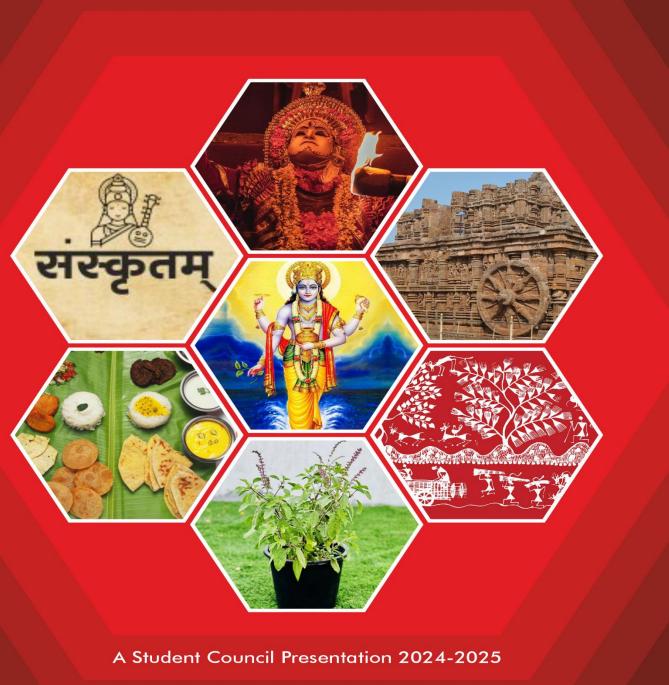
THE NEST

Nurturing sharp minds



INDIAN KNOWLEDGE SYSTEM

MET **Bhujbal Knowledge City** MET INSTITUTE OF PHARMACY (DEGREE)



Mahatma Jyotiba Phule (1827-1890)



Shrimati Savitribai Phule (1831-1897)

विद्येविना मती गेली मतीविना नीती गेली । नीतीविना गती गेली । गतीविना वित्त गेले ।। वित्ताविना शुद्र खचले । इतके अनर्थ एका अविद्येने केले ।। – महात्मा ज्योतिबा फुले

Lack of knowledge leads to indiscretion;
Indiscretion leads to lack of ethics.

Lack of ethics leads to absence of direction and momentum;

Absence of direction and momentum result in bankruptcy.

Such is the havoc caused by the lack of knowledge.

- Mahatma Jyotiba Phule

Our Faith

न चौर हार्यम् नच राज हार्यम्। न भातृभाज्यम् नच भारकारी।। व्यये कृते वर्धते एव नित्यम्। विद्याधनं सर्वधन प्रधानम्।।

Knowledge can neither be stolen by a thief, nor snatched by a king.

It is indivisible unlike ancestral property, it never burdens the bearer, it multiplies manifold when offered to others.

Knowledge is the supreme form of wealth.

Our Vision

MET Institute of Pharmacy has a vision to be recognized as one of the leading institute of pharmacy education in the nation and envisages to produce world class pharmacists who are equipped to cater to the present and future needs of the profession and society at large.

Our Mission

MET Institute of Pharmacy aims to achieve its vision by:

- 1. Imparting quality education and training the students in the field of pharmaceutical sciences through competent staff and supporting infrastructure.
- 2. Working towards the all-round development of the students.
- 3. Enabling students to make ethical and valuable contributions in diverse facets of pharmacy and social welfare, thus improving the quality of life.

Mumbai Educational Trust



Mumbai Educational Trust (MET) is a conglomerate of premiere educational institutions, driven by a single-minded focus on imparting quality education, to make students sharp. Training is imparted round-the-clock, seven days a week. Projects and assignments are given utmost importance and students learn on the job. Application-oriented knowledge, garnered in the lecture halls, is applied to industry assignments. The faculty spares no effort to make the students razor sharp, so that they make their mark in the corporate world. No effort has been spared, to create an environment that encourages students, to push the limits of their minds. All this, to help young professionals face the challenges of life. And make their mark in the corporate world.

Bhujbal Knowledge City, Mumbai

- Institute of Management
- Institute of Post Graduate Diploma in Management
- Institute of Mass Media
- Asian Management Development Centre
- Centre for Insurance Training, Research & Development
- Institute of Pharmacy
- Institute of Information Technology
- Institute of Software Development and Research
- Institute of Computer Science
- Institute of International Studies
- Rishikul Vidyalaya

Bhujbal Knowledge City, Adgaon, Nashik

- Institute of Management
- Institute of Pharmacy
- Institute of D. Pharmacy
- Institute of Technology (Polytechnic)
- Institute of Information Technology
- Institute of Engineering
- Bhujbal Academy of Science & Commerce (Jr College)
- Meena Bhujbal School of Excellence (CBSE Board)

Bhujbal Knowledge City, Gowardhan, Nashik

School of Architecture and Interior Design

At MET, over four thousands students and faculty are involved in delivering unique learning systems, through ultra modern infrastructure and academic rigour. MET Institutes are ISO certified, with affiliations to the University of Mumbai, Savitribai Phule Pune University, Directorate of Technical Education, All India Council of Technical Education, MSBTE, Pharmacy Council of India, C-DAC - Ministry of Communications and Information Technology, The Chartered Insurance Institute (CII), London.

MET also has strategic institutional collaborations with the NCC Education, UK, Manhattan Institute of Management, New York, EAE Business School, Spain, Business & Hotel Management School, Switzerland, Robert Gordon University, York St. John University, SetCONNECT, USA, TCS iON and many others bodies of International repute.

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MESSAGE FROM THE PRINCIPAL



It is with immense pleasure that we present our college magazine, "The Nest" 2025. This year, we have chosen the theme "Indian Knowledge System", as we believe it is vital for our students to explore the grandeur and depth of the rich knowledge heritage that India offers. The New Education Policy emphasizes the need to educate students about our traditions and knowledge across various fields.

India is home to one of the world's oldest medical systems: Ayurveda—the science of life. It beautifully

integrates the balance of the body, mind, and spirit. Among the many treasures of ancient wisdom, the Sushruta Samhita stands out as an exemplary work compiled by Maharshi Sushruta, the pioneer of surgical procedures. His contributions to the medical field are not just historical marvels but an inspiration for modern science and practice.

In the spirit of honoring and understanding our Indian Knowledge Systems, our students had the opportunity to showcase their talents at MET Utsav. From sports, dance, and fashion shows to various competitions and workshops, we infused our theme throughout the events. The enthusiasm, creativity, and innovative approaches displayed by our students in representing Indian Knowledge were remarkable.

The dedication of our students was evident in their exceptional performances, earning them well-deserved recognition. We proudly celebrate their achievements: Winner in Group Dance, First Runner-Up in the Fashion Show, Second Runner-Up in the Technical field and Student of the Year award. These accomplishments were achieved in just a week of preparation, and we could not be prouder of the students who represented our institution so brilliantly.

Dear students, as we continue to work hard to provide you with the best knowledge and a conducive environment for your growth, we are committed to nurturing not only your academic excellence but also your development as professional pharmacists and, more importantly, as compassionate and insightful human beings.

Let us continue to learn from the wealth of wisdom our heritage offers and carry forward this knowledge into the future.

Wishing you all a successful journey of growth and discovery
Dr. Abha Doshi
(Principal)
MET IOP Degree

COURSE COORDINATOR'S PERSPECTIVE



My Dear Students,

"Indian culture is the embodiment of the highest knowledge, truth, and wisdom." -Swami Vivekananda

The theme of this year's NEST is the "Indian Knowledge System," a unique educational approach that emphasizes holistic development. The system involves a wide range of disciplines, including philosophy, mathematics, astronomy, literature, medicine, and more. From the ancient wisdom of the Vedas to the ground-breaking contributions of

scholars like Aryabhata, Chanakya, and Kalidasa, India has long been a hub of knowledge, fostering innovation, critical thinking, and a profound understanding of the universe.

This magazine serves as a celebration of that legacy, exploring the intersection of traditional and modern Indian thought, and honoring the ongoing influence of this wisdom in our lives today.

I am delighted to share my thoughts, as it has always been a pleasure to connect with all of you. The NEST magazine is an exceptional showcase of the co-curricular and extracurricular activities undertaken by both students and staff. It beautifully highlights the contributors' perspectives on how the Indian Knowledge System resonates in our lives, conveyed through insightful write-ups, captivating images, artwork, and poetry.

I would like to express my heartfelt gratitude to our esteemed Trustees and Principal, Dr. Abha Doshi, for their constant support.

Congratulations to everyone who contributed to the creation of this exquisite magazine. My best wishes to the bright and talented students of MET for their future pursuits!

Dr. Rashmi S. Srivastava Course Coordinator MET IOP (Degree)

FROM THE CULTURAL INCHARGES



संगच्छध्वं संवदध्वं सं वो मनांसि जनताम्।

"Samgacchadhvam samvadadhvam sam vo manamsi janatam."

(Let us move together, let us speak in one voice, let our minds be in harmony.)

This ancient verse from the Rig Veda beautifully captures the essence of our cultural team.

As we present this edition of "NEST," themed Indian Knowledge System, we celebrate the profound

legacy of India's intellectual and cultural heritage. The Indian Knowledge System (IKS) encompasses a vast spectrum-philosophy, science, mathematics, literature, art, medicine, and governance-rooted in ancient texts like the Vedas and Upanishads, and preserved through centuries by dedicated scholars and educators. So, we have celebrated this theme all throughout the year with various cultural programs, celebration of days as well as competitions.

Throughout the academic year, our campus has come alive with vibrant festivals and meaningful observances that reflect the richness of Indian tradition and the spirit of togetherness: Starting the year with the Ashadi Ekadashi and other such events like the Gurupoornima, honoring devotion and the guru-shishya bond. We put a small twist to make our ancient knowledge more contemporary by an insightful awareness lecture during Nagpanchami, Nutrition week and even our innovation day. Like every year we also celebrated Independence Day and Republic Day fostering national pride and freedom. Hindi and Marathi Bhasha Diwas were celebrated with elocution and poetry competitions, cherishing our linguistic heritage. The colourful and vibrant Navaratri Garba brought everyone together to dance to the folk dances for fun and frolic and on Diwali we made lanterns from waste or recycled materials illuminating our light with sustainability.

National Science Day was about inspiring innovation and scientific curiosity among the next generation. We had students from the neighbouring public school to understand a session of 'Fun with Science' through lectures and experiments by the college students. Pharmacy week was celebrated by encouraging the students out of the box thinking by creating a 'pharmacy treasure hunt' across campus with games associated with the pharmacy profession.

Students participated in various co-curricular activities like the Poster and model presentation at Aavishkar, CiiA and won awards at other inter-collegiate events. Students also had a factory visit

at Glumex pharma and development with activities like Plat pharm, Workshop on design thinking, innovations in formulations etc. Seminar was also arranged for the students on topics like "Exploring Career Opportunities for Pharmacists in the Indian Government Sector", "Al revolutions in Pharmaceutical sciences", "Cybersecurity", "Financial awareness" amongst others.

Students also participated in various social activities with various NGOs like United Way, Smiti foundation, Sparsh foundation, Tata Cancer Hospital etc. like Tree plantation drives, Beach cleanup drives, blood donation, clothes donation drives, shore walks to name a few.

This year the students also planned and executed a full sports saga of indoor and outdoor sports and various cultural days from Fresher's to Lumiere and farewell.

