department of Sociology and Political Science, DEI Deemed University, Agra. 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. She also Training Course on “Techniques in Molecular Biology” 16th to 21st March 2020 organised by Agribiotech foundation PJTS Agriculture University Campus Rajendra Nagar, Hyderabad. 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. She also attended an International online conference on Drug development, its challenges and the role of Nutrition in Immuno Boosting+ against COVID 19 organized by Department under AEGIS of IQAC, Kalindi College, University of Delhi, India, on 20th May 2020.
- Pooja Saraswat attended six days online training program sponsored by UGC-NRC on ‘Tools Enabling drug discovery and drug analysis in pharmaceutical research’ from March 22nd to 27th, 2021. Pooja attended RBPT-based Workshop on ‘Bioinformatics’ under the aegis of DBT STAR college scheme from 9th to 13th Jan 2021, organized by Acharya Narendra Dev college, DU, Delhi. She attended an international Webinar on CRISPR in Agriculture: Context of Improving WUE organized by Bioingene.Com held on 12th September 2020. Attended an international Webinar on ‘The importance of Soft Skills in Academia’ organized by Bioingene.com held on 5th September 2020. She attended an international webinar on ‘Integrating genomics for accelerating the rate of genetic gain for Chickpea improvement’ organized by Bioingene.com held on 1st September 2020. She also participated in a certificate program on Data analysis using STATCRAFT on 17th Aug 2020 organized by the Department of Sociology and Political Science, DEI Deemed University, Agra. She participated in an Online Certificate Course in Recombinant DNA Technology (Batch II) from 6th to 10th June, 2020 organized by UKA Tarsadia University. Pooja Saraswat attended one-day online workshop for Enhancing research communication skills through ScienceDirect and Mendeley on 3rd May 2020, organised by Internal Quality Assurance cell (IQAC) and school of education (SoE), Faculty of education, Dayalbagh Educational Institute, Agra in collaboration with Elsevier. Also participated in Training Course on “Techniques in Molecular Biology” 16th to 21st March 2020 organised by Agribiotech foundation PJTS Agriculture University Campus Rajendra Nagar, Hyderabad. She also participated in Research fair-2020 @ DEI organized by Dayalbagh Educational Institute, Agra held on 11th January, 2020.
- Ayushi Singh attended Two days International Virtual conference on “Modern Instrumentation and Characterization Techniques in Applied Sciences- 2020 (MICTAS- 2020)” organized by MIET Kumaon, Haldwani in collaboration with USERC DST Dehradun; Dated on July 5- 6, 2020. Attended an International Virtual conference on “Recent Trends in Nanomaterials Synthesis and Applications (RTNSA-2020)” organised by Madanapalle Institute of Technology and Science, Andhra Pradesh; Dated on July 16 to 18, 2020. She also took part in International webinar on “Quantum Materials and Nanoparticles for Advanced Applications” organised by Kamraj college, Tamil Nadu; Dated on

Aug 06, 2020. Ayushi Singh attended a Webinar on “Nanomaterials for Biomedical Applications” organised by KPR Institute of Engineering and Technology, Coimbatore; Dated on July 15, 2020.

- 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. She participated in online webinar On “National Seed System and Policy Perspectives” Organized By NAHEP (ICAR)- CAAST, IARI, New Delhi. On 23rd May, 2020. Deeksha Singh also participated in 3 days International Webinar On “COVID 19 Pandemic Prevention and Management”. Organized by the Dept of Microbiology, Govt. Holkar Sc. College from 4th to 6th June, 2020. 5-day online workshop on “Basic Bioinformatics Tools and Techniques”. Organized by Pathfinder Research and training foundation from 1 to 5 Nov, 2020 was also attended by her. She attended 15 days online summer training on “In silico Tools for Molecular Biology” organized by Biosrishti from 02-18th June, 2021.
- Shivangi Mathur attended e-workshop on “Current challenges in promotion and production of intellectual property rights” organized by IPR Cell and Department of Botany, Government college, Kota (RAJ.) in collaboration with DST, Government of Rajasthan, Jaipur held on 21, oct 2021.
- Ambika Chaturvedi attended RBPT-based Workshop on ‘Bioinformatics’ under the aegis of DBT STAR college scheme from 9th to 13th Jan 2021, organized by Acharya Narendra Dev college, DU, Delhi.
- Vikas participated in AICTE training and learning (ATAL) academy FDP on Photography held from 9th to 13th Feb 2021 & Media communication held from 23rd to 27th Feb, 2021. Vikas presented a poster in UGC Sponsored National Seminar on Developing an approach for the conservation of water and soil nutrients.
- Hunny Waswani attended RBPT-based Workshop on Bioinformatics under the aegis of DBT STAR college scheme from 9th to 13th Jan 2021, organized by Acharya Narendra Dev College, DU, Delhi. Attended Online training on Emerging respiratory viruses, including COVID-19: methods for detection, prevention, response and control conducted by WORLD HEALTH ORGANIZATION on June 8, 2020. She attended webinar on Regulatory Framework for Vaccines Organized by Biocon and Biotechnika Info Labs Pvt Ltd. On 23/08/2021. Also participated in the online webinar on “Precision Farming for Pomegranate using IoT” on 15/08/2021. She attended six days webinar series on 3D Bioprinting Organized by Altem Technologies & Biotechnika Info Labs Pvt Ltd. 21/7/2021. She also attended online webinar on BATTLE AGAINST NOVEL CORONAVIRUS jointly organized by Promega Biotech India Pvt Ltd and Biotechnika Info Labs Pvt Ltd on 5th August 2020. Attended online webinar on MICROBIOME – PERCEPTIONS AND PRESPECTIVES organized by Biotechnika Info Labs Pvt Ltd on 27th June 2020. Hunny Waswani attended online webinar on CELEBRATING 18 YEARS OF SUCCESSFUL BT COTTON CULTIVATION IN INDIA, organized by Biotechnika Info Labs Pvt Ltd on 12th Sep 2020.

Publications

- Nishi Sharma and S.K. Soni Soymilk, 2020. Probiotic tofu production and extension of shelf life. International Journal of Scientific Research and Reviews, Vol. 9(4), 37-53, ISSN: 2279-0543.
- Karuna Singh and S.K. Soni. 2020. Effects of Walnut oil & Flaxseed oil, Fortification in Development of Omega 3 Fatty Acid Lassi in Multi- Disciplinary Approaches for Development of Agriculture and Allied Sectors in Global Scenario, 978-93-92403-14-9.
- Gupta, D., Dey, N. Leelavathi, S., Ranjan, R. 2020 Development of efficient synthetic promoters derived from para retrovirus suitable for translational research. Planta, 253:42 <https://doi.org/10.1007/s00425-021-03565-9>.
- Gupta, D., and Ranjan, R. 2020 In silico characterization of synthetic promoters designed from Mirabilis Mosaic Virus and Rice Tungro Bacilliform Virus. Virus Disease volume 31, pages369–373
- Gupta,A., and Ranjan, R. 2020 Grasses as an immense source of pharmacologically active medicinal properties: An overview, Proc Indian NatnSciAcad86 No. 4 December 2020 pp. 1323-1329.
- Yachana Jha, Budheswar Dehury, SP Kumar, Anurag Chaurasia, Udai B Singh, Manoj Kumar Yadav, UB Angadi, Rajiv Ranjan Minaketan Tripathy, RB Subramanian, Sunil Kumar, Jesus Simal-Gandara 2021 Delineation of molecular interactions of plant growth promoting bacteria induced β -1,3-glucanases and guanosine triphosphate ligand for antifungal response in rice: a molecular dynamics approach. Molecular Biology Reports, <https://doi.org/10.1007/s11033-021-07059-5>.

- Pramod Kumar, Sanjay Yadav, Madan P Singh., Bioregulators application improved heat tolerance and yield in chickpea (*Cicer arietinum* L.) by modulating zeaxanthin cycle, 2020, Plant Physiology, 25 (4), 677-688.
- Pramod Kumar, Sanjay Yadav, Madan P Singh., Possible involvement of xanthophyll cycle pigments in heat tolerance of chickpea (*Cicer arietinum* L.), Physiology and Molecular Biology of Plants, 2020, 26(9), 1773-1785.
- Dukpa, R., Tiwari, A., & Kapoor, D. (2020). Biological management of allelopathic plant *Parthenium* sp. Open Agriculture, 5(1), 252-261.
- Teg Bahadur Singh, Vikram Sahai, Akbar Ali, Mrinalini Prasad, Arti Yadav, Preksha Shrivastav, Deepika Goyal and Prem Kumar Dantu (2020) Screening and evaluation of PGPR strains having multiple PGPtrait from hilly terrain. Journal of Applied Biology & Biotechnology 08:38-44 ISSN Online: 2347-212X, ISSN Print: 2455-7005
- Teg Bahadur Singh, Vikram Sahai, Deepika Goyal, Mrinalini Prasad, Arti Yadav, Preksha Shrivastav, Akbar Ali and Prem Kumar Dantu (2020) Identification, Characterization and Evaluation of Multifaceted Traits of Plant Growth Promoting Rhizobacteria from Soil for Sustainable Approach to Agriculture. Current Microbiology <https://doi.org/10.1007/s00284-020-02165-2> IF = 1.610 Electronic ISSN 1432-0991, Print ISSN 0343-8651.
- Farhad Alam, Akbar Ali, Abid Ali Ansari, M Naeem, Tariq Aftab, M Masroor A Khan (2020) Employing silicon nanoparticles and GA3 in enhancing the productivity and biochemical attributes of sweet-leaf plant (*Stevia rebaudiana* Bert.) International Journal of Botany Studies 05: 383-387 ISSN: 2455-541X.
- Arvind Mishra, Akhilesh Kumar, 2020. Livestock healthcare management practices in Pratapgarh, Uttar Pradesh, India. Bioved 31: 41-47 ISSN-0971-0108
- Arvind Mishra, Akhilesh Kumar, 2020. Ethnobotanical survey of wild vegetables of Pratapgarh district, Uttar Pradesh, India. Bioved 31: 63-66 ISSN-0971-0108

Book Chapters

- Dipinte Gupta, Anamika Gupta, Kritika Yadav, Rajiv Ranjan 2020 Molecular Mechanism of Plant Adaptation and Tolerance to Cold Stress, Springer Singapore (Page 61-87)
- Mrinalini Prasad, Anamika Gupta, Rajiv Ranjan 2020 Nano-contaminants: Sources and impact on Agriculture, Contaminants in Agriculture, Springer (Page 175-199)
- Mrinalini Prasad, Rajiv Ranjan, Akbar Ali, Deepika Goyal, Arti Yadav, Teg Bahadur Singh, Preksha Srivastava, Prem Kumar Dantu 2020 Efficient transformation of Agriculture waste in India, Contaminants in Agriculture, Springer (271-287)
- Mrinalini Prasad and Rajiv Ranjan 2020 Brassicaceae plants responses and tolerance to water logging and flood, Springer Singapore, 978-981-15-6344-7, 475626_1_En. (Chapter-10)
- Prasad, M., Ranjan, R., Ali, A., Goyal, D., Yadav, A., Singh, T. B., & Dantu, P. K. 2020. Efficient transformation of agricultural waste in India. In Contaminants in Agriculture (pp. 271-287). Springer, Cham.
- Parul Tyagi., Ayushi Singh., Anamika Gupta, Mrinalini Prasad, Rajiv Ranjan 2021. Mechanism and function of salicylate in plant toward biotic stress tolerance. (Elsevier)
- Prasad, M., Saraswat, P., Gupta, A., & Ranjan, R. 2021. Molecular basis of plant-microbe interaction in remediating organic pollutants. In Handbook of Bioremediation (pp. 603-623). Academic Press.
- Saraswat, P., Yadav, K., Gupta, A., Prasad, M., & Ranjan, R. 2021. Physiological and molecular basis for remediation of polyaromatic hydrocarbons. In Handbook of Bioremediation (pp. 535-550). Academic Press.
- Gupta, A., Saraswat, P., Yadav, K., Prasad, M., & Ranjan, R. 2021. Physiological and molecular basis for remediation of pesticides. In Handbook of Bioremediation (pp. 551-568). Academic Press.
- Pandey, N., Tiwari, A., Rai, S. K., & Pandey-Rai, S. (2021). Accumulation of Secondary Metabolites and Improved Size of Glandular Trichomes in *Artemisia annua*. Plant Cell and Tissue Differentiation and Secondary Metabolites: Fundamentals and Applications, 99-116
- Pandey, N., & Tiwari, A. (2021). Human health risk assessment of heavy metals in different soils and sediments. In Heavy Metals in the Environment (pp. 143-163). Elsevier.
- Marya Khan, Ummey Aymen, Ashiq Hussain Mir, Anupam Tiwari, and Parul Parihar (2022) Understanding Heavy Metal Stress in Plants Through Mineral Nutrients, Taylor and Francis
- Preksha Shrivastav, Mrinalini Prasad, Teg Bahadur Singh, Arti Yadav, Deepika Goyal, Akbar Ali and Prem Kumar Dantu (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
- Teg Bahadur Singh, Akbar Ali, Mrinalini Prasad, Arti Yadav, Preksha Shrivastav, Deepika Goyal and Prem Kumar Dantu (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
 - Deepika Goyal, Arti Yadav, Mrinalini Prasad, Teg Bahadur Singh, Preksha Shrivastav, Akbar Ali, Prem Kumar Dantu and Sushma Mishra (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
 - Mrinalini Prasad, Rajiv Ranjan, Akbar Ali, Deepika Goyal, Arti Yadav, Teg Bahadur Singh, Preksha Shrivastav and Prem Kumar Dantu (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
 - Arti Yadav, Deepika Goyal, Mrinalini Prasad, Teg Bahadur Singh, Preksha Shrivastav, Akbar Ali and Prem Kumar Dantu (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.
 - Nitesh Verma and Sharmita Gupta. "Management of polythene waste through biodegradation by using few species of *Aspergillus*: An environment friendly approach". in Biotechnology and biological sciences 2020. ISBN978-0-367-43161-7; pp. 325-332. (Taylor and Francis)
 - Sonal and Sharmita Gupta, "Characterization of virus causing chlorotic spot disease in garden quinine and its effect on nitrogen and pigments" *Annals of plant and soil research* 22(2):186-188 (2020)

Patents Filed

- A Novel Synthetic Promoter and its Application, Inventors: Rajiv Ranjan, Dipinte Gupta and Nrisingha Dey, Patent Application No. 0562022/DEL/2020

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 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.