MET UTSAV '25 also helped us foster our theme of IKS and students participated with great enthusiasm to enjoy the one-week long Utsav not just as participants but also as volunteers.

Rx 2025 also brought great accolades for MET. The students not only won awards at the poster and oral presentations but we also achieved the Winner's trophy in Group Dance, First Runner-Up trophy in the Fashion Show, Second Runner-Up trophy in the Technical field and The Student of the Year award.

Each event has not only strengthened our bonds but also brought to life the core values of the Indian Knowledge System-cooperation, respect for diversity, and the pursuit of knowledge for collective well-being.

We extend our heartfelt gratitude to the trustees, management, and our respected principal for their unwavering support and vision. A special thanks to our dedicated colleagues for their collaboration and to our talented students-the heart of every initiative-for their enthusiastic participation and creativity. Together, let us continue to learn from our heritage and build a brighter, more inclusive future.

Dr. Madhura Vaidya Ms. Vrushali Keer (Cultural Incharges)

OUR TEACHERS



First Row (L to R): Dr. Madhura Vaidya, Dr. Bhagyashri Joshi, Dr. Rashmi Srivastava, Dr. Abha Doshi, Dr. Vijaya Patil, Ms. Sheeja Koliyote, Dr. Sonali Naik, Ms. Vrushali Keer.

Second Row (L to R): Dr. Bandoo Chatale, Ms. Rupsa Seth, Dr. Sindhu Menon, Mrs. Priyanka Joshi-Jain, Mrs. Sunanda Patil, Mrs. Aushima Dasari.

NON-TEACHING STAFF



First Row (L to R): Mrs. Barve, Mrs. Ashwini Pawar, Mrs. Aarti Gore, Dr. Rashmi Srivastava, Dr. Abha Doshi, Mrs. Priya Sawant, Mrs. Asavari Hadkar, Mrs. Ankita Patade,
Mrs. Sneha Kokate.

Second Row (L to R): Mr. Ashwin More, Mr. Sunil Mohite, Mr. Gurunath Pednekar, Mr. Ghanshyam Kambli, Mr. Yuvraj Thakare, Mr. Sanjay Palav, Mr. Mahendra Surve, Mr. Ajay Mali, Mr. Sanjay Katkar, Mr. Pramod Karbhari.

Third Row (L to R): Mr. Dattaram Bhure, Mr. Rajesh Sawant, Mr. Pradeep Jadhav, Mr. Prashant Rane, Mr. Sudhir Ayare.

STUDENT COUNCIL 2024-25

Instilling values such as Integrity, Strategic thinking, Teamwork, and Commitment requires practical experiences where these qualities are actively applied in life. The Student's Council plays a pivotal role in providing such opportunities, aiming to establish a solid foundation for lifelong learning. Throughout the year, we not only organized a varied range of co-curricular and extracurricular activities at college level but also orchestrated a dynamic array of intercollegiate and inter-departmental events, fostering collaboration and cross-disciplinary engagement.

Our sincere gratitude goes to Principal Dr. Abha Doshi for providing us with this platform, and heartfelt thanks to Dr. Madhura Vaidya and Ms. Vrushali Keer for their unwavering support and guidance. The council members left no stones unturned in creating magic at every opportunity, be it events, celebrations, fests or other endeavors.

This year unrolled with a tapestry of events, enthusiastic participation, and a sense of unity. From sports and performing arts to creativity, academia, and debates, our students displayed remarkable contribution and engagement. Special acknowledgement goes to the incredible team that worked tirelessly to turn imaginative ideas into reality.

Our heartfelt best wishes extend to every student, whether part of the Student's Council or not, for contributing to a fruitful year and creating lasting memories.

POST	CLASS	NAME	
General Secretary	Third Year	Mr. Aaditya Sankpal	
	Third Year	Ms. Advika Dalvi	
Cultural Secretary	Second Year	Ms. Divya Kawa	
	Second Year	Ms. Shrushti Chougale	
Class Representative	Fourth Year	Ms. Varsha Chaudhary	
	Fourth Year	Ms. Simran Keni	
	Fourth Year	Ms. Rishika Potam	
	Third Year	Ms. Tanvi Bandekar	
	Third Year	Mr. Kanhaiya Malani	
	Third Year	Mr. Kanhaiya Malani	
	Second Year	Ms. Komal Galande	
	Second Year	Ms. Shifa Khan	
	Second Year	Ms. Riva Tombri	
	First Year	Mr. Surjo Hazra	
	First Year	Ms. Nidhi Kanadia	
	First Year	Ms. Ariba Shaikh	
Social Media Coordinators	Fourth Year	Mr. Khan Mohd Monishuddin	
	Third Year	Ms. Kirti Ramane	
	Third Year	Ms. Riya Patwa	
	Second Year	Mr. Prathamesh Patil	
Sports Secretary	Third Year	Mr. Rishi Gupta	

	Second Year	Ms. Vrukshi Sankhe	
Treasurer	Third Year	Ms. Sakshi Singh	
	Second Year	Ms. Shriya Sangekar	
Health Secretary	Second Year	Ms. Apoorva Gajula	
	Second Year	Ms. Manali Parab	



COUNCIL MEMBERS:

FIRST ROW(L-R): Mr. Aaditya Sankpal, Mr. Pramod Karbhari, Dr. Rashmi Srivastava, Dr. Abha Doshi, Ms. Vrushali Keer, Dr. Madhura Vaidya, Mr. Sudhir Ayare, Ms. Advika Dalvi.

SECOND ROW(L-R): Ms. Trisha Savla, Ms. Apoorva Gajul, Ms. Sakshi Singh, Ms. Divya Kawa, Ms. Shrushti Chougale, Ms. Nidhi Kanadia, Ms. Riva Tombri, Ms. Vrukshi Sankhe, Mr. Rishi Gupta, Ms. Riya Patwa, Ms. Khushi Kanaujia, Ms. Tanvi Bandekar, Ms. Gauri Chandak, Ms. Kirti Ramane, Ms. Rishika Potam.

THIRD ROW(L-R): Mr. Khan Mohd Monishuddin, Mr. Sahil Gurav, Mr. Prathamesh Patil, Mr. Vaishnav Pawar, Mr. Surjo Hazra.

IPA TALKS

The Indian Pharmaceutical Association- Maharashtra State Branch- Students' forum, one of the chief segments of the Indian Pharmaceutical Association, has been the go-to platform for pharmacy students in the state of Maharashtra for decades.

Under the auspices of this student-run organization, various budding pharmacists have united to harmonize their energies to explore the boundless avenues of the pharmaceutical sphere. All the diverse facets of the pharmaceutical arena. Be it academia, industry, community and hospital pharmacy, management and public health are emphasized by the conglomerate.



IPA Members:

Name of the Member	Year	Post	Committee
Shrushti Shetty	Fourth Year	Vice-Chairperson	General Secretary
Yatish Chauhan	Fourth Year	Executive	Chief Executive Officer
Shlok Bodke	Fourth Year	Sports Associate	Sports Secretary
Sakshi Parab	Fourth Year	Cultural Associate	Cultural Secretary
Lavanya Ravindran	Third Year	Editorial	Editorial Cell Member
Saad Shaikh	Second Year	Public Health Office	Public Health Office Cell Member
Safoora Rawoot	First Year	Education cell Pharmacy education	Pharmacy education Office Cell
Vedika Kini	First Year	Finance	Finance Cell Member
Dhanya Shetty	First Year	Public Relations	Public Relations Office Cell

About the Cover page: THE NEST 2024-25: Indian Knowledge System

In a world rapidly advancing through technology and innovation, it becomes imperative to root ourselves in the timeless wisdom of our heritage. "THE NEST 2024-25" is a dedicated initiative to explore, document, and celebrate the rich and diverse tapestry of the Indian Knowledge System (IKS).

India, a land of profound philosophies and ancient sciences, has always been a cradle of knowledge. This edition of THE NEST brings to light various facets of the Indian Knowledge System—from Ayurveda and traditional healthcare, languages and scriptures, to architectural brilliance, classical arts, handicrafts, regional cuisine, and indigenous plants.

Each image on the cover represents a unique thread of our cultural fabric:

- The intricate temple carvings and circular stone wheels stand as a testimony to India's architectural and engineering brilliance.
- Traditional attire and embroidery mirror the beauty of regional craftsmanship.
- The vibrant folk art and rituals reflect spiritual and cultural depth.
- The depiction of deities and scriptures point towards our philosophical and spiritual pursuits.
- The display of traditional food emphasizes the diversity and science behind Indian dietary practices.
- The Tulsi plant symbolizes India's deep-rooted understanding of medicinal botany and environmental harmony.
- The central image of Dhanvantari, regarded as the divine originator of Ayurveda, symbolizes the roots of pharmacy in Indian tradition, representing the ancient knowledge of medicinal herbs, formulations, and holistic healing practices that form the foundation of pharmaceutical

Through THE NEST, we aim to instill pride in our cultural heritage, foster interdisciplinary learning, and encourage research rooted in Indian ethos. This initiative is not just a celebration of the past, but a bridge to integrate ancient wisdom with contemporary education.

Let us reconnect with our roots and reimagine the future through the lens of India's timeless knowledge.

ASHADHI EKADASHI



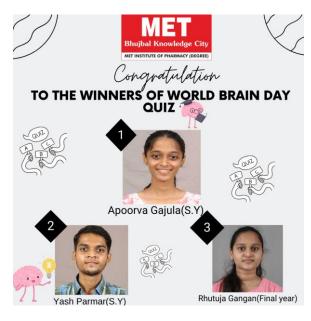
17th July 2024: The MET Institute of Pharmacy celebrated Ashadhi Ekadashi which transformed a classroom by filling it with devotion. The event began with an aarti led by our trustee, Mr. Pankaj Bhujbal, creating a reverent atmosphere. Participants enjoyed heartfelt bhajans, enhancing the spiritual ambiance, while the room was adorned with flowers and rangoli. The celebration fostered community and spiritual growth through a harmonious blend of devotion, music, and unity.

INTERCOLLEGIATE QUIZ COMPETITION

20th July 2024: The intercollegiate quiz competition organized by Shivajirao S. Jondhale College of Pharmacy, Asangaon, on "Emerging Trends in Pharmacy". Ms. Nidhi Mishra, a final-year student from MET Institute of Pharmacy, excelled, securing third prize with her extensive knowledge and quick thinking. Her achievement highlighted the high standard of education at MET IOP. The guiz successfully promoted awareness of the latest trends in pharmacy, providing a platform for students to demonstrate their knowledge and engage with peers. The event concluded with an award ceremony celebrating the winners and participants for their dedication.



WORLD BRAIN DAY QUIZ



22nd July 2024: The MET Institute of Pharmacy hosted the online World Brain Teaser Quiz for World Brain Day, promoting brain health awareness. Students engaged with one-word responses, riddles, and multiple-choice questions covering neuroscience and memory challenges. Winners included:

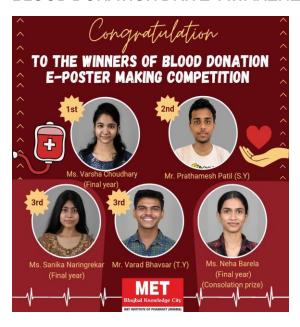
- First prize: Ms. Apoorva Gajula (Second Year)
- Second prize: Mr. Yash Parmar (Second Year)
- Third prize: Ms. Rhutuja Gangan (Fourth Year) The event emphasized cognitive health and fostered community among students.