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 21st 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, 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

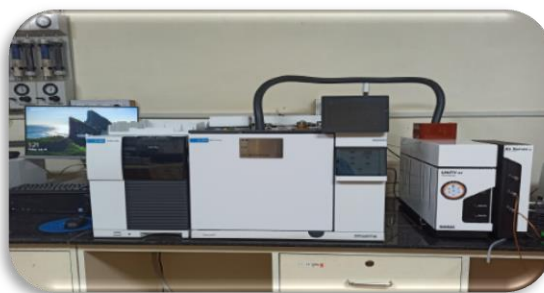
The department is equipped with state of the art instruments like X-Ray Diffractometer, High Performance Thin Layer Chromatograph, Ion Chromatograph, Atomic Absorption Spectrophotometer, Gas Chromatograph, UV-Visible Spectrophotometer, Potentiostat, Carbon Analyser, Online Ozone, NO_x and CO Analysers, 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.

New Facilities created

- **Field Emission Scanning Electron Microscope (FE-SEM)** worth Rs. 2.0 Crore procured from M/s Jeol, Japan from MNRE Research Grants of the Project on PEC splitting of water for hydrogen generation lead by Prof. Sahab Dass (HOD) and Co-PIs Prof. Rohit Shrivastav and Prof. Vibha Rani Satsangi (HOD, Dept. of Physics and Computer Science). The instrument is under installation in the Department. This equipment has the capability of magnifying objects up to 50- 60 lakh times with a resolution of 0.6 nm.



- **Thermal Desorption Unit (TDU)** worth Rs. 35 lakhs procured under the FIST grant is under installation hyphenated to GC-MS. This combined unit would enable simultaneous sampling and analysis of volatile organic compounds present in the gas phase.



Projects Sanctioned

- Project entitled “Socio-economic Empowerment of the Tribals in the Rajaborari Estate Madhya Pradesh through scientific and technological interventions” was sanctioned to DR. Anita Lakhani (PI, Dept of Chemistry), Dr. T. Prem Saran and Dr. Rajeev Ranjan (Co-PIs, from Dept of Botany) for a period of 3 years’ worth Rs. 2.19 Crore by the Science for Equity Empowerment and Development Division (SEED), Department of Science and Technology, Technology Bhavan, New Delhi.

FIST (Fund for Improvement of S& T Infrastructure) MID-TERM REVIEW Presentation

The Department made the first MID-TERM REVIEW Presentation of its Progress achieved under the FIST Support (Rs. 1.27 Crore) on July 20, 2021

Research 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-electrochemical (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).
- 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.

Patent Granted

- An Indian patent has been granted to staff and research students of Chemistry Department led by Prof. Sahab Dass (HOD) on “Hydrogen Production Using Highly Crystalline ZnO for Photoelectrochemical Water Splitting” on 25th October, 2021 for a term of 20 years from 11th December, 2020 in accordance with the provisions of the Patents Act, 1970 to Mr. Neeraj Kumar Biswas, Dr. Anupam Srivastav, Ms. Sakshi Saxena, Dr. Anuradha Verma, Dr. Anamika Banerjee, Dr. Kumari Asha, Prof. Vibha Rani Satsangi, Prof. Rohit Shrivastav and Prof. Sahab Dass.
- An Indian patent has been granted to Dayalbagh Educational Institute on “A PROCESS FOR THE DECONTAMINATION OF TOXIC HEAVY METAL'S POLLUTED WATER” on 29 November, 2021 for a term of 20 years from 5th October, 2007 in accordance with the provisions of the Patents Act, 1970.

Seminar/Symposia/Conference/Webinar Organized

- A webinar on Air Quality Management and Sustainability was organized by the Department of Chemistry, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra on 5th June, 2021 to commemorate 'World Environment Day' on a virtual platform with the aim of better understanding the role of socio-ecological systems, with special reference to Dayalbagh lifestyle and adapting, restructuring and developing into more desirable configurations to improve overall sustainability and better prepare society to deal with climate change in the future. The webinar covered a wide range of air quality monitoring, impact assessment and sustainable solutions. Spreading awareness is also a way of taking a holistic approach to the vision of improving air quality and preserving our environment.

Seminar/Symposia/Conference/Webinar Attended

- Ms. Surat Dewan participated in the International Conference on Sustainability Education on September 9-10, 2021.
- Ms. Surat Dewan participated and presented a poster in 16th International Global Atmospheric Chemistry Scientific Conference from September 12-20, 2021.
- Ms. Surat Dewan was awarded an appreciation certificate for being in top 30 in "World Ozone Day 2021"- Online Quiz Competition by Indian Institute of Tropical Meteorology, Pune.
- Ms. Priya Kumari participated in the National Conference on Nucleic acid Science & Technology (NCNST 2021), organized by CSIR Institute of Minerals and Materials Technology, Bhubaneswar, India during August 10-13, 2021.
- Ms. Priya Kumari participated in Oral Presentation at 5th World Congress on Drug Discovery and Development organized by ARJYOPA HEALTHCARE during September 25 & 26, 2021.
- Dr. Aparna Satsangi attended online Workshop on "Designing and Development of e-Resources for Teaching and Learning" DRTL-Part I, 22-24 June 2021; Organized by Department of Computer Science and Department of Chemistry, Rajdhani College, University of Delhi.
- Dr. Aparna Satsangi attended online Workshop on "Designing and Development of e-Resources for Teaching and Learning" DRTL-Part II, 23-24 July 2021; Organized by Department of Computer Science and Department of Chemistry, Rajdhani College, University of Delhi
- Ms. Surat Dewan presented a poster entitled OPTIMISATION OF PARAMETERS IN BIOHYDROGEN PRODUCTION FROM AGRICULTURAL WASTES in Conference organised by Nature on Sustainable Solutions for Pollution Control held from April 28-29, 2021. It was one of the seven abstracts accepted for presentation.
- Ms. Surat Dewan participated in "Youth dialogue - Reimagine, Restore and Recreative for clean air in your city" organised by Clean Air Asia on 5-June 2021.
- Ms. Surat Dewan also completed the Journal Citation Reports Certification Series 2021 on 8 July 2021.
- Ms. Kirti Singh Research Scholar was selected as a Youth Panelist for Clean Air Asia held on 5th of June, 2021 on the topic "Reimagine, Restore and recreate for the clean air in your city".
- Ms. Jyoti Kushwaha and Dr. Radhika Singh presented a paper entitled, "Applications of Density Functional Theory" in the International Virtual Conference on Frontiers in Chemical Sciences on 25th June 2021.
- Ms. Sakshi Saxena attended One Week National e-Workshop on "Innovation & Intellectual Property Rights" organized by Innovative Technology Enabling Centre (InTEC), CSIR, IMMT, Bhubaneswar during 14-19, June 2021.
- Ms. Bhanupriya presented a poster on "Effect of Sintering Temperature on the growth of BiFeO₃ thin films for possible use in water splitting" during the virtual poster session of "8th Interdisciplinary Symposium on Material Chemistry (ISMC-2020)" organized by Chemistry Division, BARC, Mumbai & Society for Material Chemistry during 17-19 June, 2021.
- Ms. Kumari Ruchi attended the conference of "8th Interdisciplinary Symposium on Material Chemistry (ISMC-2020)" organized by Chemistry Division, BARC, Mumbai & Society for Material Chemistry during 17-19 June, 2021.
- Ms. Yakshi Sharma (M.Sc. Student) successfully completed Skill Development Training Program on Energy Materials- Fundamentals to Device Fabrication (ECPE) through virtual mode by CSIR Electrochemical Research Institute, Karaikudi from 21.6.21-25.6.21.
- Mr. Ayush Kumar Sharma (M.Sc. student) successfully completed Skill Development Training Program on Energy Materials- Fundamentals to Device Fabrication (ECPE) through virtual mode by CSIR Electrochemical Research Institute, Karaikudi from 21.6.21-25.6.21. He also participated in a web-

based Chemistry Orientation Workshop on Competitive Examination (COWCE-21) with test series during March 6-14, 2021 conducted by INDIAN NATIONAL YOUNG ACADEMY OF SCIENCES (INIAS) & ASSOCIATION OF CHEMISTRY TEACHERS (ACT).

Achievements/Awards/ Recognition

- Ms. Kirti Singh was in the top 5 Winners in the Quiz Competition organised by IITM- Environmental Information Resource Partner to observe the “National Pollution Control Day – 2021 at IITM, Pune on December 2, 2021.
- Ms. Neelam Baghel won the 2nd Prize for the presentation of paper entitled “Air Quality Impact and Characteristics of Volatile Organic Compounds, PM_{2.5} and Trace Gases (CO, NO_x) and Formation of Tropospheric Ozone during the Diwali Festival at Sub-Urban site, Agra,” authored by Neelam Baghel, Sonal Kumari, Anita Lakhani, K. Maharaj Kumari in the World Environment Summit (WES-2021) held at India International Center, New Delhi from October 01-03, 2021.
- Ms. Neelam Baghel won the 1st Prize for the presentation of paper entitled “Short Term Variability on Air Quality: Impact of Volatile Organic Compounds, PM_{2.5} and Trace Gases (CO, NO_x and O₃) during Diwali Festival authored by Neelam Baghel, Aparna Satsangi, Sonal Kumari, Anita Lakhani and K. Maharaj Kumari. at the 6th Indian International Conference on Air Quality Management (IICAQM 2021) held at IIT Guwahati from December 16-18, 2021.
- Ms. Richa Sharma received **Best Paper Presentation** award in the National Conference on “Multidisciplinary Research & Practice” (NCMRP-2021) organized by Koshambi Foundation, India in Association with Dr. Bhimrao Ambedkar University, Agra from November 12-14, 2021.
- Ms. Gunjan Goswami won the third prize in World Environment Summit – 2021 (WES-2021) held from 1-3 October 2021 at India International Centre, New Delhi for paper entitled “Impact of Covid-19 on concentration of PM_{2.5} and changes in Air Quality in Agra authored by Gunjan Goswami, K. Maharaj Kumari, Anita Lakhani.

Publications

- 1) Sakshi Saxena, Vibha Rani Satsangi, Rohit Shrivastav, Sahab Dass, “MWCNTs Incorporated Nanostructured Bismuth Vanadate for Solar Energy Induced Water Splitting for Hydrogen Generation”, Materials Today: Proceedings, 2021, DOI: 10.1016/j.matpr.2021.05.667,
- 2) Sakshi Saxena, Anuradha Verma, Neeraj Kumar Biswas, Saif A. Khan, Vibha Rani Satsangi, Rohit Shrivastav, Sahab Dass, Zr-W Co-doping in BiVO₄-Synergistic Effect in Photoelectrochemical Water Splitting, Materials Chemistry and Physics, 2021, 267,124675.
- 3) Kumari Asha, Neeraj Kumar Biswas, Sakshi Saxena, Vibha Rani Satsangi, Rohit Shrivastav, Rama Kant, Sahab Dass, Effect of 100 KeV Ar⁺ ion beam irradiation on ZnO thin film- Influence of morphology vis-à-vis electrode/electrolyte interface and its impact on photoelectrochemical water splitting, International Journal of Hydrogen Energy, 2021, 46 (40), 20858-20870.
- 4) Gurpreet Kaur, Divya, Saif A Khan, Vibha Rani Satsangi, Sahab Dass, Rohit Shrivastav, 3D-nano-hetero-structured thin films, ZnO/Ag-(α) Fe₂O₃, with n/n junction, as efficient photoanode for renewable hydrogen generation via photoelectrochemical water splitting, Renewable Energy, 2021, 156-170.
- 5) Gurpreet Kaur, Kumari Asha, Sahab Dass, Rohit Shrivastav, Photoelectrochemical performance of Yb Co-doped BiV_{0.98}Mo_{0.02}O₄ thin films for Photoelectrochemical water splitting, Materials Today: Proceedings, 2021.
- 6) Udit Tiwari, Sahab Dass, Moisture Stable Soot Coated Methylammonium Lead Iodide Perovskite Photoelectrodes for Hydrogen Production in Water, Energy and Sustainable Futures: Proceedings of 2nd ICESF 2020, Springer,141-148, 2021.
- 7) Mahour, S., Verma, S.K. and Srivastava, S., Functionalized agro-waste for toxic metal remediation from water bodies: A green pre-treatment process. Materials Today: Proceedings. 2021 DOI: <https://doi.org/10.1016/j.matpr.2021.06.330>

- 8) Kumari, S., Lakhani, A., & Kumari, K. M., Variation of carbon monoxide at a suburban site in the Indo-Gangetic Plain: Influence of long-range transport from crop residue burning region. *Atmospheric Pollution Research*, 2021, 101166.
- 9) Priya Kumari, Monika Yadav, Surat Kumar, Ritu Barthwal, Biophysical, Anticancer, Antibacterial and Antiviral Profiles of Aloe-emodin: A Mini-Review. *Chemistry & Biology Interface*, 2021, 11, 81-96.
- 10) Monika Yadav, Priya Kumari, Surat Kumar, Spectroscopic and Molecular Docking Studies on the Interaction of Aloe-emodin with GC and AT Specific DNA Oligonucleotides. *Chemistry & Biology Interface*, 2021, 11, 112-123.
- 11) M.S. Sengar, S. Saxena, A. Lakhani, S.P. Satsangee, "Allium Based Green Route Synthesized Silver Nanoparticles for Removal of Polycyclic Aromatic Hydrocarbons". *Asian Journal of Green Chemistry*, 2021, 5, 206-218.
- 12) M.S. Sengar, S.Saxena, S.P. Satsangee, R. Jain, "Silver Nanoparticles Decorated Functionalized Multiwalled Carbon Nanotubes Modified Screen Printed Sensor for Voltammetric Determination of Butorphanol". *Journal of Applied Organometallic Chemistry*, 2021, 1, 95-108.
- 13) M.S. Sengar, S.Saxena, S.P. Satsangee, R. Jain, "CuO Decorated Polyaniline Nanocomposite Based Sensor for the Electrochemical Determination of an Opioid Analgesic". *Ionics*, 2021, <https://doi.org/10.1007/s11581-021-04333-1>.
- 14) M.S. Sengar, S.Saxena, S.P. Satsangee, R. Jain, "Graphene Oxide/[BMIM][BF₄] based Electrochemical Sensor for the Quantification of an Antihistamine Embramine". *Ionics* (Under Review).