WIN AT MED-MATRIX 2024

22nd July 2024: Ms. Khatija Khan and Mr. Dharmendra Purohit, final-year students of MET Institute of Pharmacy, actively participated in the Med-Matrix 2024 National E-Poster and Oral Presentation competition held by Bharati Vidyapeeth College of Pharmacy, Kolhapur. They presented their poster on "Exploration of Traditional and Herbal Medicine," which won first prize and a cash award of Rs. 2,000. Out of 20 competing posters, theirs was selected among the top 5, ultimately securing the top position. Their presentation focused on the scientific basis and therapeutic potential of various traditional medicine systems.



BLOOD DONATION DRIVE -AWARENESS CREATION TO DONATION



30th July 2024: The DLLE club at the MET Institute of Pharmacy held an e-poster competition on blood donation. Participants created posters highlighting the importance of blood donation, featuring relevant information and persuasive messages to encourage donations. Winners:

- First prize: Ms. Varsha Chaudhary (Fourth Year)
- Second prize: Mr. Prathamesh Patil (Second Year)
- Third prize: Ms. Sanika Naringrekar (Fourth Year) and Mr. Varad Bhavsar (Third Year)
- Consolation prize: Ms. Neha Barela (Fourth Year) The event was a success, with many participants contributing innovative ideas to promote blood donation.

BLOOD DONATION WEBINAR



and now well-informed about the criteria.

5th August 2024: The DLLE club at the MET Institute of Pharmacy (Degree) hosted a webinar on blood donation by Dr. Ashwathi Nair from TATA Memorial Hospital. She discussed the importance of blood donation, eligibility requirements, and addressed common misconceptions, emphasizing its significance for cancer patients. A Q&A session followed, allowing students to seek clarification. The event was successful, with students eager to volunteer for blood donation

BLOOD DONATION PRESENTATION

8th and 9th August 2024: The DLLE club at the MET Institute of Pharmacy (Degree) held a blood donation presentation to promote an upcoming blood donation drive. The initiative aimed to raise awareness and encourage volunteer participation. Students shared details about the drive, including its date, time, and organizing body, while highlighting the importance of blood donation and outlining the donation process and eligibility requirements. The session ended with a Q&A segment for audience inquiries.



BLOOD DONATION DRIVE



13th August 2024: The MET Institute of Pharmacy hosted a blood donation drive with Tata Memorial Hospital to raise awareness and meet the ongoing need for blood. The event featured a well-equipped donation area, qualified medical staff, and refreshments, attracting a strong turnout through effective promotion. Participants underwent health assessments to ensure eligibility. This initiative showcased the college community's collaboration and the hospital's commitment to saving lives while educating attendees on the importance of blood donation.

SEMINAR ON INNOVATION AND ITS PROTECTION

2nd August 2024: The MET IOP hosted a seminar organized by the Institutions Innovation Council, featuring Dr. Arun Raaza, CEO of Arcomm. Dr. Farida Virani, a MET IOM professor, opened the event by emphasizing the importance of innovation initiatives like Aavishkar and CIIA. Dr. Raaza discussed intellectual property rights, including patents, trademarks, and copyrights, highlighting the importance of novelty in patents and the role of



design patents in protecting unique product visuals. Dr. Rashmi Srivastava addressed audience questions about patents. The seminar offered valuable insights into intellectual property rights, encouraging innovative thinking and understanding of legal protections. The event concluded with Dr. Srivastava and Mrs. Sheeja Koliyote recognizing Dr. Raaza for his contributions.

POSTER MAKING COMPETITION



3rd AUGUST 2025: The Green Club at the MET Institute of Pharmacy held a poster-making competition focused on climate change and water management. Many participants created posters highlighting the causes, impacts, and solutions to climate change, with a strong emphasis on water management. Ms. Manjiri Shinde supervised the event.

Competition results:

- First Prize: Ms. Gauri Chandak and Ms. Swatee Chindarkar (Second Year)
- Second Prize: Mr. Kartik Narkhede and Ms. Aditi Nijapkar (Third Year)
- Third Prize: Ms. Anshita Modi and Mr. Junaid Naik (Third Year)

The competition aimed to raise awareness of climate change and water management while allowing students to showcase their artistic talents.

FRIENDSHIP DAY

5th August 2024: The Student Council of MET Institute of Pharmacy celebrated Friendship Day with the theme "Twin with Your Best Friend." Students wrote heartfelt messages on cards for their friends, which were collected and later distributed in a beautifully decorated box. This event highlighted the importance of nurturing relationships and showcased the college's commitment to fostering supportive community.



GPAT AND NIPER ENTRANCE TRAINING



7th August 2024: The MET Institute Pharmacy hosted Mr. Ashthbhuja Shukla, a Junior Associate Scientific Writer and GPAT All India Rank 96 holder. He shared insights on preparing for the **GPAT** and **NIPER** entrance exams for programs like MS, MBA, and MTech in Pharmacy. Mr. Shukla emphasized innovative study methods, understanding the GPAT's 125 multiple-choice questions. consulting and standard textbooks like "Medicinal Chemistry" by Foey. He recommended studying 8 to 10 hours daily, developing tailored

strategies, practicing past papers, and taking mock tests. Starting with confident sections can build momentum, while effective time management ensures comprehensive coverage.

NAGPANCHAMI

9th August 2024: The DLLE club at the MET Institute of Pharmacy hosted an awareness seminar for Nag Panchami, a Hindu festival honoring snakes. Guest speakers included Mr. Chaitanya Keer, a Sarpmitra and founder of 'Nature Rocks,' and biodiversity expert Ms. Apurva Patil. Mr. Keer covered snake taxonomy, distinguishing venomous from nonvenomous species, debunked myths about snakes and the festival, and shared his snake rescue experiences in India, along with first aid tips for snakebites. The seminar concluded with a Q&A session



highlighting the importance of understanding cultural heritage.

TALKS ON ROLE OF PHYTOPHARMACEUTICALS



9th August 2024: The MET Institute of Pharmacy hosted alumnus Dr. Roshan Kulkarni, who shared insights into pharmaceutical science, including NMR spectroscopy and combinatorial chemistry. He highlighted the growing significance of the herbal and Ayurvedic food industry in phytopharmaceuticals and the integration of beauty products with health supplements in niche markets like nutraceuticals. Dr. Kulkarni encouraged the use of alternative remedies, such as Gulkand for cough relief, and motivated students to explore these specialized fields while addressing their queries.

SATYANARAYAN POOJA

10th August 2024: The MET Institute of Pharmacy organised the Satyanarayan Pooja like every year in the month of Shravan. The pooja aimed to express gratitude and seek blessings. The classroom where the pooja was performed was decked up with flower garlands and colorful lights. Beautiful rangolis adorned the floor. The staff and students seeked the blessing of the almighty and an aarti was performed along with our trustee, Mr. Pankaj Bhujbal. The puja followed an afternoon of singing devotional songs and bhajans and the event concluded with distribution of prasad, filling the whole floor with purity and well-being.



KHARI KAMAI



10th August 2024: The student council and IIC of MET Institute of Pharmacy hosted "Khari Kamai," an event for students to showcase their talents. Participants enjoyed food stalls, game booths and handmade crafts. Students creatively marketed their products to boost sales, and the event was well-received by peers, staff, and trustee Mr. Pankaj Bhujbal. The main goal was to raise funds for charity while providing valuable business experience, resulting in significant proceeds from their efforts.

ELOCUTION COMPETITION - THE ROLE OF INNOVATORS IN THE DEVELOPMENT OF INDIA

12th to 14th August 2024: The Innovation Council of the MET Institute of Pharmacy hosted an elocution competition on the theme "The Role of Innovators in the Development of India." Students showcased their public speaking skills in Hindi, English, and Marathi, with speeches lasting 3 to 5 minutes, judged by Ms. Sonali Naik.

Winners included:

- First prize: Ms. Nidhi Mishra (Fourth Year)
- Second prize: Mr. Pratham Shah (Fourth Year)
- Consolation Prizes: Mr. Mahesh Chavan and Mr. Vibhav Patil (Fourth Year)

The event successfully enhanced students' communication skills and passion for innovation.

INDEPENDANCE DAY



15th August 2024: The MET Institute of Pharmacy and MRV School celebrated Independence Day by hoisting our tricolour bγ our trustee Mr. Pankaj Bhuibal. He also talked about the significance of independence for our country and MRV ourselves. School students performed a band, songs, dances, and a historical skit on events. while Pharm students created a rangoli in the colors of the

Indian flag. The event showcased the collaborative spirit of students, faculty, and the Trustee, emphasizing unity, freedom, and democracy.

SEMINAR AND POSTER PRESENTATION

30th and 31st August 2024: MET IOP held a two-day national seminar titled 'Exploring Career Opportunities for Pharmacists in the Indian Government Sector.' The first day featured intercollegiate an poster competition for B. Pharm students, judged by Dr. Namita Desai, Dr. Galvina Periera, and Dr. Arundhati Abhyankar. On the second day, experts including Mr. Umesh Rathod and Mr. Nilesh Patil discussed career opportunities, providing valuable insights participants from MET IOP and other colleges.



TREE PLANTATION DRIVE (ISMAIL YUSUF COLLEGE)



1st September 2024: MET Institute of Pharmacy students joined a tree plantation initiative at Ismail Yusuf College, organized by DLLE and the Green Club, in collaboration with Soch Sayani and the Smiti Social Work Foundation. The Rotary Club of Mumbai's West Coast donated 150 saplings to support environmental preservation. The event united students, volunteers. advocates to enhance the local green landscape, fostering ecological balance and community awareness. Inspired by the advocates'

dedication, students felt a renewed commitment to environmental stewardship, making the event impactful.

NATIONAL NUTRITION WEEK-QUIZ COMPETITION



4th September 2024: The MET Institute of Pharmacy hosted a quiz on "Nutrition and the Importance of a Balanced Diet" for National Nutrition Week, celebrated from September 1-7. This initiative by the Government of India aims to raise awareness about nutrition, with the theme "Nutrition for All" supporting the UN's goal for nutritious diets. The quiz addressed topics like vitamin sources and deficiency-related health issues, enhancing students' understanding of nutrition.

Winners:

- First Prize: Ms. Fatema Kapasi, Ms. Nidhi Mishra (Fourth year)
- Second Prize: Ms. Apoorva Gajula (Second year)
- Third Prize: Ms. Gauri Chandak (Second year)
- Consolation Prize: Ms. Varsha Choudhary, Mr. Osama Shaikh (Fourth year)

TEACHER'S DAY



5th September 2025: The Student Council of MET Institute of Pharmacy celebrated Teacher's Day by surprising their educators with a specially designed cake. After regular lectures, students gathered to express their gratitude for their professors' unwavering support. The cake-cutting ceremony was lively, filled with joy and appreciation, highlighting the significant impact teachers have on their students.

TREE PLANTATION DRIVE (TITWALA)

6th September 2025: The students participated in a plantation initiative tree organized by the DLLE committee and Parayavaran Dakshata Mandal in Titwala, overseen by Ms. Vijaya Patil. Mr. Deva Jadhav introduced the organization's mission and the project's goals, emphasizing the importance tree planting amid of urbanization and climate change. Students learned



proper planting techniques and, under supervision, planted around 50 saplings. The event concluded with refreshments and a discussion where students shared their experiences.