Department of Mathematics

The department aims at providing the students a comprehensive foundation in Mathematics, increase their employment potential and to undertake meaningful research. 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 Year of Engineering
3. VRE Engineering Mathematics to VRE students of Engineering
4. Mathematics to students Arts/Social Sc. B.A./B.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

- Shambhu Sharma got membership of American Mathematical Society. He got another membership of The Indian Mathematical Society. Also, he got membership of The Indian Science Congress. He procured the membership of Operational Research Society India (ORSI). Also, he got another membership of System Society of India (SSI).
- Kamal Srivastava was invited as the Guest Editor for the Special Issue on Metahueristics, Expert Systems in 2021.
- Kamal Srivastava got a chance as a Reviewer in Computers & Operations Research, Elsevier in 2020.
- Kanha Bindal was awarded the PG Scholarship for university rank holders sanctioned from UGC for the session 2021-22.
- Aditi Singh received Student Travel Award from Society for Industrial & Applied Mathematics (SIAM) for the session 2021-22.
- Deepanshi Goyal qualified GATE and got funded by IITS on behalf of Department of Higher Education for the session 2021-22.
- Yogesh Kumar qualified GATE and got funded by IITS on behalf of Department of Higher Education for the session 2021-22.
- Mohammad Aakib qualified IIT JAM and got funded by IIT Roorkee for the session 2021-22.
- Vikas Sarendhi qualified IIT JAM and got funded by IIT Roorkee for the session 2021-22.
- Nayan Jain qualified IIT JAM and got funded by IIT Roorkee for the session 2020-21.
- Yogesh Kumar qualified IIT JAM and got funded by IIT Roorkee for the session 2020-21.

Placements

- Akansha Kumari got placement in State Bank of India as a Junior Associate in 2021-22.
- Deeksha Jethnani got a placement as a junior Associate with the package of 7 lakhs per annum in United Technologies Corporation India Private Limited.
- Prachi Garg got placed as an Editing Associate in Oswaal Publications with the package of 2.4 lakhs per annum in 2021-22.
- Deepanka Bajaj got placement in Euronext Solutions as a Software Engineer with the annual package of 6 lakhs.
- Kanika Jain placed as a Software Intern in Cadence with the annual package of 4.8 lakhs in 2021-22.
- Shahbaz got an opportunity as an Academic Specialist in BYJU's with the package of 6 lakhs per annum.
- Shubham Singh placed as Assistant Director in UP Government Services with the government pay scale.
- Aditi Singh got placement as an Assistant Professor through Uttar Pradesh Higher Education Services Commission in year 2021-22.
- Pushkar Singh got placement as an Assistant Professor through Uttar Pradesh Higher Education Services Commission in year 2021-22.

- Ram Asrey Rajput placed as an Assistant Professor through Uttar Pradesh Higher Education Services Commission in year 2021-22.
- Pinky Lavania got placement as an Assistant Professor through Uttar Pradesh Higher Education Services Commission in year 2021-22.
- Mohit Kumar Baghel appointed as Statistical Officer by Uttar Pradesh Public Service Commission.
- Anchal Garg got position of Assistant Grade III in Food Corporation of India in 2021-22.
- Eti Goyal appointed as Assistant Professor by Uttar Pradesh Public Service Commission in Government Inter College, UP.
- Himanshi Gamta appointed as R & D Project Assistant in Centre for Quality Management, Standards & Calibration Services with the annual package of 2.52 lakhs in the session 2020-21.
- Kanha Bindal appointed as R & D Project Assistant in Centre for Quality Management, Standards & Calibration Services with the annual package of 2.52 lakhs in the session 2020-21.
- Ritu Singh appointed as Post Graduate Teacher in Uttar Pradesh Education Services Selection Board, Allahabad.
- Kanchan Gupta appointed as Junior Associate in Randstad India Private Ltd, Randstad with the annual package of 3.5 lakhs.

Conferences/ Seminars/ Workshops Attended

1. Nivedita Sharma attended Atal FDP on Computational oriented methods for partial differential equations held from 23rd Aug to 27th Aug 2022.
2. Nivedita Sharma attended Swayam ARPIT online course Certification on Pedagogical Innovations and Research Methodology (Interdisciplinary) organized at Guru Jambheshwar University of Science & Technology, Hisar, Haryana from 1st Dec 2020 to 31st March 2021.
3. Nivedita Sharma ranked 3rd in online short-term course on "Recent development in numerical methods for partial differential equations" held from 29th May to 3rd June 2022.
4. Antika Thapar attended Faculty development programme on 'Promising Success through Inclusive Development' organized by Dwaraka Doss Goverdhan Doss Vaishnav College, Chennai from 15th to 21st Feb 2021.
5. Richa Bansal attended Refresher course on 'Disaster Management' organized by Kumaun University Nainital Uttarakhand from 28th Sept to 12th Oct 2020.
6. Richa Bansal attended National level virtual faculty development programme on 'Promising Success through Inclusive Development' held at Doss Vaishnav College, Dwaraka Doss Goverdhan from 15th to 21st Feb 2021.
7. Suchi Agarwal attended AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Application of Computers in Biology" held at Galgotias University from 7th to 11th Jun 2021.
8. Suchi Agarwal attended National Level Online FDP on "Number Theory and its applications" at Gates Institute of Technology from 14th -19th June 2021.

Publications

1. Swati Agarwal, Shambhu Sharma., A Shootout Method for Time Minimizing Transportation Problem with Mixed Constraints, American Journal of Mathematical and Management Sciences, 2020, 39 (4), 299-314.
2. Pradeep Kumar, Shambhu Sharma., Allocation of flights to land at the terminals of an airport, Journal of Physics Conference Series, 2021, Ser. 1714 012034.
3. Gurmeet Kaur, Shambhu Sharma., Analysis on Transportation Problem with Mixed Constraints using Dual Modal, The International journal of analytical and experimental modal analysis, 2021, 13 (1), 253-257.
4. Swati Agarwal, Shambhu Sharma., More-for-Less Paradox in Time Minimization Transportation Problem with Mixed Constraints, American Journal of Mathematical and Management Sciences, 2022 DOI: 10.1080/01966324.2022.202730.

5. Gunjan Agrawal, Deepanshi., Fundamental Group of Minkowski Space with Fine Topology, Reports on Mathematical Physics, 2022.
6. Gunjan Agrawal, Shruti Sinha., Separation Axioms of the Space of Endless Causal Curves, PARITANTRA Journal of Systems Science and Engineering, 2022, Vol. 26, No. 1.
7. P. Lawaniya, S. Sinha, R. Kumar., Effect of pollution on predator-prey systems, International journal of Dynamical Systems and Differential Equations, 2021, 11, 359-377.
8. Y. Singh, R. Kumar., Models of Prey-Predator Systems with two mutualistic predators, GJPAM, 2020, 16, No.6, 915-937.
9. R. Kumar, Y. Singh., Harmless delay in mutualist, prey and predators systems, GJPAM, 2021, 17, No. 1, 79-88.
10. Yogita S Kardam, Kamal Srivastava, Pallavi Jain, Rafael Marti., Scatter Search for the Minimum Leaf Spanning Tree Problem, Computers & Operations Research, 2022, 145, 105858.
11. Yogita S Kardam, Kamal Srivastava, Rafael Marti., General Variable Neighborhood Search for the Minimum Stretch Spanning Tree Problem, Optimization Letters, 2022.
12. Aditi Khandelwal, Gursaran, Kamal Srivastava., On Roman Domination of Graphs Using a Genetic Algorithm, Advances in Intelligent Systems and Computing book series, 2021, (AISC, volume 1227), ISSN :2194-5365.
13. Yogita S Kardam, Kamal Srivastava., Tabu-Embedded Simulated Annealing Algorithm for Profile Minimization Problem, Advances in Intelligent Systems and Computing book series, 2021 (AISC, volume 1227), ISSN :2194-5365.
14. Yogita S Kardam, Kamal Srivastava., General Variable Neighborhood Search for the Minimum Stretch Spanning Tree Problem, Advances in Intelligent Systems and Computing book series, 2021, (AISC, volume 1227), ISSN :2194-5365.
15. Rani Kumari, Kamal Srivastava., Variable Neighbourhood Search for Bi-Objective Travelling Thief Problem, Proc. 8th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), 2020.
16. Nikky Kumari., Intuitive Approach for Nonlinear Transportation Problem, International Journal of Mathematics And its Application, 2020, 8(3), 93-98.
17. Nikky Kumari., Zero Accomplishment Method for Finding an Optimal More-For-Less Solution of Transportation Problem with Mixed Constraints, International Journal of Mathematics Trends and Technology (IJMTT), 2020, 66(8).
18. V.L. Tiwari, Antika Thapar., Solving max-Archimedean t-norm interval-valued fuzzy relation equations, Fuzzy Sets and Systems.
19. V.L. Tiwari, Antika Thapar., Covering Problem for Solutions of Max-Archimedean Bipolar Fuzzy Relation Equations, International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems.
20. Nivedita Sharma., Analysis of free vibrations in transradially isotropic spherically symmetric thermoelastic spheres, Multidiscipline Modeling in Materials and Structures, 2020, 16(6) 1631-1650.

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, Department of Computer Science, University of Calgary, Alberta, Canada, Northeastern University, USA, The University of British Columbia, Okanagan Campus, University of Waterloo, Canada, Max Planck Institute for Science of Light, Germany, Hokkaido University, Sapporo, Japan, TIFR, Mumbai, 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 a Under-Graduate Research Award (UGRA) to 5-6 bright students selected annually from Science and Engineering in research areas of the Department.

Achievements

- Prof. Sukhdev Roy was awarded the Distinguished Alumni award by DEI in 2021.
- Prof. Sukhdev Roy was included among the top 2 % scientist in Optoelectronics and photonics in POLS one in the year 2020.
- Dr. P. S. Sudhish was awarded the Rajkumar Varshney award by the Systems Society of India in 2021.
- Mr. Himanshu Bansal was awarded the Best Paper Presentation Award in the " National Systems Conference (NSC 2021)" Conference organized by Dayalbagh Educational Institute in association with Systems Society of India, May 2021.
- Ms. Binagi Binathi was awarded the Best Paper Presentation Award in the " National Systems Conference (NSC 2021)" Conference organized by Dayalbagh Educational Institute in association with Systems Society of India, May 2021.

- Ms. Manvi Jain was awarded the Best Paper Presentation Award in the " National Systems Conference (NSC 2021)" Conference organized by Dayalbagh Educational Institute in association with Systems Society of India, May 2021.
- Mr. Karan Narain was awarded the SSI Vikram award by the Systems Society of India in 2021.
- Fourteen students successfully completed the project on computer network design, under the collaboration on Seneca -DEI joint network essentials course with Seneca College of Applied Arts and Technology, Markham, Ontario, Canada in 2021.

Workshops/Conferences/Seminars/Webinars Organized

1. UGC SAP Seminar - Advances in Nano, Bio and Neuro Sciences was organized by the Department of Physics and Computer Science, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra on March 18, 2021.
2. A special lecture was organized by the Department of Physics and Computer Science on Education Policy of India for the Coming Decade, on February 28, 2020. The special invited guest for the lecture was Dr. Leena Chandran Wadia, Observer Research Foundation, Mumbai.
3. A special lecture was organized the Department of Physics and Computer Science with Spenta R. Wadia as the invited guest on February 29, 2020.

Papers in Conferences/ Seminars/ Workshops

1. Soniya, L. Singh, and S. Paul, Hybrid Evolutionary Network Architecture Search (HyENAS) for Convolution Class of Deep Neural Networks with Applications, Expert Systems, 2021, <https://doi.org/10.1111/exsy.12690>
2. Soniya, S. Paul, and L. Singh, Application and Need Based Architecture Design of Deep Neural Networks, International Journal of Pattern Recognition and Artificial Intelligence, 2020, <https://doi.org/10.1142/S021800142052014X>
3. Dhruv Bhandari, Sandeep Paul, Apurva Narayan, Deep neural networks for multimodal data fusion and affect recognition, International Journal of Artificial Intelligence and Soft Computing, 2020, <https://www.inderscienceonline.com/doi/abs/10.1504/IJAISC.2020.113475>
4. Gupta S, Gahlot S, Roy S., Design of Optoelectronic Computing Circuits with VCSEL-SA based Neuromorphic Photonic Spiking., Optik 2021, <https://www.scopus.com/sourceid/110152>
5. Bansal, H., Gupta, N. and Roy, S., 2021, Theoretical analysis of optogenetic spiking with ChRmine, bReaChES and CsChrimson-expressing neurons for retinal prostheses, Journal of Neural Engineering, 2021, <https://www.scopus.com/sourceid/130164>
6. Bansal, H., Gupta, N. and Roy, S., 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, 2020, <https://www.scopus.com/sourceid/21100788266>
7. Bansal, H., Gupta, N. and Roy, S., Theoretical Analysis of Low-power Bidirectional Optogenetic Control of High-frequency Neural Codes with Single Spike Resolution, Neuroscience, 2020, <https://www.scopus.com/sourceid/18042>
8. S Prakash, A Gupta, Contextual bound states for qudit magic state distillation, Physical Review A, 2020, <https://doi.org/10.1103/PhysRevA.101.010303>
9. S Prakash, R Sinha, Melonic dominance in subchromatic sextic tensor models, Physical Review D, 2020, <https://doi.org/10.1103/PhysRevD.101.126001>
10. S Jain, V Malvimat, A Mehta, S Prakash, N. Sudhir, all order exact result for the anomalous dimension of the scalar primary in Chern-Simons vector models, Physical Review D, 2020, <https://journals.aps.org/prd/abstract/10.1103/PhysRevD.101.126017>
11. S Prakash, Magic state distillation with the ternary Golay code, Proceedings of the Royal Society A, 2020, <https://doi.org/10.1098/rspa.2020.0187>
12. A Jain, S Prakash, Qutrit and ququint magic states, Physical Review A, 2020, <https://journals.aps.org/pra/abstract/10.1103/PhysRevA.102.042409>
13. S Prakash, AR Kalra, A Jain, A Normal Form for Single-Qudit Clifford+ Operators, Quantum Information Processing, 2021, <https://link.springer.com/article/10.1007/s11128-021-03280-0>
14. Singh, U., Saifi, Zeeshan, Kumar, M., Reimers, A., Krishnananda, S.D., Adelung, R. and Baum, M, Role of structural specificity of ZnO particles in preserving functionality of proteins in their corona, Scientific reports, 2021, <https://www.nature.com/articles/s41598-021-95540-3>

15. Saifi, Zeeshan, Mridul Kumar, and Soami Daya Krishnananda, Design and Simulations of 2D Planar Antenna for Dielectric Characterization of Biological Samples, Engineering Proceedings, 6, 2021, 10.3390/I3S2021Dresden-10079
16. Asthana, P., & Singh, P., Prediction of confirmed and recovered cases of COVID-19 by using polynomial regression, Turkish Journal of Physiotherapy and Rehabilitation, 2021, <https://pesquisa.bvsalud.org/global-literature-on-novel-coronavirus-2019-cov/resource/pt/covidwho-1249907>
17. Vandana, A., & Singh, P., Comparing user-friendliness of online teaching and learning platforms, Turkish Journal of Physiotherapy and Rehabilitation, 2021, <https://pesquisa.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/pt/covidwho-1269008>
18. Arya, N. V., & Singh, P. An optimization procedure for quadratic fractional transportation problem, Computational Network Application Tools for Performance Management, 2020, DOI: 10.1007/978-981-32-9585-8_2
19. P Gupta, M Satsangi, GP Satsangi, A Jangid, Y Liu, SK Pani, and R Kumar, Exposure to respirable and fine dust particle over North-Central India: chemical characterization, source interpretation, and health risk analysis, Environ Geochem Health, 42, 2020, 10.1007/s10653-019-00461-w
20. R Kumar, P Gupta, and A. Jangid An empirical study towards air pollution control in Agra, India: a case study SN Appl. Sci., 2, 2020 <https://link.springer.com/article/10.1007/s42452-020-03826-4>
21. Kajal Garg and Sonali Bhatnagar, Identification of nuclear wastage with the help of scintillation detectors, Pramana-Journal of Physics, Indian Academy of Sciences, 2021, DOI:10.1007/s12043-020-02050-4
22. NK Biswas, A Verma, VR Satsangi, R Shrivastav, S Dass, Role of pH of electrolytic pH on the performance of nanostructured ZnO thin films in photoelectrochemical water splitting, SPAST Abstracts, 2021 <https://spast.org/techrep/article/view/265>
23. Sakshi Saxena, Anuradha Verma, Neeraj Kumar Biswas, Saif Ahmad Khan, Vibha Rani Satsangi, Rohit Shrivastav, Sahab Dass, Zr-W Co-doping in BiVO₄–Synergistic effect in photoelectron chemical water splitting , Materials Chemistry and Physics, 2021, <https://doi.org/10.1016/j.matchemphys.2021.124675>
24. Sakshi Saxena, Vibha Rani Satsangi, Rohit Shrivastav, Sahab Dass, MWCNTs incorporated nanostructured Bismuth Vanadate for solar energy induced water splitting for hydrogen generation, Materials Today: Proceedings, 2021, <https://doi.org/10.1016/j.matpr.2021.05.667>
25. Kumari Asha, Neeraj Kumar Biswas, Sakshi Saxena, Vibha Rani Satsangi, Rohit Shrivastav, Rama Kant, Sahab Dass, Effect of 100 KeV Ar⁺ ion beam irradiation on ZnO thin films – Influence of morphology vis-a-vis electrode/electrolyte interface and its impact on photoelectrochemical water splitting, International Journal of Hydrogen Energy, 2021, <https://doi.org/10.1016/j.ijhydene.2021.03.216>
26. Rohit Shrivastava Gurpreet Kaur, Divya, Saif A.Khan, Vibha R. Satsangi, Sahab Dass, Nano-hetero-structured thin films, ZnO/Ag-(α)Fe₂O₃, with n/n junction, as efficient photoanode for renewable hydrogen generation via photoelectrochemical water splitting, Renewable Energy, 2021 <https://doi.org/10.1016/j.renene.2020.09.060>

Publications

1. Lotika Singh, Extractive Lecture Summarization System Using Evolutionary Algorithms– Optimizing Word, Sentence and Text Features, National System Conference (NSC), May 22-23, 2021, National, 2021
2. Lotika Singh, IFAS: A Deep Learning Model for Instant Formative Assessments, National System Conference (NSC), May 22-23, 2021, National, 2021
3. Lotika Singh, Efficient and Economical DenseNet for Automatic Identification of COVID-19 from X-Ray Images, National System Conference (NSC), May 22-23, 2021, National, 2021
4. Sandeep Paul, Efficient and Economical DenseNet for Automatic Identification of COVID-19 from X-Ray Images, National System Conference (NSC), May 22-23, 2021, National, 2021
5. Sandeep Paul, Interpretation of Machine Learning Models for Driver Behavior using LIME Technique, National System Conference (NSC), May 22-23, 2021, National, 2021
6. Sandeep Paul, A Hierarchical Multimodal Perception Framework for Intelligent Systems, National System Conference (NSC), May 22-23, 2021, National, 2021
7. Sukhdev Roy, Improved optogenetic retinal prostheses with chrmine, Principles of light-induced charge transfer for optogenetics CT4OPTO REPORT 2021, Principles of light-induced charge transfer for optogenetics CT4OPTO REPORT 2021, International, 2021

8. Sukhdev Roy, Low-Power and High-Frequency Optogenetic Retinal Prosthetics with ChRmine, NSC 2021, NSC 2021, National, 2021
9. Sukhdev Roy, Theoretical Analysis of Optogenetic Control in Step-function Opsin with Ultra-high Light Sensitivity (SOUL)-expressing Neurons, NSC 2021, NSC 2021, National, 2021
10. Sukhdev Roy, Low-power and High Frequency Bidirectional Optogenetic Switching of Neuronal Spiking by Co-expressing Anion and Cation Conducting, Channelrhodopsins, ICONN 2021, ICONN 2022, National, 2021
11. Sukhdev Roy, High-frequency Bidirectional Optogenetic Switching of Chronos Jaws Expressing Neurons: A Computational Stud, Optogenetics 2020, Optogenetics 2021, International, 2020
12. Zeeshan, Urvashi, Mridul Kumar, K.S. Daya, Design and Simulation of Paper-based Microstrip and Reconfigurable Multiband Antenna, 8th International Conference on Signal Processing and Integrated Networks (SPIN-2021), International, 2021
13. Arya, L. V., & Singh, P. Role of Classification Model with Fuzzy Model to Predict Covid-19: A Comparative Study, International Conference on Cybersecurity in Emerging Digital Era, International, 2020
14. Saraswat, D., & Singh, P., Comparison of Different Decision Tree Algorithms for Predicting the Heart Disease International Conference on Machine Learning, Image Processing, Network Security and Data Sciences, 2020
15. C. M. Markan, Calibration of off-the-shelf low-cost wearable EEG headset for application in field studies for children, NSC 2021, NSC 2021, National, 2021
16. C. M. Markan, Downlink Throughput and SINR Analysis of a mmWave 5G MIMO System in an Urban Environment, NSC 2021, NSC 2021, National, 2021
17. C. M. Markan, Graph Theoretic analysis of Effective brain Connectivity networks in ultra-transcendental meditation, NSC 2021, NSC 2021, National, 2021
18. C. M. Markan, Identifying Correlation dimension of non-linear time series obtained from E/MEG data, NSC 2021, NSC 2021, National, 2021
19. Dayal Pyari Srivastava, Meta Game theoretic analysis of standard “real world” game theoretic problems, NSC 2021, NSC 2021, National, 2021
20. Sonali Bhatnagar, Muon telescope: An experimental observation of leptonbased on coincidence technique, Journal of Physics: Conference Series International Conference on Innovations in Electronics, Communication, Computing & Automation (ICIECCA-2020), International, 2021
21. Sonali Bhatnagar, Study of energy deposition of hard, soft and nucleonic component of extensive air shower using DEASA array, 21th ICSET 2020, organized by Vellore Institute of Technology (VIT) Vellore Tamilnadu, International, 2020
22. C. V. Lakshmi, A Systematic Approach for English- Hindi Parallel Database Creation for Transliteration of General Domain English Words, IEEE 4th International Conference on Computing, Power and Communication Technologies (GUCON), IEEE 4th International Conference on Computing, Power and Communication Technologies (GUCON), International, 2021
23. C. M. Markan, Identifying Neural Correlates in Stroop Task, In: Saran V.H., Misra R.K. (eds) Advances in Systems Engineering. Lecture Notes in Mechanical Engineering Springer, Singapore, In: Saran V.H., Misra R.K. (eds) Advances in Systems Engineering Lecture Notes in Mechanical Engineering Springer, Singapore, National, 2021
24. Lotika Singh, Interactive Learning System for Children, in V. Huzur Saran and R. Kumar Mishra (eds.), Lect. Notes Mechanical Engineering: Advances in System Engineering, National, 2021
25. Lotika Singh, Sparsely Connected DenseNet for Malaria Parasite Detection, in V. Huzur Saran and R. Kumar Mishra (eds.), Lect. Notes Mechanical Engineering: Advances in System Engineering, in V. Huzur Saran and R. Kumar Mishra (eds.), Lect. Notes Mechanical Engineering: Advances in System Engineering, National, 2021
26. Sandeep Paul, Sparsely Connected DenseNet for Malaria Parasite Detection, in V. Huzur Saran and R. Kumar Mishra (eds.), Lect. Notes Mechanical Engineering: Advances in System Engineering, in V. Huzur Saran and R. Kumar Mishra (eds.), Lect. Notes Mechanical Engineering: Advances in System Engineering, National, 2021
27. Sandeep Paul, Epileptic Seizures Detection, in V. Huzur Saran and R. Kumar Mishra (eds.), Lect. Notes Mechanical Engineering: Advances in System Engineering, in V. Huzur Saran and R. Kumar Mishra (eds.), Lect. Notes Mechanical Engineering: Advances in System Engineering, National, 2021
28. C. M. Markan, Identifying Neural Correlates of Insightful Problem Solving with EEG Evidence, in V. Huzur Saran and R. Kumar Mishra (eds.), Lect. Notes Mechanical Engineering: Advances in System Engineering, in V. Huzur Saran and R. Kumar Mishra (eds.), Lect. Notes Mechanical Engineering: Advances in System Engineering, National, 2021

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 interspersed inter-disciplinary research. The current research and teaching areas in the Department include Molecular Genomics; Genotoxicity, Computational Biology, Vector Control Entomology, Vector Control Parasitology; Molecular Systematic; 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.

Faculty Development Programs

1. Prof. Shabd Preet participated in Faculty development programme on, “Academic writing and Research methodology” from June 08 to June 12, 2020 organized by Sharda University, Greater Noida.
2. Prof. Alka Prakash and Prof. Shabd Preet participated in the 3-day workshop entitled “Designing and development of e-resources for teaching and learning” organized by University of Delhi from 22.6.21 to 24.6.2021
3. Dr. Reshma Bhatnagar participated in the refresher course “Novel insights in Life sciences research” from 15-02-2021 to 27.2.2021 organized by Guru Ghasidas Vishwavidhyalaya.
4. Dr. Lalit Mohan participated in the UGC Sponsored online Refresher course entitled “Geography and Environmental Science” organized by the Jamia Milia Islamia from 9.11.2020 to 24.11.2020.
5. Dr. Arun Pratap Sikarwar completed One Week Faculty Development Program (FDP) entitled "Development and Management of MOOCs and Online Courses using LMS- Moodle", conducted by Guru Angad Dev Teaching Learning Centre (a Centre of MHRD under PMMMNMTT) and

S.G.T.B. Khalsa College, University of Delhi (DU), dated June 30th to July 4th, 2020 (Online mode). Also he participated in the program entitled “Development and management of MOOCs and online courses using LMS Modle, from 30.06.2020 to 4.7.2020

6. Dr. Priyanka Gautam participated in Faculty Development Programme on” Managing Online Classes and Co-Creating MOOCs” organized by Teaching Learning Centre, Ramanujan College (University of Delhi), from 20.4.2020 to 6.5.2020.