NIRMALYA COLLECTION



9th to 12th September: In a heartfelt initiative to honor both tradition and environmental stewardship. the Green Club of MET Institute Pharmacy of (Degree) hosted a Nirmalya Collection event. The event invited students and college community to bring sacred flowers used during

the Ganpati celebrations to college. The collected flowers were not discarded but instead going to be recycled and transformed into natural fertilizer. This process ensures that each bloom continues to contribute positively to the environment, turning offerings of devotion into lasting benefits for nature.

The event exemplified how we can merge our cultural practices with ecological responsibility, demonstrating that even after the festivities, our commitment to the Earth can continue to grow.

HINDI BHASHA DIVAS



14th SEPTEMBER 2025: The Cultural Council of the MET Institute of Pharmacy hosted a poetry recitation competition for Hindi Diwas, honoring Hindi's adoption as an official language in 1949 and scholar Beohar Rajendra Simha's birth anniversary. The event highlighted Hindi's significance national unity, culture, and education, with enthusiastic participation from students and staff.

Winners:

- First prize: Ms. Nidhi Mishra (Fourth Year)

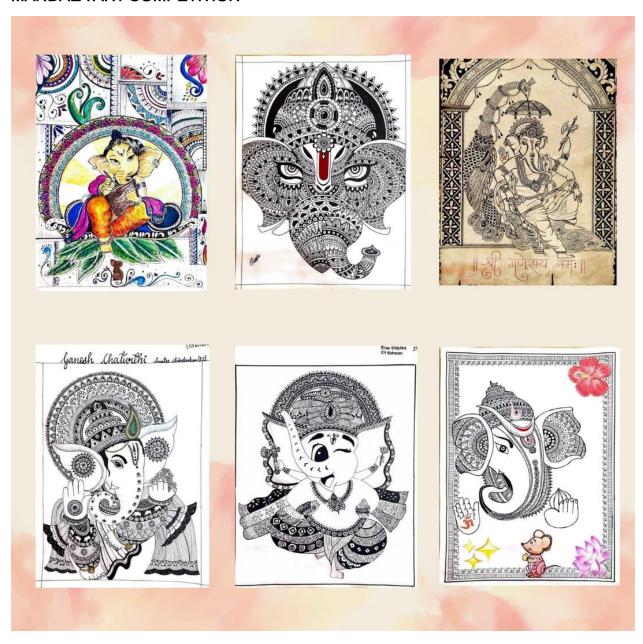
- Second prize: Ms. Sakshi Fulaware (Fourth Year)

- Consolation: Mr. Vaishnav Pawar (Third Year) - Mr. Saee Thakur (Third Year)

WORLD FIRST AID DAY

14th SEPTEMBER 2024: The council of MET Institute of Pharmacy (Degree) organized an online awareness quiz to celebrate World First Aid Day 2024. It is celebrated every year on the same day to help people learn how first aid can save lives in everyday situations. The quiz had various questions about different emergency health situations related to people's bodies. The questions included how one can treat a nose bleed, what to do when the person gets unconscious suddenly, how to stop bleeding etc. The competition was a success as it spread awareness about first aid and participants were able to clear their myths and wrong information about first aid.

MANDALA ART COMPETITION



16th September 2024: The Student Council of the MET Institute of Pharmacy held a Mandala Art Competition themed around Ganesh Chaturthi, allowing students to showcase their creativity through intricate designs inspired by Lord Ganesha. Participants from various academic years displayed vibrant colors and patterns reflecting Ganesha's qualities of wisdom, prosperity, and harmony.

Winners:

- First Prize: Ms. Apoorva Gajula (Second Year)
- Second Year: Ms. Swatee Chindarkar (Second Year)
- Third Year: Ms. Varsha Choudhary (Fourth Year)
- Consolation Prizes went to: Ms. Sakshi Fulware (Fourth Year) and Ms. Rishika Potam (Fourth Year).

The competition successfully celebrated the spirit of Ganesh Chaturthi.

MAHIM BEACH CLEANUP

18th SEPTEMBER 2024: The MET Institute of Pharmacy students participated in a beach cleanup at Mahim Beach, organized by the DLLE committee and NGO United Ways. The event featured discussions by Mr. Shubham Nikam and Ms. Shraddha Sawant on beach waste issues and safety precautions, providing masks and gloves due to domestic and sewage waste. Students then grouped to collect and sort waste. The program concluded with an interactive session where students shared their experiences, successfully raising awareness about the Ganpati Visarjan festival's impact and the importance of beach cleanliness.



CHIMBAI AND JUHU BEACH CLEANUP



21st September 2024: The MET Institute of Pharmacy students participated in a beach cleanup at Juhu Beach, organized by the DLLE committee and Project Mumbai as part of the "Jallosh Clean Coast" Shahana campaign. Siddiaui Ms. introduced the event, highlighting waste accumulation and water pollution on beaches, and provided safety gear for participants. Students were divided into groups to start the cleanup. The event with applause concluded participants, who learned about the impact

of the Ganpati Visarjan festival and the importance of beach cleanliness, marking the drive a success.

WORLD PHARMACIST DAY



23rd and 25th September 2024: The MET Institute of Pharmacy celebrated World Pharmacists Day with engaging activities. The festivities included a quiz competition and a treasure hunt on the 23rd, promoting teamwork through pharmaceutical clues. On the 25th, an elocution contest allowed students to express their views on pharmacists' vital role in healthcare. Organized by the Institute's Innovation Council, these events fostered learning, collaboration, and community spirit, inspiring participants.

DNYANESHWARI JAYANTI

23rd September 2024: The celebrations began with an address on the significance of Dnyaneshwar Javanti in Indian philosophical discourse. Final-year students actively participated, sharing insights on its literary and philosophical aspects, along with Sanskrit proverbs reflecting Indian wisdom. A highlight was the heartfelt recitation of the Vishwa Pasaydan, which resonated with the audience and emphasized India's rich heritage of knowledge and spirituality. These activities honored Dnyaneshwar Jayanti's legacy and inspired students to appreciate and uphold India's ancient wisdom.



NAVRATSOV '24



7th October 2024: The Navratsov'2024 event, organized by the MET IOP Student Council, took place at the convention hall, celebrating Garba during Navratri. Attendees showcased vibrant traditional attire, with highlights including competitions for Best Dressed and Best Dancer. Jugal Shah and Rishika Potam won for best male and female dancers. while Mr. Yohan Kotian and Ms. Jinali Faria were recognized for best costumes. The energetic atmosphere fostered community and connection. allowing participants to with engage Garba's rich cultural heritage.

AWARENESS LECTURE ON WASTE MANAGEMENT



9th October 2024: The DLLE and Green club of MET Institute of Pharmacy (Degree) and The United Ways Organization held a seminar on Waste Management for Final Year B. Pharm students. The speakers discussed the issue of waste generation in Mumbai, the importance of changing waste mind-sets, and the "4 R's" of waste management: Refuse, Reuse, Reduce, and Recycle. The session was informative and interactive, motivating participants to implement the strategies discussed.

FINANCIAL AWARENESS SEMINAR



9th October 2024: The MET Institute of Pharmacy (Degree) held a finance seminar to equip students with essential knowledge for financial independence. The seminar covered various investment options and strategies, including stocks, mutual funds, and gold bonds. The final session focused on future financial planning and the importance of starting early to build wealth. The event ended with a Q&A session, allowing students to engage with experts and gain a deeper understanding of managing their finances effectively.

LILAVATI HOSPITAL VISIT



8th and 9th October 2024: Importance of teamwork in patient care, as pharmacists collaborate closely with healthcare professionals to ensure the safe and effective use of medications. MET's dedication to offering real-world learning experiences continues to shape us into skilled professionals, ready to make the Final Year B.Pharm students at MET Institute of Pharmacy (Degree) had an enriching field visit to Lilavati Hospital on 8th and 9th October 2024, where they gained hands-on insights into the hospital's pharmacy and Central Sterile Supply Department (CSSD) and outpatient pharmacy department. This visit was more than an educational journey; it was a transformative experience that highlighted the pivotal role pharmacists play in healthcare. Exploring the intricate processes of the hospital pharmacy and CSSD brought classroom learning to life. From the vibrant color-coded labeling system to the meticulous management of emergency medications and secure handling of high-risk drugs, the responsibilities of a pharmacist became crystal clear. The experience underscored the meaningful impact on patient safety and wellness. With each visit, we are one step closer to becoming leaders in the field of pharmacy.

CGMP DAY ORAL PRESENTATION AT NMIMS

10th October 2024: The MET Institute of Pharmacy students participated in the 2nd National cGMP Day, focusing on quality in pharmaceutical manufacturing. The event included expert speaker sessions, panel discussions, and an oral presentation competition on Current Good Manufacturing Practices (cGMP). The Final-year B. Pharmacy students, Ms. Nidhi Mishra and Ms. Sakshi Fulaware, won the competition, showcasing their deep understanding of cGMP and effective audience engagement. This achievement reflects the high standards of education at MET Institute of Pharmacy.

COASTAL BIODIVERSITY AND WASTE MANAGEMENT AWARENESS SEMINAR

11th October 2024: The DLLE and Green club of MET Institute of Pharmacy hosted a seminar with United Ways, Mumbai, titled "SHORE WALK", an initiative by IHCL called Clean shores, Mumbai. The seminar focused on coastal biodiversity and waste management, addressing the impact of pollution on marine ecosystems. The consultant.



Mr. Shubham Nikam, discussed ocean pollution sources, waste segregation, and the challenge of plastic waste in recycling. He also encouraged participants to participate in beach clean-up activities to raise awareness.

DRY WASTE COLLECTION DRIVE



14th to 21st October 2024: The MET IOP's DLLE Committee and United Way, Mumbai organized a successful dry waste collection drive promoting sustainability and responsible waste management. The initiative began with a seminar on waste generation in Mumbai, waste types, and proper disposal methods. Participants were encouraged to bring or collect dry waste from their homes or campus areas and segregate it in designated bins, highlighting the importance of simple waste segregation in environmental preservation.

INNOVATION DAY

15th October 2025: The MET Institute of Pharmacy hosted a panel discussion on innovation in formulation development, honoring Dr. APJ Abdul Kalam's birth anniversary. Panelists, including Dr. Ashok Omray, Mrs. Pooja Upadhyay Banbakode, and Mr. Vinay Jain, shared their expertise. The session aimed to bridge the gap between academia and industry, encouraging students to think beyond boundaries. It covered theoretical and approaches practical to formulation processes, adherence to IPR and regulatory guidelines, lab-scale innovation, and the importance of natural sources and larger molecules.



DLLE FIRST TERM TRAINING SESSION



22nd October 2024: The DLLE committee of MET IOP held its first term training program, under the guidance of Dr. Shrima Banerjee. The event, attended by students from the second, third, and final year, began with a university song. Dr. Banerjee guided students through various activities of DLLE, helping them understand their role in uplifting society and gain future insights. The event concluded with an interactive session for students to ask questions and share opinions.

LANTERN MAKING COMPETITION

29th October 2024: The DLLE club at MET Institute of Pharmacy held a lantern-making competition focusing on sustainability and artistic talent. Participants created innovative lanterns using waste or recyclable materials. The competition was attended by many students, who displayed their creations in the college corridor and gifted some to the cleaning staff.