Staff Achievements/Recognitions

- Dr. Arun Pratap Sikarwar acted as a Mentor & Resource Person to deliver a session over "Human Brain and Mind in the Teaching & Learning" in the INSPIRE Science Camp (Innovation in Science Pursuit for Inspired Research of the Department of Science & Technology, DST, Gov. of India) conducted by Sir Madanlal Institute of Pharmacy, Etawah, India, on February 20th, 2021. He also delivered a public lecture entitled "Importance of Creativity & Innovation in Teaching and Learning along with New Education Policy-2020" under the auspices of Institution's Innovation Council of R.D. and S.H. National College and S.W.A. Science College, Bandra, Mumbai, dated 13th December 2020. Dr. Sikarwar acted as a Resource person for delivering a lecture entitled “Role of Human Brain Memory in Teaching & Learning” to the Faculty Induction Program (FIP) of UGC-HRDC centre of Jawaharlal Nehru University (JNU), New Delhi, dated October 21st, 2020. Also, he acted as a Resource person for delivering a lecture entitled “In quest of inculcation of Creativity and Innovation along New Education Policy-2020” to the Faculty Induction Program (FIP) of UGC-HRDC centre of Jawaharlal Nehru University (JNU), New Delhi, dated October 15th, 2020. Dr. Arun Pratap Sikarwar acted as a Resource person for delivering a lecture entitled “Understanding of Neurobiology of EMOTIONAL INTELLIGENCE with Hands-On Session” AICTE Training and Learning (ATAL) Academy Sponsored Five-Day Faculty Development Program (Online mode) on "Emotional Intelligence" of National Institute of Technology (NIT), Hamirpur, dated October 19th, 2020. He delivered presentation entitled "Does social neuroscience of brain education may be harnessed to create Peace, sustainability, and Harmony in the world?" in a brainstorming session of the World Intellectual Forum (WIF) over "Global Thinking for Peace and Sustainability, What Role Can Faith, Spirituality, And Philosophy Play in This Process?", dated September 30th, 2020. YouTube: <https://youtu.be/JOPOJsfn34>. Dr. Sikarwar delivered a Radio talk on 90.4 FM Community FM Radio Station over “National Science Day” on 28th February 2021. Also, he was a Guest of honour and keynote speaker to deliver a lecture entitled "Beyond Binary Sexuality of Male & Female to the Spectral Model of JGBTQAI+" at G.L.A. University, Mathura (India), dated June 26th, 2021. YouTube: <https://youtu.be/6I1NYMBSLaQ>. Dr. Arun Pratap Sikarwar delivered a conceptualized presentation entitled "Science of Conflict Resolution & Peace" at the World Intellectual Forum (WIF), dated 30th January 2021. YouTube: <https://youtu.be/5ciFT6jCRgY>. He also delivered a Radio talk on 90.4 FM Community FM Radio station over the "COVID-19 Vaccination in India" on 9th January 2021. YouTube: <https://youtu.be/RXbMXJWy4Dc>. Dr. Arun Pratap Sikarwar uploaded a Video over “Neuroscience of CREATIVITY and INNOVATION & New Education Policy-2020”. (1:08:32 hr). YouTube: <https://youtu.be/CCYp4CHyM0o>. Dr. Sikarwar was Interviewed on "Neurobiology, molecular and cellular biology" in a theme of "Science in a Creative Society" at Allatra TV English, dated July 31st, 2020. YouTube: <https://youtu.be/MDTyd-XCep0>. He acted as resource person in a webinar over "Nutri-Talk" along with Dr. Renuka Dang, conducted by the Backbone Foundation, dated Sept 27th, 2020. YouTube: <https://youtu.be/VcCtBo1c3P8>. Dr. Arun Pratap Sikarwar delivered an online presentation entitled "New Education Policy-2020: Perspectives and Challenges" to the faculty members of Arts, Commerce and Science College (Pune University), Ahmednagar, Maharashtra, dated Aug 14th, 2020. YouTube: <https://youtu.be/4ju-6fsUBu0>

Students Awards and Achievements

- Rajul Jain, was awarded Second Rank in “Covid-19 Pandemic: Creating Safety Zone” in National level e- Poster and slogan writing competition on 27 May - 8 June 2020. He was awarded second prize in e-poster presentation entitled “Indian population during covid 19 pandemic facing anxiety, stress and perceived mental health care” in the International Conference on the Web “Covid19: Roadmap to Future Environment” organized by the Department of Botany, St. John’s College, Agra, India, held on 5th June, 2020. He won Consolation Prize in “National Essay Witting Competition” in “VIGYANIKA 2020” (International Science Literature Festival) as part of “India International Science Festival” organized by “Ministry of Science and Technology; Ministry of Earth Sciences, and Ministry of Health and Family Welfare, Govt. of India in collaboration with Vijnana Bharati (VIBHA) by Council of Scientific & Industrial Research (CSIR)” conducted from 22nd – 25th December 2020. He presented a “Inspiring Anecdotes from Scientists’ lives (group III)” and secured First Rank in “Vigyanika online Competition” as part of “India International Science Festival” organized by “Ministry of Science and Technology; Ministry of Earth Sciences, and Ministry of Health and Family Welfare, Govt. of India in collaboration with Vijnana Bharati (VIBHA) by Council of Scientific & Industrial Research (CSIR)” conducted from 10nd – 13th December 2021.

Seminar/Symposia/Conference/Webinar Attended

- Prof. Shabd Preet participated in, “National online workshop on SARS CoV-2 (COVID-19) & Molecular Diagnostics” organized by Helix Biogenesis Pvt. Ltd. Noida during 29th June to 3rd July 2020.
- Anuradha Kapoor attended five days’ workshop on “Nano era: Nanotechnology for Global Sustainability” from 7th- 11th June 2021 organized by Amity Institute of Nanotechnology, Noida, UP. She also attended international webinar on “Not too conventional thoughts about Embryoculture” organized by Animal Biotechnology centre, ICAR, Karnal, Haryana on 15th June 2021. Ms. Kapoor attended five-day National Research conclave on “Scaling Techniques and Data Analysis using Excel and SPSS” from 26th- 30th April 2021 organized by CMS Jain (Deemed to be University) Bengaluru. She attended a shortterm training program AICTE sponsored on “Nanotechnology and functional materials” organized by SV College of Engineering, Tirupati, Andhra Pradesh. Dated: 14 Sept to 19 Sept. 2020. Ms. Kapoor attended online "Cell culture Techniques Course" organized by 'BioFlix' in September 2020. Also, she participated in Two-day National workshop on "Data Analysis using SPSS, Amos and R" conducted on 24- 25 August 2020 by "CMS Jain Deemed to be University.
- Radha Yadav and Parisa Gupta participated in international workshop entitled “Scientific Writing” on 23rd - 24th June, 2021, organized by ICAR- National Dairy Research Institute, Karnal, Haryana.
- Madhuri participated in the international conference on “Covid-19 Roadmap to Future Environment” organized by St. John's College Agra, 5th June 2021. She also participated in an International virtual webinar on “Conventional thought about Embryo Culture”, organized by animal biotechnology centre ICAR- National Dairy Research Institute, Karnal, Haryana, 15th June 2021. Ms. Madhuri participated in a workshop on "Effect of Climate Change on Biodiversity" under Asian Water bird census program, 8th Jan 2021.
- Rajul Jain and Krishna Rana, research scholars attended Two days International Conference on ‘Recent Trends in Biological Perspectives’ organized by the Department of Biochemistry, V. V. Vanniaperumal College for Women, Virudhunagar, Tamil Nadu, India on 2nd to 3rd, June 2020.
- Krishna Rana, Research Scholar, Dept. of Zoology, presented oral Presentation entitled “Negative or Positive Impact of COVID-19 on Environment” in International Webinar on “COVID-19 And the Environment” organized by the Department of Zoology, CMP Degree College (A Constituent PG College of University of Allahabad), Prayagraj held on 5th, June 2020.
- Rajul Jain research scholar attended 2020 Bioinformatics Community Conference (BCC2020) with Galaxy Community Fellowship of \$50, from July 17-26, 2020. He also presented Poster at Indian Conference on Bioinformatics 2020 (INBIX’20), virtually organized by NEHU, Shillong and Bioclues, during December 4-5, 2020. He attended Indian conference on bioinformatics 2021 (INBIX’21) organized virtually by CSIR-NEIST and Bioclues.org during November 11-13, 2021.
- Krishna Rana, Research Scholar, attended International E-Conference on “Recent Trends in Life Science Research: Challenges & Promises” Organized by Department of Botany, SS College,

Shahjahanpur, UP Government PG College Bazpur, Us Nagar, Uttarakhand & Society for Research in Biological Science (SRBS) held on 08th August 2020. He also participated in E-conference entitled “International E-Conference on Biotechnology, Bioinformatics, and Biomedicine 2020” organized by faculty of Applied Science, AIMST University, Malaysia, held on 24-26 August 2020. Mr. Rana attended in the “International e-Workshop” on ‘Computational Approaches in Drug Design & Therapeutics’ organized by Drug Discovery & Development Cluster jointly with Amity Institute of Biotechnology, Amity University Chhattisgarh held on 20 Feb 2021

- Rajul Jain, Research Scholar, gained bioinformatics skills in the workshop ‘Next Generation Sequencing: Hands-on using Variant Analysis’ from 13-14 June 2020 by Avastambh group.
- Krishna Rana, Research Scholar, attended the workshop FDP – Webinar on “Experience the Cutting-Edge Elsevier Tools to Pivot your Research” organized by department of biotechnology, Karunya Institute of Technology and Sciences in collaboration with ELSEVIER held on 18th June 2020. He attended National Webinar On “Recent Advances in Modern Analytical Techniques” Organized by Placement Cell, A.U. College of Science & Technology, Andhra University and PerkinElmer India Pvt. Ltd. on 22nd – 24th June 2020.
- Rajul Jain, participated in 3 Day Workshop on Learning Statistics and Data analysis Using MS Excel organized by simple statistics solution and training provider (SSSTP), Tirunelveli, Tamil Nadu from 6 – 8 July 2020. He got skilled from a National Webinar Online Tools for Citation Databases and Reference Management on 1st June 2020 organized by Department of Library, A.P.A. College of Arts and Culture, Palani. He also participated in Online environment awareness program on ‘Environment awareness program on occasion of ‘Environment Day’ on 5th June 2020 organized by Environment and Social, Welfare Society, Khajuraho, M.P (India). He attended national webinar on ‘Role of Human Immunology in COVID-19 pandemic’ organized by Dept. of Zoology Shri Muktanand College, Gangapur, Dist. Aurangabad on 9 June 2020
- Neha Singh, Research Scholar, participated in A two days online workshop on “Next Generation Sequencing: Hands on using variant analysis” held on 13th and 14th June, 2020.
- Rajul Jain, Research Scholar, attended international webinar on “COVID-19 Pandemic: Its Impact on Environment, Health and Education” Organized by Govt P.G. College Datia M.P on 10 June 2020.
- Neha Singh, Research Scholar, participated in National webinar on “Online Tools for Citation databases and reference management” organized by department of library, Arulmigu palaniandvar college of Arts and culture, Palani on 1st June, 2020.
- Rajul Jain, Research Scholar, attended international workshop on “Scientific Writing” organized by IDP-NAHEP on June 23rd to 24th, 2021.
- Krishna Rana, attended international webinar on “Overview of Neurodegenerative Diseases – “Impact of COVID-19 Pandemic on Neurological Symptoms” & “Traumatic Brain Injury and Neurodegeneration” organized by department of Biochemistry & Microbiology, Chennai National Arts and Science College Avadi, Chennai on 28-29 August 2020. He also participation in the Science Academies’ Lecture Workshop On “Recent Trends in Biological Sciences” organized by Sacred Heart College (Autonomous), Tirupattur, held on 16th -17th Feb 2021. Also, he participated in Online workshop on ‘Quality Research and Publication Ethics’ organized by Faculty of Social Sciences, Aligarh Muslim University, Aligarh held on 11th April, 2021. Mr. Rana participated in the international workshop on “Scientific Writing” organized by ICAR-NDRI, Karnal, India held on 23rd – 24th June 2021. He completed One week Online International Skill Development Program on “Innovations in Drug Delivery Systems” organized by department of pharmaceutical, Bapatla college of Pharmacy, Andhra Pradesh India, held on 31st May – 5th June 2020.
- Rajul Jain, Research Scholar, attended e-FDP on 'Advanced Topics in Omics Sciences' organized by Dept. of Biotechnology, GLA University, Mathura from Nov 23rd to Nov 28th, 2020. He participated in a 40 hours Online Faculty Development Program on ‘BASICS OF BIO-INFORMATICS’ from 26th May – 04th June 2021, Organized by E & ICT Academy, National Institute of Technology, Warangal in association with University College of Engineering BIT Campus.
- Krishna Rana, Research Scholar, successfully completed One-week International eFTP/STP on “Drug Research Evolution and Practice (DREAP)” in Association with Acharya Nagarjuna University of Pharmaceutical Sciences from 1st – 6th July 2020. He participated in a Two-Day National Level Faculty Development Program titled “Data Analysis using SPSS, AMOS & R”

organized by CMS, Jain (Deemed-to-be University) on 24th & 25th August 2020. He also participated in a Five-Day National Research Conclave titled "Scaling Techniques and Data Analysis using Excel and SPSS" organized by CMS, JAIN (Deemed-to-be University), Bengaluru held on 26th - 30th April 2021. He participated in the international e-Symposium on Biodiversity (IeSB-2020-SSC) organized by Swami Sahjanand College, Jehanabad Bihar, India held on 03rd and 04th Feb 2021. He also, participated in the first *UKIERI-SPARC Symposium* on "Genome Regulation in Development and Disease" organized by The University of Manchester, United Kingdom held on 26th, Feb 2021.