Winners:

- First prize: Ms. Nidhi Mishra, Ms. Sakshi Fulaware (Fourth Year)
- Second prize: Mr. Nithesh Choudhary,
 Mr. Shravan Chaudhary, Mr. Mahesh
 Chavan, Ms. Simran Keni (Fourth Year)
- Third Prize: Ms. Apoorva Gajula, Ms. Divya Kawa, Ms. Riya Kadam, Mr. Prathamesh Patil, Mr. Yohan Kotian (Second Year).



NATIONAL ENTREPRENEURSHIP DAY



9th November 2024: National Entrepreneurship Day, celebrated and honor's the entrepreneurial spirit that drives innovation, economic growth, and societal progress. The Institute's Innovation Council of MET IOP hosted an online event to celebrate entrepreneurship in the pharmaceutical sector. The session focused on the journeys of top Indian companies like Cipla, Mankind, and Nykaa, highlighting innovation, resilience, and social responsibility. The event inspired the next generation of entrepreneurs and emphasized that entrepreneurship is not just

about building businesses; it's about creating lasting solutions that impact society.

SCHOOL VISIT

10th December 2024: The DLLE committee of MET IOP successfully organized a school visit to BPES School at Bandra West to create awareness among students regarding the field of pharmacy, educating them about the scope in pharmacy. Students also delivered a poster presentation about OTC (over-the-counter Medicines), the precautions and side effects to be known of OTC drugs. Students enjoyed an interactive quiz and game round at the end of the event.



AAVISHKAR 2024-25

12th December 2024: The MET Institute of Pharmacy actively participated in the University of Mumbai's Intercollegiate Research Convention known as "Aavishkar," which was held at H.K. College of Pharmacy. This event provided a platform for various institutions to showcase their research initiatives and foster collaboration among students and faculty members. The participation of the MET Institute of Pharmacy shows its commitment to advancing pharmaceutical education and research, as well as its dedication to engaging with the broader academic community.

SHORE WALK



to appreciate marine biodiversity.

17th December 2024: The DLLE club of MET Institute of Pharmacy (B. pharm) organized a shore walk at Juhu Beach, observing and documenting various marine species. Under the guidance of Miss. Chahat Yadav and United Way Mumbai, participants learned about marine life and their survival The experience mechanisms. enhanced their understanding of the delicate balance of marine ecosystems and the importance of their preservation. It was an educational and inspiring initiative

ALUMNI SESSION

18th December 2024: Dr. Abhishek Nair, a 2014 graduate of MET, held an alumni interaction session with third-year pharmacy students. He discussed the growing importance of biostatistics, the need for analytical skills. and the importance of continuous learning. He advised students to identify their unique capabilities, prepare thoroughly for tests, and focus on self-improvement and future-proofing their careers. The concluded session with an interactive Q&A, providing



participants with insights on skill enhancement and industry readiness.

WORLD SAREE DAY



21st December 2025: The MET Institute of Pharmacy celebrated World Saree Day with great enthusiasm and participation from students. On this occasion, students showcased a diverse array of saree styles, each representing unique cultural backgrounds and traditions. The event served not only as a platform for students to express their individuality through traditional attire but also as an opportunity to honor the rich heritage associated with sarees. The vibrant colors, intricate designs, and various

draping techniques highlighted the significance of this timeless garment in different regions of India and beyond, fostering a sense of unity and appreciation for cultural diversity among the participants.

PRARAMBH: FIRST-YEAR ORIENTATION PROGRAMME

3rd January 2025: The Prarambh Orientation Programme for first-year students and parents was held at MET Institute of Pharmacy. The event was inaugurated by Principal Dr. Abha Doshi, who introduced the college, the teaching and non-teaching staff, and its commitment to excellence. Teachers introduced themselves, and students were informed about the MWM music room, indoor game facilities, canteen, modern instruments, and remedial measures. The session also highlighted the college's strict



Anti-Ragging policy and encouraged students to participate in extracurricular activities.

SPORTS MEET



6th and 7th January 2025: The MET Institute of Pharmacy held its Annual Sports Meet 2025 titled "Unleash the Champion Within." The event featured outdoor and indoor games, including box cricket, volleyball, football, dodgeball, carrom, chess, and table tennis. The meet was a mix of outdoor and indoor activities, catering to diverse interests. Participants displayed exceptional talent and determination, and the event ended with a spirit of unity and achievement, leaving unforgettable

memories of camaraderie and sportsmanship. Organized by the Sports Committee, it fulfilled its promise of creating legends and celebrating excellence.

FRESHER'S PARTY

9th January 2025: The 2nd-year students of MET Institute of Pharmacy hosted a Glam and Glitz Fresher's Party to welcome the new batch. The event was a glamorous celebration, with everyone dressed in chic outfits and decorated with gold and silver accents. The event began with a welcome speech from Principal Dr. Abha Doshi, followed by a series of icebreaker games. The highlight was the Talent Show, where freshers showcased their talents in singing, dancing, comedy, and poetry. The party ended with a live DJ and delicious refreshments.



ALUMNI INTERACTION



10th January 2025: The MET Institute of Pharmacy hosted an alumni interaction where Mr. Jaydeep Kolape, MBA, Manager of Microscopy Center, shared his professional journey and emphasized the importance of exploring global opportunities in research. Ms. Deepti Mazumdar, CEO of Halewood Laboratory, and Mr. Analesh Desai, Director of Viva Test Research and Development Pvt. Ltd., discussed entrepreneurship and their experiences in research labs. emphasized the importance of perseverance and consistency in manufacturing success. The session also provided advice on building self-confidence and resilience.

CULTURAL DAYS



14th to 18th January 2025: The Student Council of MET Institute of Pharmacy (Degree) organized cultural days, including Class Alike Day, Jersey Day, Character Day, and Traditional Day. Students dressed according to the designated themes and participated in various activities. Class Alike Day involved students wearing the same color, Jersey Day featured sports jerseys, Character Day allowed students to embody popular memes or characters, and Traditional Day was marked by enthusiastic

participation in diverse attire representing cultural traditions. The events were a success, with many students embracing the themes and contributing to the overall enjoyment.

PHOTOGRAPHY COMPETITION

19th January 2025: The Indian Pharmaceutical Association (IPA) organized a Street Photography Competition during a workshop at MET IOP Bandra. The competition aimed to inspire participants to capture the essence of street life through spontaneous moments and unique urban stories. Mr. Prathamesh Patil from MET IOP secured 2nd place for his exceptional street photography, noted for its compelling composition and narrative. Winners were awarded certificates and prizes in recognition of their dedication and talent in photography.



REPUBLIC DAY



26th January 2025: The Republic Day celebration at MET IOP began with flag hoisting, followed by Sir Pankaj Bhujbal's speech. A patriotic song and an inspiring speech uplifted spirit. The energetic performance of Dil Hai Hindustani was followed by a soulful group song, Ae Watan. A graceful classical dance captivated the audience. The speech at the end emphasized unity, concluding the program with patriotic fervor.

MET UTSAV

1st to 8th February 2025: The Mumbai Educational Trust, our college, organized the MET Utsav from February 1 to February 8, 2025. The overarching theme of the event was 'Indian Culture.'



On February 1st, a sports day event was organized, featuring traditional Indian sports such as Kabaddi. Kho-Kho. Langdi, and Lagori, alongside outdoor activities including ball badminton, rink football, shot put, and cricket. Indoor sports included chess, carrom, and Each department was badminton. designated a name inspired by Indian forts. including Shivneri, Raigad. Pratapgad, Raigad, and Sinhagad. The day commenced with a parade led by students from various departments, followed by the inauguration of MET Utsav. A series of games were

conducted for each sport, culminating in a prize distribution ceremony at the day's end.

Additionally, the day marked the commencement of a creative exhibition, where students showcased their artistic talents through various artworks and photographs.

On February 3rd, we organized a diverse competitions, range of including the Squid Game, Heritage Hunt, Nukkad Natak, Lupt Rasoi, and reel-making, all of which adhered to a central theme that celebrated our Indian culture, encompassing both its rich history and mythology. The events featured topics and questions that reflected our cultural heritage, and the winners were declared on the same day, with a ceremony held to honor their achievements and recognize their talents.





On February 4th, we organized a Talent Show that provided students with a unique platform to showcase their skills and hidden talents. The event featured a diverse range of performances, including melodic songs, instrumental performances, and stand-up acts, all of which were thoroughly enjoyed by the Furthermore, audience. several exceptional performers were selected to participate in the grand finale of MET Utsav.

On February 5th, a Jatra was held with the theme of Traditional Attire, commencing with a bike rally known as Shobha Yatra. Following this, a traditional dance called 'Bohada' was performed which is a traditional dance of tribal groups. Subsequently, various cultural stalls were established, with each department assigned to represent a specific state, including Maharashtra, Rajasthan, Gujarat, and Punjab, showcasing traditional food and games. Street performances were also conducted by different departments to highlight their respective cultures. Additionally, center stage shows featuring magic, juggling, and puppet performances were organized. A variety of fun activities, such as a Laughing Mirror, BioScope, Tarrot Reading, Photo Booth, Bullock Cart rides, a Wishing Well, and a Ferris wheel, were also made available for attendees.

On February 6th, a diverse range of workshops were conducted, including Swad ki Virasat, Nadi Pragamana, Drishvakala. Nritva Utsav Abhinav Kala, Warli Chitrakala, Maharashtratil Sanskrutik Yuddh Kala, Mitti ka Jadoo, Naad Anubhuti, Dhyan aur Satarkta Satra, Shringar Prath, and Vrukshavalli Aamha Soyari, which organized various were by departments. To provide participants with expert guidance, professional specialists in their respective fields were invited to lead these workshops, offering participants the opportunity to learn about diverse art forms.





On February 8th, the grand finale of MET Utsav took place, characterized immense enthusiasm enjoyment. The event commenced with an Invocation song, followed by a series of performances including a band, stand-up acts, and various dance presentations that featured traditional, Mahakali, and technical styles, along with vocal performances. Additionally, an award ceremony was held, during which the MET Ratna, Gaurav, and Vikram trophies were presented. The event also saw the presence of several special celebrities who made appearances throughout the

proceedings. The finale concluded with a fashion show themed around Indian mythology, complemented by Bollywood dance performances. This day marked the conclusion of MET Utsav 2025, a success attributed to the active participation of students and the dedicated efforts of our staff.

ACCOLADES AT VALORANT



2nd February 2025: The Valorant team from MET IOP (degree), comprising Mr. Calvin Nazareth (Leader), Mr. Om Durgavle, Mr. Vedant Patil, Mr. Vedant Raorane, Mr. Surjo Hazra, and Mr. Huzaifa Lokhandwal, participated in the tournament hosted by IPAMSB-SF. Despite the intense competition, the team, displayed remarkable skill and teamwork, securing a commendable second-place finish. Their dedication and performance were truly impressive.

CIIA

5th to 7 February 2025: The event commenced at Nehru Science Centre. On February 5 with the inauguration of the exhibition, promoting CIIA's mission to encourage youth in research. A book by the CIIA Chairman was released, followed by a ribbon-cutting and diya-lighting ceremony.

February 6 was dedicated to the exhibition, showcasing scientific innovations.

On February 7, Dr. Anuradha Majumdar anchored the award ceremony, along with Sir Prince Grover. The event featured the national anthem, diya lighting, Ganesha and Saraswati Vandana, and a dance anthem. Dr. A.P. Rajraman, President of CIIA,



delivered a speech, followed by a cultural dance. Chief Guest Dr. Anil Gupta gave an inspiring speech before the award distribution concluded the event.

ALUMNI INTERACTION

10th February 2025: The MET Institute of Pharmacy hosted an alumni interaction where Mr. Jaydeep Kolape, MBA, Manager of Microscopy center, shared his professional journey and emphasized the importance of exploring global opportunities in research. Ms. Deepti Mazumdar, CEO of Halewood Laboratory, and Mr. Analesh Desai, Director of Viva Test Research and Development Pvt. Ltd., discussed entrepreneurship and their experiences in research labs. They emphasized the importance of perseverance and consistency in manufacturing success. The session also



provided advice on building self-confidence and resilience.

WORKSHOP ON INDUSTRY READINESS



24th and 25th February: The MET Institute of Pharmacy (Degree) conducted a twoday workshop on "Industry Readiness" for Final-year B. Pharmacy students. The workshop, led by Plat Pharm Skilling & Careers LLP, covered commercial and government roles in healthcare, emerging career opportunities, and higher education programs. Students also learned about resume-building techniques and selection screening tools. The hands-on approach included mock Group Discussions Interviews simulating real-

world hiring scenarios. The workshop aimed to enhance students' professional preparedness and confidence for the pharmaceutical industry.

SEMINAR ON CYBER CRIME, WOMEN SAFETY AND ANTIRAGGING

27th February 2025: A seminar on Cyber Crime, Women Safety, and Anti-Ragging was held in collaboration with Mumbai Police at MET Institute of Pharmacy. The event featured distinguished guests, including Assistant Police Inspectors, Police Inspectors, and Women Cell Sub-Inspectors. The officers discussed real-life cases of cybercrime, advised students to avoid posting personal updates on social media, and discussed online transaction safety and bank fraud awareness. They provided a cyber-helpline number for assistance.



MARATHI DIVAS



27th February 2025: The Marathi Divas celebration at MET Institute of Pharmacy began with introduction to the significance of the day. This was followed by an engaging crossword puzzle testing participants' knowledge of Marathi language and culture. A final-year student delivered an inspiring speech on the richness of Marathi literature. The cultural program featured soulful songs, a heartfelt poem, and a special song dedicated to the final-year students. The highlight was a captivating Garana performance in Konkani by Ms.

Sakshi Fulaware. The event concluded with a mesmerizing rendition of "Pasaydan" by Mr. Sudhir Sir and fourth year students.

ART & PHOTOGRAPHY COMPETITION FOR CLEAN SHORES INDIA, IHCL

1st March 2025: Students from the MET Institute of Pharmacy participated in a competition at Maharashtra Nature Park in Dharavi, organized by United Way Mumbai for Clean Shores India sponsored by IHCL. The Committee offered an educational experience focused on various plant species, including medicinal herbs like Bryophyllum and Neer Brahmi, as well as toxic plants such as the Fish Poison Tree. The event featured an intercollege competition for model-making and photography, where MET students excelled, securing second place in both categories. Fourth-vear students Savi Munde, Khan Mohd Monishuddin, and Varsha Choudhary won second prize in model-making, while second-year students Prathamesh Patil and Karan Choudhary achieved the same in photography. The judges praised the students for their creativity and talent.



ACCOLADES AT PRATYUSH 2025

5th MARCH 2025: The MET IOP (degree) participated in Pratyush 2025, the annual festival of IES MCRC, Bandra, featured exciting competitions like Carrom, Table Tennis, and Brand Charades, guess the logo and acronym competition.

In Carrom, Mr. Aniket and Mr. Affan from MET Institute of Pharmacy won the doubles title. The second-year MET IOP team secured 2nd place in Brand Charades, earning a ₹500 cash prize, while third-year students Mr. Vaishnav and Mr. Junaid took 3rd place.

Mr. Karan Chaudhari, a second-year student secured 3rd place in Table Tennis.

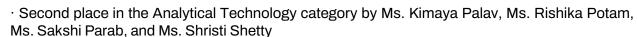
Mr. Huzaifa Lokhandwala and Mr. Prathamesh Patil showcased exceptional skills, securing 1st place in the Guess the Logo and The Acronym competitions through their outstanding memory, observation, and analytical abilities.

The event fostered teamwork, creativity, and competitive spirit, making it a memorable success.

MAJOR WINS AT RX 2025

8th and 9th March 2025: The MET Institute of Pharmacy represented our college at the Rx Utsav event held at the Bombay College of Pharmacy on February 8th and 9th, 2025. Our students participated in a wide range of competitions, including Dance, Fashion Show, Poster Presentation, Pharm Layout, Table Tennis, Carrom, Chess, Mehendi, Meme Mastic, Trash to Treasure, Buzzword, Rangoli, Show Bizz, and Convince Me. We achieved notable success, securing

- · First place in the Dance competition
- · Second place in the Fashion Show, with Mr. Pranav Thakur awarded the Best Walk title
- · Third place in Table Tennis Doubles, with the efforts of Mr. Siddhesh Wadkar and Mr. Karan Chaudhari
- · Third place in the Technical category
- First place in the Poster Presentation on Pharmacoeconomics by Mr. Dharmendra Purohit and Ms. Khatija Khan





- · First place in Pharm Layout through the efforts of Ms. Priyanka Singh and Ms. Janali Faria
- · Second place in the Oral Paper Presentation in the Pharmaceutical Sciences and Technology category by Ms. Nidhi Mishra and Ms. Priyanka Singh
- · First place in the Pharmacy Practice and Regulatory Affairs category by Ms. Kimaya Palav, Ms. Shrishti Shetty, Ms. Rishika Potam and Ms. Sakshi Parab

· First place in the Natural Products and Pharmaceutical Quality category by Mr. Dharmendra Purohit and Ms. Khatija Khan

Additionally, our student Ms. Nidhi Mishra was awarded the Student of the Year. The overall success at the Rx 2025 is a testament to the dedication and hard work of all our participating students and the support of our college council.

Faculty members, Dr. Bhagyashri Joshi, Mrs. Sunanda Patil and Ms. Vrushali Keer provided their expertise as judges for the scientific presentations and technical segment.





CAMPUS WINNERS

FIRST YEAR

SEMESTER I

SR NO.	SUBJECT	NAME OF THE STUDENT
1	Human Anatomy and Physiology l–Theory	Gauri Chandak
2	Pharmaceutical Analysis I – Theory	Apoorva Gajula
3	Pharmaceutics I – Theory	Shaina Puthran
4	Pharmaceutical Inorganic Chemistry –Theory	Gauri Chandak
5	Communication skills – Theory	Kimaya Bondre
6	Remedial Mathematics – Theory	Shrushti Chougule
		Krishna Fatak
7	Human Anatomy and Physiology –Practical	Aditi Kambli
8	Pharmaceutical Analysis I – Practical	Apoorva Gajula
9	Pharmaceutics I – Practical	Shaina Puthran
10	Pharmaceutical Inorganic Chemistry –Practical	Shaina Puthran
11	Communication skills – Practical*	Yohan Kotian
		Divya kawa
		Atharva Khapare

SEMESTER II

SR NO.	SUBJECT	NAME OF THE STUDENT
1	Human Anatomy and Physiology II – Theory	Nyssa Falcao
2	Pharmaceutical Organic Chemistry I – Theory	Krishna Fatak
3	Biochemistry – Theory	Nyssa Falcao
		Krishna Fatak
4	Pathophysiology – Theory	Nyssa Falcao
5	Computer Applications in Pharmacy – Theory	Sakshi Dandge
6	Environmental sciences – Theory	Huzaifa Lokhandwala
7	Human Anatomy and Physiology II –Practical	Divya Kawa
8	Pharmaceutical Organic Chemistry I– Practical	Shaina Puthran
9	Biochemistry – Practical	Shaina Puthran
10	Computer Applications in Pharmacy – Practical	Apoorva Gajula

FIRST YEAR TOPPER

Overall Topper	Shaina Puthran	8.61
	Krishna Fatak	8.58
	Nyssa Falcao	8.5

SECOND YEAR

SEMESTER III

SR NO.	SUBJECT	NAME OF THE STUDENT
1	Pharmaceutical Organic Chemistry II – Theory	Sahil Gurav
		Kunal Jadhav
2	Physical Pharmaceutics I – Theory	Chinmayi Kshirsagar
		Saee Thakur
3	Pharmaceutical Microbiology – Theory	Chinmayi Kshirsagar
4	Pharmaceutical Engineering – Theory	Chinmayi Kshirsagar
5	Pharmaceutical Organic Chemistry II – Practical	Himanchali Chaubey
6	Physical Pharmaceutics I – Practical	Manisha Chaudhary
		Khushi Kanujia
		Vaishnav Pawar
7	Pharmaceutical Microbiology – Practical	Zulkif Khan
8	Pharmaceutical Engineering –Practical	Aaditya Sankpal

SEMESTER IV

SR NO.	SUBJECT	NAME OF THE STUDENT
1	Pharmaceutical Organic Chemistry III- Theory	Chinmayi Kshirsagar
2	Medicinal Chemistry I – Theory	Chinmayi Kshirsagar
3	Physical Pharmaceutics II – Theory	Chinmayi Kshirsagar
4	Pharmacology I – Theory	Chinmayi Kshirsagar
5	Pharmacognosy and Phytochemistry I– Theory	Chinmayi Kshirsagar
6	Medicinal Chemistry I – Practical	Chinmayi Kshirsagar
7	Physical Pharmaceutics II – Practical	
8	Pharmacology I – Practical	
9	Pharmacognosy and Phytochemistry I – Practical	

SECOND YEAR TOPPER

Overall Topper	Chinmayi Kshirsagar	9.57
	Manasi Parkar	8.77
	Himanchali Chaubey	8.75

THIRD YEAR

SEMESTER V

SR NO.	SUBJECT	NAME OF THE STUDENT	
1	Medicinal Chemistry II – Theory	Fatema Kapasi	
		Priyanka Singh	
2	Industrial Pharmacy I– Theory	Priyanka Singh	
3	Pharmacology II – Theory	Pratham Shah	
4	Pharmacognosy and Phytochemistry II- Theory	Priyanka Singh	
5	Pharmaceutical Jurisprudence – Theory	Kimaya Palav	
6	Industrial Pharmacy I – Practical	Priyanka Singh	
7	Pharmacology II – Practical	Varsha Chaudhary	
		Jinali Faria	
		Fatema Kapasi	
8	Pharmacognosy and Phytochemistry II –Practical	Varsha Chaudhary	

SEMESTER V

SR NO.	SUBJECT	NAME OF THE STUDENT
1	Medicinal Chemistry III – Theory	Pratham Shah
2	Pharmacology III – Theory	Nitesh Choudhary
3	Herbal Drug Technology – Theory	Nitesh Choudhary
		Jinali Faria
		Khatija Khan
		Priyanka Singh
4	Biopharmaceutics and Pharmacokinetics – Theory	Jinali Faria
5	Pharmaceutical Biotechnology – Theory	Nitesh Choudhary
6	Quality Assurance –Theory	Pratham shah
7	Medicinal chemistry III – Practical	Varsha Chaudhary
8	Pharmacology III – Practical	Varsha Chaudhary
		Fatema Kapasi
9	Herbal Drug Technology – Practical	Varsha Chaudhary
		Pratham shah