Publications

1. Satsangi, N., and Preet, S., Phyto-synthesis and characterization of potent larvicidal silver nanoparticles using *Nyctanthes arbortristis* leaf extract. *Journal of Plant Biochemistry and Biotechnology*, 2021, B30(3), 608-612.
2. Yadav, H., and Prakash, S., Diversity of spiders (Araneae) in the flood plains of the Taj trapezium zone of Agra. *Appl Ecol Env Sci*, 2021, 9(2), 149-155.
3. Khadpekar, Y., Whiteman, J. P., Durrant, B. S., Owen, M. A., and Prakash, S. (2021). Scent-marking behavior by female sloth bears during estrus. *Ursus*, 2021, (32e2), 1-9.
4. Kishore, V., Loach, N., Srivastava, C. N., and Mohan, L. Toxicity evaluation and chemical composition of *Capsicum frutescens* for natural control of Asian blue tick, *Rhipicephalus (Boophilus) microplus* (Acari: Ixodidae). *The Journal of Basic and Applied Zoology*, 2021, 82(1),
5. Paswan, S. K., Nath, V., Verma, P., Sikarwar, A. P., and Verma, S. K., Hydroxychloroquine: Similarity Search and Structure-Based Virtual Screening for Identification of Potential Hits for Chemoprophylaxis Against SARS-CoV-2. *FABAD Journal of Pharmaceutical Sciences*, 2021, 46(2), 147-158.
6. Sikarwar, A.P., Epidemiology, Basic Reproduction Number, and Herd Immunity of SARS-CoV-2. *Science and Technology Magazine of National Research Development Corporation (NRDC)*, an enterprise of DSIR, Ministry of Science & Technology, DST, Gov. of India, 2020.
7. Singh, D., and Bhatnagar, R., Cognitive ethology of Rhesus macaques: A review of research through five decades. *Journal of Experimental Zoology*, 2021, 24(1): 637-643.
8. Jain R, Gautam P, Neurophysiological and Behavioural Perturbations in *Caenorhabditis elegans* exposed to Organophosphate Pesticides. *Journal of Experimental Biology and Agricultural Sciences*, 2021, 9 (3):343–352. [https://doi.org/10.18006/2021.9\(3\).343.352](https://doi.org/10.18006/2021.9(3).343.352)
9. Singh N, Gautam P., Comparative analysis of hypochlorite method on transgenic strain By250. *Journal of Advanced Zoology*. 2021, 42(1): 1-6. <https://doi.org/10.17762/jaz.v42i01.1>

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. It offers B.A. Honours Economics (3 years course), M.A. (2 year course), Post-Graduation Diploma in Business Economics and Ph.D.

Conferences/ Seminars/ Workshops/Lectures Organized

- An invited Talk on Monetary Policy Framework of India was delivered by Prof. Pami Dua, Director, Delhi School of Economics, July 20, 2020

Participation in Conferences/ Seminars/ Workshops/ OC/ RF Courses:

- Prof. Sangeeta Kumar attended the web panel discussion on "Approaches to income support during the coronavirus pandemic" organized by institute for human development and Indian society of labour economics, 17 July 2020.
- Prof. Rupali Satsangi participated in Webinar on "Accounting Disrupted: Financial Intelligence in the new Digital Era" London School of Economics (LSE, UK) UK on Friday, August 21, 2020 from 5:30 PM -6:30 PM (IST) as part of ADMAA Webinar Series
- Jyoti Gupta presented a paper in Amity Global University Patna International Web Conference on Pandemic Effect and Global Economy: Unseen Challenges and Opportunities Post Covid-19 Diagnosis "Economic Impact of Covid-19 in India on Household Income and Consumption" (IC 2020) 31st July – 1st August, 2020.
- Jyoti Gupta participated in Workshop on Writing Literature Review Article (Cape Institute of Technology) Date & Year: 16th May
- Jyoti Gupta participated in Workshop on Data Analysis using STATCRAFT by Dayalbagh Educational Institute, 17th August 2020
- Jyoti Gupta participated in Faculty Development Program on Logit, Probit and Tobit Model by Commerce Ahead New Delhi, from 7 Aug to 9 Aug 2020
- Jyoti Gupta participated in Online Workshop Entitled, "Basic Statistical Analysis to Doctoral Research" (Koach Scholar New Delhi), 5th Sep to 9th Sep 2020

- Suraj Pratap Singh presented a paper entitled “Economic Impact of Covid-19 in India on Household Income and Consumption” in International Web Conference on Pandemic Effect and Global Economy: Unseen Challenges & Opportunities Post Covid-19 Diagnosis (IC 2020) on 31st July, 2020 Organized by Amity School of Business, Amity University Patna, Bihar.
- Suraj Pratap Singh participated in webinar on “Economics of Gender and Crime: with Special Emphasis on the Covid Time” organized by Internal Quality Assessment Committee in collaboration with Economics Department of Bharati College, University of Delhi on August 28, 2020.
- Suraj Pratap Singh presented a paper titled “Economic Impact of Covid-19 in India on Household Income and Consumption” in International Web Conference on Pandemic Effect and Global Economy: Unseen Challenges & Opportunities Post Covid-19 Diagnosis (IC 2020) on 31st July, 2020 Organized by Amity School of Business, Amity University Patna, Bihar
- Suraj pratap singh participated in International Webinar on Contemporary Issues in Business Management and Information Technology 2020, Organized by Amity University Patna Certificate no: AUP/CIBMIT/2020/119
- Suraj Pratap Singh participated in The International Webinar on Contemporary Issues in Business Management and Information Technology 2020, Organized by Amity University Patna Certificate no: AUP/CIBMIT/2020/119
- Suraj Pratap Singh participated in The “Economics of Gender and Crime: with Special Emphasis on the Covid Time” organized by Internal Quality Assessment Committee in collaboration with Economics Department of Bharati College, University of Delhi on August 28, 2020. (webinar)
- Suraj Pratap Singh participated as a Delegate in During the First Digital CNE of Indian Dietetic Association-Gujarat Chapter Held on 17 May 2020.
- Suraj Pratap Singh participated in The One Day Online Workshop for Enhancing Research Communication Skills through ScienceDirect and Mendeley May 3rd, 2020. Organized by: Internal Quality Assurance Cell (IQAC) & School of Education (PMMMNM), Faculty of Education Dayalbagh Educational Institute Agra
- Suraj Pratap Singh participated in The 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
- Suraj Pratap Singh participated in 'The Crazy Tips to Crack Virtual Interviews' organized by Internal Quality Assurance Cell of Bunts Sangha's Uma Krishna Shetty Institute of Management Studies and Research on Saturday, 6th June 2020.
- Suraj Pratap Singh participated in “The Writing Literature Review Article: Weekend” presented by Mr. Daniel C, Director, Manuscriptpedia, jointly organized by Cape Institute of Technology, Levekipuram and Manuscriptpedia on 16th May, 2020 through online pedagogy.
- Suraj Pratap Singh participated in The Participating as a Delegate at the UGC and ICSSR Sponsored National Conference Organized by Department of Economics and Commerce, Daulat Ram College held on January 21, 2020.
- Ayushi Kukreja participated in a certificate programme on Data Analysis using STATCRAFT (Organized by the Dept. of Sociology & Political Sci. DEI Deemed Univ. Agra in collaboration with STATCRAFT, Bangalore.) [August 17, 2020]
- Vaishali singh participated in, Data Analysis Using Statecraft, Dayalbagh Educational Institute And Statecraft, Online Aug 2020

Staff /Student Achievements/ Recognition: Awards, Fellowships, Memberships, Editorial Boards , Reviewers , Invited Lectures, Session chairs

- Prof.Swami Prakash Srivastava received ISSN Golden Research Award, International Society for Scientific Network Awards, 1H/1400 Nilgileason Nagar, Tuticorin, Tamil Nadu India, 2020.

- Prof. Jyoti Gogia delivered a lecture on “Financial Services for Small Businesses and Low-Income Households: An overview” as a part of Lecture Series on Microcredit organized by DEI on September 16, 2020
- Rupali Satsangi participated as an Indian delegate in International Model United Nations Online Conference 64.0: Experience the Best of Diplomacy & Excellence-UN Women Committee (United Nations Women) Ensuring gender equality by alleviating discrimination against on 29 June 2021.
- Prof. Rupali Satsangi was invited as Panellist in Webinar of the UNESCO Series allocated to the Association of Indian Universities on the Theme “Inclusivity, Equality and Equity in Diverse Population in the Education Sector” organized on July 26, 2021.
- Dr Resham Chopra successfully completed Two Week Online FDP organized by MHRD PMMMNMTT Teaching and Learning Centre, Ramanujan College, University of Delhi from 1st to 14th Sept 2000 entitled “Learning advanced E-Tools for MOOCs Development & Research” and obtained A+ grade.
- Vaishali singh received Best Research paper Award for co-authoring paper titled Role of Social Media during Covid-19 Era in India with special reference to Agra in one day International e-conference organized by Bharat College of Arts and Commerce, University of Mumbai. [ISSN:2394-7780]
- Jyoti Gupta received Best Research Paper Award for paper titled Role of Social Media during the Covid-19 era in India with special reference to Agra in International Conference on Covid-19: A Holistic Approach towards Sustainability from Bharat College of Arts and Commerce from Mumbai University.

Placement of Students

2020-2021

- Dr. Namrata Anand is appointed as Assistant professor, the Northcap university, Gurgaon.
- Vabhav is appointed as Sr. Executive Procurement, Commercial/Procurement department, Three D Integrated Solutions ltd. Gurgaon Haryana
- Nirat Kavia is appointed as Guest Faculty in Department of Economics, DEI, Agra

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

Publications

- Rupali Satsangi, Circular economy towards sustainable production and Consumption (with special reference to sustainable Development goals), International Research Journal of Management Sociology & Humanities, ISSN 2277 -9809, Vol 12 Issue 2, 2021, pp:16-23. UGC ID 48312
- Rupali Satsangi & Namrata Anand, Impact of microfinance on sustainable rural livelihood: An analytical study, International Journal of Creative Research Thoughts; ISSN: 2320-2882; Vol 9, Issue 2, 2021, pp: 1350-1359.UGC ID 49023(18)
- Rupali Satsangi & Kanwaljyot Kaur, Financial Performance of Public and Private Sector Banks in India: Camel Model, International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211, Volume 9, Issue 2, February -2021, pp: 822-831 UGC Approved
- Rupali Satsangi & Namrata Anand, Human Capital Formation through Microfinance: An Impact Assessment, ACADEMICIA An International Multidisciplinary Research Journal; ISSN: 2249-7137 Vol. 11, Issue 1, January 2021, UGC Approved
- Rupali Satsangi & Pavneet Kaur, A Study on the Effectiveness of Green Banking for Sustainable Development, International Journal of Scientific & Engineering Research (IJSER); ISSN 2229-5518, Volume 12, Issue 2, February 2021, pp:95-115
- Poonam Tomar, Relationship between area, production of major oilseed crops and rainfall in Rajasthan, Research journal of Agriculture sciences, An international Journal, issue: 03, ISSN (E): 2249-4538, May-June 2021.
- Poonam Tomar, An estimation of trends and patterns in sugarcane cultivation: Indian context, International Journal of research and analytical reviews (IJRAR), ISSN (E): 2348-1269, issue: 02, June 2021.
- Jyoti Gupta, Impact of Financial Inclusion In The Covid-19 Era, Edited Book (Endurance of Indian Economy Amidst the Global Pandemic) 2020; ISBN: 978-93-89234-88.
- Jyoti Gupta and Vaishali Singh, Role of social media during the Covid-19 Era in India with special reference to Agra, International Journal of Advance and Innovative Research, 2021, ISSN 2394-7780, Vol-8.
- Suraj Pratap Singh, An Analytical Study of the Five- Year Plans: A Special Reference to Health & Women Empowerment, International Journal of Multidisciplinary Education Research, ISSN: 2277-7881, Volume: 10, Issue: 2(3), February 2021.
- Suraj Pratap Singh, Impact of Covid-19 on Different Sector: A case Study of Agra City Employment Promotion in Rural India, Nitya Publication, Bhopal (ISBN: 978-93-90390-60-1 Edited Book) Chapter 11 (Page no. 117-126) December 2020.
- Suraj Pratap Singh, A Vision of Digital India: Its Negative & Positive Impact on Indian Society, International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) Volume 4, Issue 2, April 2021.

Department of Sociology & Political Science

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.

Seminar/Symposia/Conference/Webinar Attended

- Dr. Rachna Yadav attended APSA International Webinar on “Helping Children at Home: Level 1” Organized by Asia Pacific School Psychology Association, Malaysia in collaboration with Indian School of Psychological Association on 2nd and 3rd July 2020. Also, she presented a Paper on “Covid -19 and Social Exclusion of Marginalized Community” Organized by Department of Political Science, Govt. Degree College Ganderbal, Jammu & Kashmir on 23rd July 2020. Dr. Yadav Participated in National Webinar on International Politics Organized Department of Political Science Shri Shankaracharya Mahavidyalaya, Junwani, Bhilai held on 16TH June 2021. She attended Two days Lecture series on Gendered Society held on 29th July and 30th July 2020, Department of Sociology, Mahatma Gandhi Central University, Bihar. Dr. Rachna Completed five days Faculty Development Programme (FDP) in online mode on “Academic Enhancement through Quality Research during 15th to 19th July 2020, Department of management studies, BSAITM, Faridabad.
- Dr. Deepika Chauhan Completed the Certificate Program on Data Analysis using STATCRAFT on 17th August 2020 Organized by the Dept. of Sociology & Political Sci. DEI Deemed Univ. Agra in collaboration with STATCRAFT, Bangalore. Also, she attended One week Training programme on E-learning organized during 28 June-4 July 2020 by SNDT Women’s University in collaboration with PVDI College of Education for Women, Mumbai. Dr. Chauhan has done 41st Refresher Course in Sociology (Online) by Jawaharlal Nehru University, New Delhi from 6-18 September, 2021.
- Dr. Parvindra Kumar Orientation Course from Aligarh Muslim University, Aligarh on 10/05/2021 to 22/06/2021

Publications

- बन्दना कौर, समाज में लैंगिक असमानता का स्वरूप एवं महिलाओं के सामने आनेवाली चुनौतियों का एक समाज शास्त्रीय अध्ययन। The Journal of Dristikon, January – February 2020, 951-954.
- Bandana Kaur, Premature Menopause and Women’s Health in India. (Mental Health and Child Health Care in India) Prasant Kumar Pandya Sigamani PaneerChittranjan Subudhi 2020.
- Bandana Kaur, Implementation of Inclusive Education in School for Deficiency abled (Disabled) Children P.N-49-57 Towards New India Trends and Transition.
- Bandana Kaur, Cultural Globalization: Impact and Identity Formation of Youths (With Special Reference to Dayalbagh Education Institute. Agra) An International Bilingual Peer Reviewed Referred Research Journal October-December 2020.
- Bandana Kaur, समाज में लैंगिक समानता के सन्दर्भ में महिला सशक्तिकरणका सामाजिक अर्थिल राजनितिक आधार दृष्टिकोण, २०२०।
- Birpal Singh Thenua, Gender Gap at The Workplace: A Sociology Interpretation with Special Reference to Indian Society, The journal of Oriental Research Madras, ISSN 0022-3301, Vol. XCII-XXXII, June 2021.
- Birpal Singh Thenua, Gandhi on nuclear world: a special analysis of its relevance in 21st century, Utkarsh Historic Research, ISSN- 0976-2132, Vol. 34 no.2, May 2021.
- Vinod. F. Khobragade, India’s Blue Water Dominance in The Indian Ocean (Co-authored), World Focus, April 2021,
- Vinod. F. Khobragade, China-US New Cold War (Co-authored), World Affairs, April-June 2021.
- Anju Sharma, Participation of women in Indian Politics, Dristikorn Publication April-2021 ISSN 0975-119x
- Anju Sharma, India-Eu Cooperation in Counter-terrorism (Co-Author) THIRD CONCEPT Vol.36 No.422 April 2020 ISSN 0970-7247

- Gopal Krishna Parihar, The Re Emergence of Karl Marx with Special Reference to COVID-19 in India, Innovation Research Concepts, ISSN: 2456-5474, Social Research Foundation, Kanpur (SRF International), Vol.06, May 2021, 78-83.
 - Gopal Krishna Parihar, The Governor in the Indian Political Milieu, Anthology the Research, Social Research Foundation Kanpur (SRF International), Vol. 06, June 2021, 01-09.
 - Deepika Chauhan, Chapter published in edited book Towards New India: Trends and Transitions, entitled “Adolescents, Moral Values and Deviant Behaviour: A Critical analysis” ISBN: 978-93-86709-48-6, Printed by National Prints, Blue Buck Publications, New Delhi 2020.
 - Deepika Chauhan, Chapter Published in Edited Book Towards New India: Trends and Transitions, ISBN: 978-93-86709-48-6, Printed by National Prints, Blue Buck Publications, New Delhi 2020.
 - Ishwar Swaroop Sahay, इंटरनेट ऑफ थिंग्स का सामाजिक संरचना पर प्रभाव: एक समाजशास्त्रीय अध्ययन, scholarly journal for humanity science & English language, Online ISSN 2348-3083, Oct-Nov 2020, VOL-8/42.
 - Monika Tiwari, Indian Women and Their Gradual Extinction from Economic Sphere, Jigyasa, ISSN 0974-7648, Vol. 14, No. III, March 2021
 - Monika Tiwari, Placing the Narratives of South India In National Freedom Struggle. The Forgotten Heroes of Indian Freedom Struggle. ISBN:978-93-90870-77-6, March 2022
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Schools and Colleges

DEI Prem Vidyalaya Girls' Intermediate College

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

2. **Staff:**

Teaching Staff: **48** Non-Teaching Staff: **08**

3. **Enrollment Details:** (2020-2021)

Total Students Strength

4. **Activities:**

(i) Literary

- Under the co-curricular activities (CCA) 2020, an online competition was organized in two categories, literary and artistic, under which the girl students participated with great enthusiasm in both the activities and displayed their talent and skills.
- Tamanna Satsangi, a student of class IX of D.E.I.Prem Vidyalaya got third and consolation prize respectively in simple Hindi and English writing category under 'National Pen Men Championship 2020'

(ii) Music

- On 16 March 2021, the Divisional Shastri Sangeet Pratiyogita was organized by Uttar Pradesh Sangeet Natak Akademi in Agra, under which Aashna Suri, a student of Prem Vidyalaya, participated with great enthusiasm, and she secured the first position.
- In May 2021, an online international music competition was organized in Prayagraj by 'Pandit Ramashray Jha 'Ramrang' committee, in which Aashna Suri, a student of Prem Vidyalaya, participated, and she got the e-certificate.
- Aashna Suri, a student of class IX of D.E.I. Prem Vidyalaya secured second position under the Khayal Tarana Children's category, the regional classical music competition organized by 'Uttar Pradesh Sangeet Natak Academy Lucknow'

(iii) Creativity

- A Maths magazine made by IX- C students (<https://online.fliphtml5.com/qnqlj/gjwn/>)
- Students designed interesting projects(sanskrit patrika) in class like the flipbook given above. (<https://online.fliphtml5.com/kgapm/rgb>)

a) Winter Training camp

From 21 -25 December 2020, Winter Training Camp was organized in DEI premises in which DEI. 325 girl students of Prem Vidyalaya participated in activities and training program of their choice like Joining Army, Motivational Talk on Earth, Exploring Earth, Modern Equipment and Tools, Clay Modelling, Block Painting, Mehndi, Soft Toys, Vocal Music, Spoken English, Personality Development Programs and participated in sports like Kho-Kho, Volleyball and Self Defense etc. It was a good experience for the girl students.

b) Soft Toy Making, Mehendi Designing

c) **Independence Day** - College celebrated Independence Day with great enthusiasm.

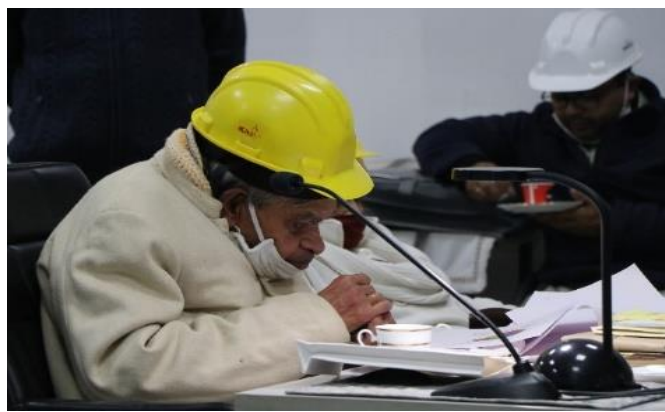
d) **Hindi Divas** - Celebrated on-line. (<https://youtu.be/oYgnPirLc>)

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

- Colloquia- Colloquia were held every month in this session in which the staff participated enthusiastically. All Staff members participated in Teachers Colloquia which was organized in online mode by DEI Board School with an object to make teachers aware about latest teaching skills.
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Seminars and Conferences

Winter Session of Dayalbagh Science of Consciousness 2021



The Winter session of the bi-annual conference series of Dayalbagh Science of Consciousness was organized in virtual mode on January 1, 2021. The event was jointly organized by Dayalbagh Educational Institute (Deemed to be University), Radhasoami Satsang Sabha (Sponsoring Body of DEI), University of Kiel, Germany, University of Waterloo, Canada & Systems Society of India.

The Conference had four Keynote talks by speakers from diverse fields spanning Religion and Theology, Panpsychism, Quantum Physics to Evolutionary Biology. The conference primarily focused Towards Evolutionary, Arts, Science & Engineering (TEASE) of Consciousness while the theme of the panel discussion was Ultra-transcendental meditational techniques and the Science of Consciousness. Invited talks by faculty members of DEI were also presented, highlighting the research work of their respective doctoral students. Conference proceedings were moderated by Dr. Vijai Kumar, President of the Radhasoami Satsang Sabha, Dayalbagh.

44th National Systems Conference (NSC 2021)

The Dayalbagh Educational Institute, in association with Systems Society of India, organized the 44th National Systems Conference (NSC-2021) on Systems for Sustainable Healthcare Habitats from May 22 to May 23, 2021, at Dayalbagh Educational Institute, Agra. The conference was held online in the virtual mode with approximately 3000 participants in each session across the globe connected through e-cascade. There were thirty oral presentations which were divided into six categories, namely, 'Consciousness and Biological Systems', 'Education Systems', 'Environment Systems', 'Healthcare Systems', 'Information and Communication Systems' and 'Mathematical Systems' with five papers in each category. For each paper, an 8–10-min pre-recorded video was presented followed by a live audio interaction. Similarly, the Poster Session with ten selected posters was scheduled for 30 minutes on Day-2 where a pre-recorded video of each poster of 3 minutes or less was presented followed by an audio interaction. The Annual General Meeting (AGM) of the Systems Society of India was also held on Day -1. A brief Inaugural Session was scheduled in the evening on Day-1. The session began with the University Prayer followed by a brief introduction about the SSI by the President of SSI. A short video by Prof Erik Goodman from Michigan State University (MSU) was played where he mentioned about his long association with Prof Herman E. Koenig who pioneered Physical System Theory. Prof Koenig had also taught Most Revered Prof. P S Satsangi Sahab during His Master's programme at MSU. Prof Goodman saluted Most Revered Prof. P S Satsangi Sahab for His vision in founding and nurturing the SSI. Convener NSC-21 provided details about the conference and presented a short film introducing DEI. This was followed by two plenary talks on 'Complex System of Systems Engineering Paradigm for Smart Future Systems' by Prof. Mo Jamshidi, University of Texas at San Antonio, USA and 'Systems Framework for Personalized Infectious Disease Management Using Nano-enabled Biosensors' by Prof. Evangelyn C. Alocilja, Michigan State University, USA.

Both the plenary talks were successful in generating good interaction with the audience. This was followed by six invited talks by young researchers across the globe under the theme 'What GenNext Thinks'. The presenters were, Dr. N. Apurva Ratan Murty from MIT, USA, who talked about The GenNext of Science and what it will take to get there, Dr. Aarat Kalra of Princeton University, USA, who presented Habits and Habitats: Comparing Dayalbagh and Princeton, contrasting east and west in dealing with different scenarios, Mr. Karan Narain from TCS Research and DEI, India, who presented some interesting recent research endeavours including phonons, graphene, graph theoretic modelling and nano brain, Dr. Tanmay Nath from Johns Hopkins University, USA, who talked about High-Dimensional Mediation Using Deep Learning: Understanding the stimulus-pain relationship in humans, Dr. Surat Parvatam from Atal Incubation Centre-CCMB, India who made a presentation on 'Shift towards human-relevant and predictive paradigm for research and drug discovery' and Mr. Anubhav Nanavati a PhD student in The University of California at Irvine, USA, who discussed Algebraic Geometry, K-Theory, and Future Outlook.

On Day-2, the remaining oral presentations took place followed by the poster presentations and two plenary talks which were on 'Imitation learning from human demonstration' by Prof. Laxmidhar Behera, IIT Kanpur, India and 'Waking the Frog: Building a Renewed Climate Capitalism' by Dr Tom Rand, ArcTern Ventures, Canada.

A Panel Discussion was also organized on the theme of the conference, i.e., 'Systems for Sustainable Healthcare Habitats' comprising the following eminent persons: Dr. Anoop Srivastava (Moderator), Dayalbagh, India, Dr. Tom Rand, ArcTern Ventures, Canada, Prof. Mo Jamshidi, University of Texas, at San Antonio, USA, Prof. Laxmidhar Behera, IIT Kanpur, Prof. Satya Prakash, Dayalbagh, India, Mr. M. Asad Pathan, SPHEEHA, India and Dr Anjoo Bhatnagar, Saran Ashram Hospital, Dayalbagh, India.

A session with award ceremony followed, where the different SSI awards were conferred. The session was chaired by Prof D Bhagwan Das, Secretary SSI. Prof Satya Prakash, Dr PS Sudhish and Mr Karan Narain received the award in person while the others received it in the virtuous virtual mode.



Lifetime Achievement Award

1. Prof. Mo Jamshidi, University of Texas at San Antonio, USA
2. Dr. Tom Rand, ArcTern Ventures, Canada
3. Prof. Satya Prakash, Dayalbagh

National Systems Gold Medal

1. Prof. Ranjan Bose, Director, IIT, Delhi

Varshney Award

1. Dr. Arun Gupta, AIIMS, New Delhi
2. Prof. Aaditeshwar Seth, IIT, Delhi
3. Dr. Prem Sewak Sudhish, Dayalbagh Educational Institute

Vikram Award

1. Mr. A. K. Saxena, Director, ADRDE, Agra
2. Mr. Karan Narain, TCS
3. Dr. Surat Paravatam, Atal Incubation Centre, CCMB

Young Systems Scientist Award

1. Dr. N. Apurva Ratan Marty, MIT, USA
2. Dr. Aarat Kalra, Princeton University, USA
3. Dr. Tanmay Nath, Johns Hopkins University, USA

Best paper/poster Awards:

Category	Best Paper Title and Authors
Consciousness and Biological Systems	Calibration of off-the-shelf low-cost wearable EEG headset for application in field studies for children, by Manvi Jain, C.M. Markan
Education Systems	Extractive Lecture Summarization System Using Evolutionary Algorithms – Optimizing Word, Sentence and Text Features by Binathi Bingi, Lotika Singh
Environment Systems	Self-Powered and Self Sustained Energy Systems: Energy Autonomy in the Internet-of-Things Systems by Ankit Mittal, Aatmesh Shrivastava
Healthcare Systems	Low-Power and High-Frequency Optogenetic Retinal Prosthetics with ChRmine by Himanshu Bansal, Neha Gupta, Sukhdev Roy
Information & Communication Systems	Deep Feature Compression Based Ensemble Model Towards Content Based Image Retrieval by Rohan Raju Dhanakshirur, Prem Kumar Kalra
Mathematical Systems	A Comparative Study of Causal Curves and Endless Causal Curves in Spacetime by Gunjan Agrawal, Shruti Sinha
Poster Session	Dayalbagh's Evolutionary Spiritual Consciousness Framework: An open system transforming to a hybrid system by Swati Idnani, Suresh Idnani, Sneha Idnani, Pushpa Idnani

A short cultural programme was also presented by the students of the Dayalbagh Educational Institute. The programme was immensely appreciated. The programme ended with the National Anthem.