THIRD YEAR TOPPER

Overall Topper	Nitesh Choudhary	9.175
	Priyanka Singh	9.105
	Pratham Shah	9.095

FOURTH YEAR

SEMESTER VII

SR NO.	SUBJECT	NAME OF THE STUDENT
1	Instrumental Methods of Analysis – Theory	Sakshi Prabhu
		Vedika Pimpte
2	Industrial Pharmacy II – Theory	Smruti Chavan
3	Pharmacy Practice – Theory	Preeti Kothare
4	Novel Drug Delivery System – Theory	Swati Baheti
5	Instrumental Methods of Analysis –Practical	Avijeet Baksi
		Pratham Mahato
		Atharva Mandhare
6	Practice School	Kashmira Chaudhari

SEMESTER VIII

SR NO.	SUBJECT	NAME OF THE STUDENT
1	Biostatistics and Research Methodology	Krushika Soni
2	Social and Preventive Pharmacy	Dhanashree Ghogdake
3	Pharma Marketing Management	Swati Baheti
4	Pharmaceutical Regulatory Science	Kashmira Chaudhari
5	Cosmetic Science	Ansari Yasir
6	Project Work	Krushika Soni
		Dhanashree Ghogdake
		Pratham Mahato
		Sharvani Pednekar

FOURTH YEAR TOPPER

Overall Topper	Kashmira Chaudhari	8.52
	Azhar Dhanani	8.49
	Smruti Chavan	8.44
	Sharvani Pednekar	8.44

AAVISHKAR 2024-25

CATEGORY: MEDICINE AND PHARMACY

Sr No	Mentor	Student Participants	Project Name	
1	Dr. Abha Doshi	More Akshata Siddanath Naringrekar Sanika Charudutta Panjwani Pratham Sameer Pathak Aniruddha Sanjay Patil Hrishikesh Ashok	Formulation of Anti- inflammatory emulgel from Kalonji	
2	Dr. Rashmi Srivastava	Attarwala Nashita Murtuza Choudhary Varsha Gulabram Potam Rishika Ravi Shetty Khushi Uday Shetty Shristi Shekar	RegenBone : A Natural Path to Bone Healing	
3	Dr. Bhagyashri Ajit Joshi	Khan Sehar Sameer Kumbhar Vaishnavi Rajaram Parab Sakshi Pramod Rawther Abinisha Syedabibullah	Herbo-Syn Patch: A new Frontier in Visionary Healing.	
4	Dr. Poonam Advani	Choudhary Fatima Samirullah Choudhary Shravan Hemant Faria Jinali Ashwin Katre Rasika Sanjay Shah Annikshaa Siddharth	MetHEAL: Wound Healing Patch	
5	Ms. Sheeja Koliyote	Bawani Izhan Altaf Kapasi Fatema Mohamed Kondi Shravani Umesh Singh Priyanka	Healsoothe: Nature's aid for wound healing	
6	Ms. Vrushali Keer	Chavan Mahesh Rajendra Gangan Rhutuja Sandeep Jadhav Aryan Santosh Khan Khatija Khatoon Shaikh Shifa Salim	Novel Formulation and Evaluation of Antiseptic spray	
7	Dr. Bandoo Chatale	Fulaware Sakshi Sanjay Ranjol Mohd Waseel Abdul Hameed Shah Pratham Nilesh Tandale Vinod Dnyandeo	Formulation and evaluation of a topical film forming spray for arthritis containing Flurbiprofen and Vitex negundo leaf extract	
8	Mrs. Sunanda Patil	Kore Tanisha Ninad Surve Shalvee Surendra Wadkar Siddhesh Vilas Yadav Aarti	Novel formulations for treatment of eye diseases and disorders	

CATEGORY: HUMANITIES, LANGUAGES AND FINE ARTS

Sr No	Mentor	Student Participants	Project Name
1	Ms. Priyanka Joshi	Gawde Samiksha Praful	Formulation and Evaluation
		Mashilkar Amisha Arun	of Herbal Handwash Tablets
		Patade Vinita Rajesh	
		Patil Rutika Yallappa	
		Sayyed Mohd Affan	
2	Ms. Priyanka Joshi	Gangan Sanika Manoj	Angular Cheilitis Herbal
		Singh Shrishti Pradeep	Cream
		Bagul Darshika Raju	
		Puthran Shaina Sudhir	
3	Dr. Sindhu Menon	Bari Chanchal Yogendra	Wholesome Wellness:
		Birare Krushna Ganesh	Multivitamin Gummies for
		Munde Savi Satyajit	Balanced Child Development
		Sawant Karan Haresh	
4	Ms. Manjiri Shinde	Bele Rohit Vijay	BeetRich Bites: Herbal
		Modkharkar Pradnyesh Prashant	Gummies for Anemia
		Pisat Aryan Suresh	
		Sawant Pratham Purushottam	
		Shah Yesha Hitesh	
5	Dr. Bandoo Chatale	Thakur Saee Ganesh	GlucoTrace- effortlessly
		Dalvi Advika Abhijit	monitor glucose level
		Sule Akshata Dadasaheb	
6	Dr. Rashmi Srivastava,	Nazareth Calvin Vivian	Nature Cures Nature:
	Mrs. Sunanda Patil	Chikhale Shreya Ashish	Aromatic Wonders
		Narkhede Kartik Chandrahasya	
		Bandekar Tanvi Rajendra	

CATEGORY: PURE SCIENCES

Sr No	Mentor	Student Participants	Project Name	
1	Dr. Rashmi	Sankpal Aaditya Narendra	Contra-Psorex, Novel	
	Srivastava, Mrs.	Patwa Riya Ayodhyaprasad	formulation for treatment	
	Sunanda Patil	Pawar Vaishnav Pravin	of Psoriasis vulgaris	
		Patil Vedant Ajay		
		Rajput Kshitija Ranjitsingh		
2	Dr. Rashmi	Modi Anshita Kamlesh	Varico-H - Novel	
	Srivastava, Mrs.	Kanujia Khushi Ravindra	Formulation for the	
	Sunanda Patil	Naik Junaid Imran	Treatment of Varicose	
		Shaikh Mohammed farhan	Veins	
3	Ms. Priyanka Joshi	Suthar Varsha Chhaganlal	Topical dosage Form for	
		Shitkar Asmita Laxman	Treating Onychomycosis	
		Choudhary Manisha Ramaram		
4	Dr. Vijaya Patil	Barela Neha Mahendra	UroWellness: Pioneering	
		Chauhan Yatish Prashant	patch technology for UTI	
		Palav Kimaya Hemant		
		Rai Shivam Upendra		
		Wadkar Vaishnavi Arun		

CATEGORY: AGRICULTURE AND ANIMAL HUSBANDRY

Sr No	Mentor	Student Participants	Project Name
1	Dr. Sonali Naik	Keni Simran Dhondiram Khan Mohd monishuddin Moinuddin Khamkar Aniket Anant Khatik Rabiya Bee Akhlaque Ahmed Bodke Shlok Santosh	Soluble Aqualac Inserts
2	Ms. Aushima Dasari	Mishra Nidhi Suryaprakash Biradar Harish Maroti Choudhary Nitesh Gupta Dhiraj Jain Pratham Sudhindra	Brahmidin: The Herbal Shield for wounded Dogs
3	Dr. Madhura Vaidhya	Mulla Saniya Phadatare Vibhav Santosh Purohit Dharmendra Fateh Singh Rane Tanishqa Narendra Shaikh Mohammed Osama	Ecoflex Bandage
4	Dr. Vijaya Patil and Mrs. Sunanda Patil	Kshirsagar Chinmayi Vishal Gurav Sahil Sanjay	CORULCERX: An novel opthalmic formulation for treating corneal ulcer

ZONAL WINNER GROUPS

No of project Participated	22
Number of Zonal Winner group	02
Name of Mentors	Dr. Rashmi Srivastava and Dr. Bhagyashri Joshi
Category	Medicine and Pharmacy
Name of Participated students	Gr. 1- 1. Rishika Potam, 2. Shristi Shetty, 3. Nashita Attarwala, 4. Varsha Choudhary, 5. Khushi Shetty. Gr.2- 1. Khan Sehar, 2. Rawther Abinisha, 3. Kumbhar Vaishnavi, 4. Parab Sakshi, 5. Kadam Pallari.

CIIA 2024-25

STUDENTS	MENTORS	TOPIC
 Mohd.Farhan Shaikh Zulkif Khan Junaid Naik Khushi Kanujia Anshita Modi 	Mrs. Sunanda Patil Dr. Rashmi Srivastava	Varico-H: Novel Formulation for treatment of Varicose Veins
 Sakshi Parab Vaishnavi Rajaram Seher Khan Pallari Kadam 	Dr. Bhagayshri Joshi	NAFACIP: A Revolutionary Strategy for Mitigation Formulation
 Kimaya Palav Yatish Chauhan Shivam Rai Vaishnavi Wadkar 	Dr. Vijaya Patil	Urorelief transdermal patch

PUBLICATIONS

- 1. Sakshi Shetty, **Sonali Naik**, Likhitha Suvarna, Mexican Mint (Coleus amboinicus) Emlgel: Natural Solution for Antidandruff Hair care, Journal of Pharmaceutical Research, 2024, 23 (3), 164-173. (DOI: 10.18579/jopcr/v23.3.79).
- 2. **Sunanda Patil**, Gayatri Sawale , Santosh Ghuge, Sadhana Sathaye, Graefes Arch Clin Exp Ophthalmol., 2025, 263(2), 269-278. (doi: 10.1007/s00417-024-06587-7)
- 3. Tendulkar M. R., Gadgoli Chaya, **Patil Sunanda**, Bhadange S, Evaluation of Wound Healing Potential of *Zizyphus jujuba* in Rats, International Journal of Drug Delivery Technology, 2024, 14(4), 2387-2394. (DOI: 10.25258/ijddt.14.4.60)
- 4. **Vijaya Patil**, Yatish Chauhan, Rohit Bele and Mahesh Chavan, Immunotherapeutic Monoclonal Antibodies: A Groundbreaking Targeted Therapy For Oral Cancer, World Journal of Pharmacy and Pharmaceutical Sciences, 2024, 13(2), 194-216. (DOI: 10.20959/wjpps202412-286380)
- 5. **Bandoo C Chatale**, Ankita Panda, Smruti Chavan, Akshata Patne, Tanvi Kurhekar and Sarth Mistry, Advancement in HIV Treatment: A Comprehensive Review of Therapeutic Strategies and Emerging Innovations, Acta Scientific Microbiology, 2024, 7(11), 38-61.
- 6. Nidhi Mishra, Comparative efficacy of Curcuma longa, Azadirachta indica, and Centella asiatica in Canine Wound Healing, Indian Journal of Veterinary Public Health, 2024, 10(2), 32-40. (DOI: https://doi.org/10.62418/ijvph.10.2.2024.32-40)
- 7. Saluja, R.S., **Vaidya, Madhura P.**, Kharkar, P.S., PROTACs: Principles and Mechanisms. In: Nandave, M., Jain, P. (eds) PROTAC-Mediated Protein Degradation: A Paradigm Shift in Cancer Therapeutics. Springer, Singapore, (2024) (DOI: https://doi.org/10.1007/978-981-97-5077-1_2

PRESENTATIONS

Ms. Priyanka Joshi Jain presented research paper titled "Formulation of a Transdermal System
as an alternative for reducing oral dose frequency" at 23rd International Symposium on
Advances in Technology and Business Potential of New Drug Delivery Systems, Controlled
Release Society - Indian Chapter, 27-28 February 2025

PATENT

Sr. No.	Faculty (Initials)	Title	* Date of the Publication	Inventors
1	I I)r ∆hha I)∩shi	Mucoadhesive buccal films for mouth ulcer	22nd March 2025	Abha Doshi, Vedika Pimple, Avijeet Bakshi

DR. SINDHU MENON ACHIEVEMENT.