Activities @ DEI

Socio-Cultural Day Celebrations



In order to dispel the mist of distress and disillusionment that the hovering Pandemic has tried to spread all around, the members of DEI fraternity organized a feisty display of cultural extravaganza on the 13 January, 2021, on the occasion of the Lohri festival which is organized as the Socio-Cultural Day in DEI every year. The event was planned in such a cautious manner, where every possible care was taken to avoid the threat laid by Covid-19. DEI students of all programmes were given three separate venues for their display and presentations so as to avoid any cluster of people in large number. The children enrolled in Sant Superman Scheme as well as the boys' students were given the venue at the huge DEI Parking Ground (in front of Faculty of Engineering) and DEI girls students were given two venues at DEI Girls Hostel I and II (situated near Jubilee Gate and at Madhuban Enclave respectively).

All three venues were decorated in aesthetically pleasing hues with traditional hand-crafted buntings and artifacts. A massive eco-friendly smokeless fire arranged at each of the venues enhanced the festive fervour and gave an enormous boost to the thrill and excitement of the students. The cultural bonanza presented by the students under the supervision of the teacher coordinators included presentation and *bolis* by the children of Sant Superman Scheme, *Bhangra*, Short Speech on the meaning and significance of Lohri, *Giddha*, *Ghumar*, *Boliyan*, Punjabi-Mashup, and many other rhythmic song and dance performances which were not only energetic but also displayed our strong socio-cultural roots. In the end refreshment consisting traditional delicacies made of peanut, Gur and Til, etc. were distributed to all. The event proved to be the most remarkable effort both in terms of revitalizing the inherent talents of the students as well as developing a strong sense of respect towards our great cultural heritage.

Annual Drama Festival-2021



The Annual Drama Festival was organized by the English, Hindi and Sanskrit departments, Faculty of Arts, DEI from 17-19 March, 2021. Even the hovering threat of Corona Virus could not dissuade the drama lovers from participating in this thrilling cultural and theatrical bonanza. All the precautions as per the pandemic protocol were duly followed during the organization of this much awaited event. Total seventeen plays were performed in this competition, where, four plays were performed in English, eight in Hindi and remaining five were performed in the Sanskrit language. In addition to this, a special short dramatic act was presented by the students of DEI, dramatizing the famous conversation between the two Nobel Laureates, Scientist Albert Einstein and Poet Rabindra Nath Tagore in the year 1930 at Berlin, Germany, where they discussed about the Superhuman Reality in terms of Science and Religion. Two schools, two colleges and six faculties of Agra, including DEI took part in this festival. The participating students displayed commendable acting prowess in different segments of dramatic performance and also showcased great coordination and managerial skills through the stage representations. The audience enjoyed plays in all three languages and encouraged the participants by their presence in large number. Dr. Priyam Ankit, Associate Professor (English), Agra College, Mr. Yash Uprati, a reputed theatre artist and Mr. Durga Prasad Rao, an expert of Sanskrit language and drama were the judges.

DEI Prem Vidyalyaya won the Best Production Award at the school level for the Hindi play '*Dhruvswamini*'. At the college level, Faculty of Engineering won the Best Production Award for the Hindi play '*Natsamrat*', Faculty of Education won the Best Production Award for its Sanskrit play '*Swarn- Marjari*' and the Best Production Award for English play was taken by Engineering Faculty for its play '*The Illuminated Night*'.

The highlight of this year's Drama Festival was the August Presence of Most Revered Prof. P.S. Satsangi Sahab, Chairman, Advisory Committee on Education, DEI and Most Respected Mrs. Satsangi through virtual mode on all three days which provided the much- needed impetus for the success of the event.

General Manager North Central Railway Visits Dei

Shri Pramod Kumar, General Manager North Central Railway, visited DEI on 7 August 2021. He is an illustrious alumnus of the Institute. He graduated from the Faculty of Engineering in 1984 with a degree in BSc. Engineering (Electrical branch). On his arrival, Shri Kumar was given a warm welcome by the Honourable Director DEI at the Central Administrative Office. Through a film on DEI, Shri Kumar was acquainted with the progress that took place since the time he studied here. He was shown a glimpse of the variety of skill- works going on in DEI keeping pace with the government's initiatives. Later, Shri Kumar went to the Faculty of Engineering and paid his obeisance to his alma mater. Shri Kumar assured that he would try his best to contribute towards the progress of DEI.

Shri Pramod Kumar was accompanied by Shri Sushil Kumar, Divisional Railway Manager-Agra. Incidentally, long time ago both Shri Pramod at DEI and Shri Sushil at IIT Kanpur, have been the students of Director, DEI, Prof. P.K. Kalra.

Teachers' Day Celebration in DEI



Teachers' Day was celebrated with zeal and enthusiasm by the students of DEI in the virtual mode on 5th September 2020. The Programme began with Prayer. Ms. Ishita Tewari and Ms. Mili Tewari paid homage to teachers through Guru Vandana presented in their melodious voice.

On this occasion, Prasann Prasad paid tributes to Dr. Sarvepalli Radhakrishnan, the former President of India, who was known as a brilliant teacher and a great philosopher. He presented the life sketch of this exceptional mentor, vowing to follow his footsteps.

Through a beautifully animated presentation “Teachers – the Lockdown Warriors”, students paid tribute to the entire DEI Teaching Community for the exceptional efforts made during the ongoing Covid-19 period.

Niharika Singh through her self-composed poem paid respects to the teachers. Arbab Ahmed and Ansh Rajauria highlighted the teacher-student bond in DEI through their musical presentation and saluted the teaching fraternity for their hard work, dedication and commitment.

On this auspicious day, the following teachers, Prof. Kamlesh Kumari Ravi, Prof. Gur Pyari Satsangi, Prof. Man Mohan Srivastava and Maj. Pritam Singh, who retired after a long, devoted and committed service to DEI were honoured. These teachers in their address acknowledged that they have learnt a lot from the Institute and will always remain available with their services.

Prof. P.K. Kalra, Director DEI, honoured the retired teachers by presenting mementos to them. In his Presidential Address, Prof. Kalra wished all a happy teachers’ day and said that the teachers are the powerful role models who after parents have a great influence in shaping the young minds. He stated that the progress of any educational institute is advanced by its teachers who set an example of selfless service towards both students and institute.

He further said that the ethos of selflessness and dedication have been exemplified here when teaching and non-teaching staff came forward to provide healthy organic produce for the neighbouring community during the challenging period of Covid-19 pandemic. He mentioned that DEI staff and students have voluntarily started growing vegetables, producing good quality agriculture & horticulture products and planting trees to increase the green cover. He also informed that efforts are continuing for creating smart health care habitat, thus contributing to the service of mankind.

On behalf of the students of DEI, Vatsala Singh proposed the Vote of thanks. The Compering was done by the students, Mani Pengoria and Aryaka Mahajan. The celebration was witnessed in the virtual mode by large number of staff, students and many others. The programme ended with the Institute Song.

Values and Quality Day



The Seventh Annual ‘Values and Quality Day’ was celebrated at Dayalbagh Educational Institute on 14th November 2020 with great fervour. The main event was organised at DEI International Seminar Hall and the live proceedings were transmitted in ‘Virtual and Supervised Mode’ through Zoom and DEI Multimedia Youtube Links across the centres.

Prof. Terence Lovat, Emeritus Professor, New Castle University, Australia, delivered the Key-note address where he emphasised that with ‘Values’ integrated with Quality teaching, students become capable to imbibe and practice human values of tolerance, ethics, integrity, social sensibility etc. in their lives in a more natural and organic way.

The finals of Inter-Institute Elocution, Poetry recitation and Bhakti Sangeet competitions were also held on this day where students of various faculties of DEI, Technical College, Prem Vidyalaya and REI Intermediate

College participated enthusiastically. Special presentations by the winners of these competitions were also held during the main event.

List of Prize Winners of Values & Quality Competitions 2020:

Elocution:

- Hindi: 1. Shreya Verma, Engineering
2. Prashansa Yadav, Social Sciences
3. Manish Maheshwari, Technical College

- English: 1. Drishti Goel, Engineering
2. Gaurav Sabhani, Science
3. Anshima Johri, Commerce

Poetry Recitation

Hindi:

1. Surat Bhushan, Prem Vidyalaya (Title: 'Sach hai vipatti jab aati hai')
2. Ami Satsangi, REI (Title: 'Corona')
3. Mahima Kumari, Prem Vidyalaya (Title: 'Satya ki vijay')

English:

1. Vyom Jangid, REI (Title: 'Let the light enter')
2. Daya Drishti Malhotra, Prem Vidyalaya (Title: 'Value misplacement')
3. Binti Satsangi, Prem Vidyalaya (Title: 'Still I rise')
4. Umang Manocha, Prem Vidyalaya (Title: 'where the mind is without fear')

Bhakti Sangeet:

1. Darash Adhari, Arts
2. Amola Satsangi, Commerce
3. D. Abhilasha, Science
4. Nij Mehar Grover, Engineering

It is heartening to note that various Distance/ ICT centres of DEI across the world also celebrated 'Values and Quality Day' with immense zeal by organising cultural and literary events where students and staff together participated in large number.

53rd Engineer's Day Celebrated by DEI Students' Chapter, IEI

On the occasion of 53rd Engineers' Day a webinar on "The Role of Engineers in COVID-19" was organized at Dayalbagh Educational Institute by the Students' Chapter IEI, Kolkata on 15 September, 2020. About 266 participants participated in this function. The event commenced with the University prayer followed by a brief overview of the significance of Engineers' day and the report of the students' chapter activities in the academic session 2019-20.

Dr D.K. Chaturvedi gave an illustrative introduction of Prof. Oscar Castillo; Tijuana Institute of Technology, Tijuana, Mexico, who was the principal speaker for the day. Prof. Castillo gave the expert talk on the topic, 'Soft Computing and Fractal Theory' including information on Type-2 Fuzzy Logic, Firefly Algorithm, Neural Network Architecture for Covid-19 time series prediction. Mr. Ishant Singhal, the advisor to the Students' Chapter gave the introduction of the Guest of Honour for the day, Mr. Vivek Nigam, Business Head, ISGEC Heavy Engg. Ltd., a DEI alumni of 1980 batch of Engineering. Mr. Nigam presented the bird's eye view of the upcoming and trending technologies with the exposition of the industry in India and overseas.

The programme was presided over by Prof. P.K. Kalra, Director DEI, Dean FOE Prof. V. Soami Das and Mr. Ishant Singhal. Prof V. Soami Das presented the Vote of Thanks. The programme was compared by Ms. Surat Nigam, a 1st year B. Tech student.

Annexure

RULE:11

GOVERNING BODY - LIST OF MEMBERS

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TERM: 2020-2021

	<u>Status of Nomination</u>		<u>Name of the Member</u>
(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. Kamaljeet Sandhu Dean, Faculty of Social Sciences Dayalbagh Educational Institute Dayalbagh, Agra-282 005 Prof. Sharmila Saxena Dean, Faculty of Arts Dayalbagh Educational Institute Dayalbagh, Agra-282 005
	4.	-do-	
(d)	5.	One nominee of the Ministry of Education, Govt. of India.	Prof. B.R. Kukreti
(e)	-	One nominee of the Chairman, UGC	As per UGC, Reg., 2010 (Not needed)
(f)	6.	Director, Higher Education, Uttar Pradesh (Ex-officio)	Dr. Amit Bhardwaj Director Higher Education, U.P. Directorate of Higher Education Post Bag No.005 PRAYAG RAJ-211 001

GOVERNING BODY - LIST OF MEMBERS (Contd.)**Page-2**

TERM: 2020-2021

(g)	7.	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)	8.	One nominee of the Radhasoami Satsang Sabha, Dayalbagh, Agra	Shri Gur Saroop Sood
(i)	9.	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)	10.	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 rksinha@gmail.com	Shri Ravi Kumar Sinha B-2/6, (Ground Floor) Vasant Vihar NEW DELHI-110 057
	11.	-do- 9837308578	Prof. S.S. Bhojwani 3/43, Prem Nagar Dayalbagh, Agra-282 005
(k)	12.	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 (Residual term up to 30.6.2020)	Professor Pami Dua C-58, Soami Nagar New Delhi-110017
	13.	-do- 9219500838	Professor V.B. Gupta 3/173, Prem Nagar Dayalbagh, Agra-282 005
	14.	-do- 9557707948	Professor P. Sriramamurti 4/112, Vidyut Nagar Dayalbagh, Agra-282 005
	15.	Registrar, DEI (Ex-officio Secretary)	Prof. Anand Mohan Registrar Dayalbagh Educational Institute Dayalbagh, Agra-282 005

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