MET Institute of Pharmacy (Degree), takes immense pride in announcing that **Dr. Sindhu Menon** has successfully completed her Ph.D. in Pharmacy (Science and Technology) in Pharmaceutical Analysis from C. U. Shah College of Pharmacy, SNDT Women's University, under the esteemed guidance of Prof. Dr. Pratima Tatke.

Her research on "Development and validation of analytical methods for simultaneous estimation of



phytomarkers in polyherbal formulations" focuses on enhancing the quality of herbal medicines through advanced HPLC and HPTLC standardization techniques. This achievement underscores her dedication to academic excellence and research, further strengthening MET's commitment to high-quality education.

We congratulate Dr. Sindhu Menon on this remarkable milestone and look forward to her continued contributions in shaping future pharmaceutical professionals!

CULTURAL COMPETITIONS

NAME OF THE EVENT	Prize		Name of the student	Year
Brain quiz		1	Apoorva Gajula	Second
		2	Yash Parmar	Second
		3	Rhutuja Gangan	Fourth
E-poster - blood donation		1	Varsha Choudhary	Fourth
		2	Prathamesh Patil	Second
		3	Sanika Naringreker	Fourth
		3	Varad Bhavsar	Third
	Consolation		Neha Barela	Fourth
Elocution competition		1	Nidhi Mishra	Fourth
		2	Pratham Shah	Fourth
	Consolation		Mahesh Chavan	Fourth
	Consolation		Vibhav Patil	Second
Poster Competition		1	Gauri Chandak	Second
		1	Swatee Chindarkar	Second
		2	Kartik Narkhede	Third
		2	Aditi Nijapkar	Third
		3	Anshita Modi	Third
		3	Junaid Naik	Third
Nutrition quiz			Fatema Kapasi	Fourth
		1	Nidhi Mishra	Fourth
		2	Apoorva Gajula	Second
		3	Gauri Chandak	Second
	Consolation		Varsha Chaudhary	Fourth
	Consolation		Osama Shaikh	Fourth
Poster presentation		1	Nitesh Choudhary	Fourth
			Dhiraj Gupta	Fourth

			Pratham Jain	Fourth
			Nidhi Mishra	Fourth
			Harish Biradar	Fourth
		2	Aarti Yadav	Fourth
			Shalvee Surve	Fourth
			Tanisha Kore	Fourth
			Siddhesh Wadkar	Fourth
		3	Kimaya Palav	Fourth
			Shivam Rai	Fourth
			Neha Barela	Fourth
			Vaishnavi Wadkar	Fourth
			Satish Chauhan	Fourth
Hindi Bhasha Divas		1	Nidhi Mishra	Fourth
			Sakshi Fulaware	Fourth
	Consolation	_	Vaishnav Pawar	Third
			Saee Thakur	Third
Mandala art		1	Apoorva Gajula	Second
		2	Swatee chindarkar	Second
		3	Varsha Chaudhary	Second
	Consolation		Sakshi Fulware	Fourth
	Consolation		Rishika Potam	Fourth
Navratsov' 24	Best Dancer		Jugal Shah	Fourth
	Best Dancer		Rishika Potam	Fourth
	Best Dressed		Yohan Kotian	Second
	Best Dressed		Jinali Faria	Fourth
	best Dressed		Jiliali Faria	Fourtii
Lantern making		1	Nidhi Mishra	Fourth
			Sakshi Fulaware	Fourth
		2	Nithesh Choudhary	Fourth
			Shravan Chaudhary	Fourth
			Mahesh Chavan	Fourth

	Simran keni	Fourth
3	Apoorva Gajula	Second
	Divya Kawa	Second
	Riya Kadam	Second
	Parthmesh Patil	Second
	Yohan Kotian	Second

SPORTS CERTIFICATES

On January 6th and 7th, 2025, the MET Institute of Pharmacy hosted its electrifying Annual Sports Meet 2025 at the college turf area, themed "Unleash the Champion Within." The event featured a range of exciting games, including box cricket, volleyball, and football for boys, and dodgeball for girls. Indoor games such as carrom, chess, and table tennis provided a platform for showcasing strategic skills.

The meet saw fierce yet friendly competition as participants displayed exceptional talent and determination. Enthusiastic spectators cheered on their peers, creating a lively and supportive atmosphere. The mix of outdoor and indoor events catered to diverse interests, ensuring everyone had a chance to participate and enjoy.

The event concluded with a spirit of unity and achievement, leaving behind unforgettable memories of camaraderie and sportsmanship. Organized by the Sports Committee, it truly delivered on its promise of creating legends and celebrating excellence.

Name of the Sport	Prize	Name of the participant	Year
Chess	1	Rishi Gupta	Third
	2	Aryan Pisat	Fourth
	3	Aniket Khamkar	Fourth
Table Tennis (Girls)	1	Sharvari Kulkarni	Second
	3	Shalvee Surve	Fourth
Table Tennis (Boys)	1	Shravan Chaudhary	Fourth
		Dhiraj Gupta	Fourth
	2	Pratham Shah	Fourth
		Aryan Jadhav	Fourth
	3	Karan Chaudhari	Second
		Tanush Jain	Second
Carrom	1	Tanishqa Rane	Fourth
		Amisha Mashilkar	Fourth
	2	Mayank	First
		Vinayak Shukla	First

Cricket (boys)	1	1.Khan Mohd Monishuddin 2.Hrishikesh Ashok Patil 3.Sayyed Affan 4.Nitesh Choudhary 5.Siddhesh Vilas Wadkar 6.Mohammed Waseel 7. Karan Haresh Sawant 8.Shlok Bodke 9.Aniket Khamkar	Fourth
	3	1.Atharva Khapare 2.Saad Shaikh 3.Karan Chaudhari 4.Dishant Mali 5.Malkirat Singh Aurora 6.Pranav Thakur 7.Bhagesh Keny 8.Prem Mengaji 9.Tanush Jain 10. Sujal Bramhecha	Second
Cricket (Girls)	2	 Shalvee Surve Sanika Naringrekar Annikshaa Shah Saniya Anis Mulla Neha Barela Jinali Faria Chanchal Bari Tanisha Kore 	Fourth
	3	 Mandira Naik Khushi Kanaujia Sayali Sanjay Joshi Bhagyashree Palaskar Riya Patwa Sakshi Singh Varsha Suthar Saloni panigraghy Trisha Savla Stuti Singh 	Third

Dodgeball	1	 Sakshi Singh Advika Dalvi Ojasvi Bansode Riya Patwa Maya Ashok Kolekar Saloni Panigrahy Mandira Naik Sayali Joshi 	Third
	3	 1.Archita Save 2.Sanika Sawant 3. Swatee Sandeep Chindarkar 4. Naitri Sheta 5. Gauri chandak 6. Varuni Parmar 7. Pradnya Ghanshyam Borji 	Second
Volleyball	1	1.Nitesh Choudhary2.Vinod Tandale3.Pratham Jain4. Hrishikesh Ashok Patil5.Rohit Bele6.Dhiraj Gupta7. Aryan Jadhav	Fourth
	2	1.Karan Chaudhari 2.Vedant Raorane 3.Atharva Khapare 4.Dishant Mali 5.Huzaifa Lokhandwala 6.Kaif Qureshi 7.Rahul Bhangade 8.Prathamesh Patil	Second
	3	1.Omkar Singh 2.Rahul Channa 3.Heymish Shirsekar 4.Tarun Patil 5.Vibhav Pure 6.Sahil Gurav 7. Mansoori Mohammed Suhail	Third

Football	1	1.Bhagesh Keny2.Malkirat Singh Aurora3.Saad Shaikh4.Vedant Raorane5.Yohan Kotian6.Rahul Bhangade7.Prathmesh Patil	Second
	2	1.Shivam Rai2.Shravan Choudhary3.Dhiraj Gupta4.Pratham Sawant5. Karan Haresh Sawant6. Aniruddha Pathak	Fourth
	3	1.Atharva Padwal 2.Vinayak Shukla 3.Sahil Borana 4.Soham Rampurkar 5.Surjo Hazra 6.Raj Rasal 7. Sudesh Rajput	First

DLLE

The **Department of Lifelong Learning and Extension (DLLE)**, University of Mumbai, was established in 1978 with the aim of promoting a culture of lifelong learning among students and the community. Rooted in the belief that education should extend beyond traditional classrooms, DLLE serves as a vital link between the university and society, encouraging students to actively participate in meaningful community engagement. Students at MET enroll under this and actively take part in the events organized by the college.

DATE	EVENT
22/07/24	World brain day quiz
30/07/24	Blood donation poster competition
03/08/24	Climate change and water management poster competition
05/08/24	Blood donation awareness webinar
07/08/24	Blood donation awareness presentation
09/08/24	Nag Panchami webinar
10/08/24	Khari Kamai
13/08/24	Blood donation drive
15/08/24	Independence Day celebration
30/08/24-	Seminar for career opportunities
31/08/24	
01/09/24	Bhavan's college plantation drive
04/09/24	Nutrition quiz
06/09/24	Tree plantation drive
16/09/24	Mandela art competition
18/09/24	Mahim beach cleanup
20/09/24	Nirmalya collection
21/09/24	Juhu beach cleanup

16/09/24- 21/09/24	Daan Utsav
18/09/24- 22/09/24	E waste collection drive
23/09/24	Pharmacy Day celebration
23/09/24	Climate change awareness (BMC school)
30/09/24	Nutrition month seminar
11/10/24	Shore walk seminar
22/10/24	1 st Term training program
29/10/24	Lantern making competition
09/11/24	IIC webinar
10/12/24	School visit (B.P.E high school)
17/12/24	Juhu shore walk
15/01/25	2 nd term training program
18/01/25	Bandra beach cleanup
18/01/25	Andheri beach cleanup
23/01/25	Old age home visit
23/01/25	Udaan competition
26/01/25	Republic day celebration
03/02/25	MET UTSAV: Street play
05/02/25	MET UTSAV: Jatra competition
06/02/25	MET UTSAV: Competition
15/02/25	Bandra beach cleanup
27/02/25	Cyber security seminar
28/02/25	National science day
01/03/25	United ways competition (Model making and photography competition)

04/03/25-	Book collection drive
14/03/25	
04/03/25-	Medicine collection dive
14/03/25	
13/03/25	Hackathon
23/03/25	Malad beach cleanup

GREEN CLUB

METIOP (Degree)-Green Club is dedicated to promoting environmental awareness and sustainability. The students engage in activities focused on understanding and improving their local environment, with an aim to foster a sense of environmental stewardship and encourage students to adopt eco-friendly practices.

Sr. No.	Events/ Activities	Date	
	Green club	From	То
1	Climate Change and Water Management	24/08/2024	
	poster Making Competition		
2	Nirmalya Collection for Composting	06/09/2024	12/09/2024
3	Tree Plantation Drive	01/09/2024	
4	Tree Plantation Drive	06/09/2024	
5	Beach Cleanup drive	18/09/2024,	
	'	21/09/2024,	
		27/09/2024	
6	Climate Change and Water management	23/09/2024	
	awareness by school visit		
7	Daan Utsav	16/09/2024	21/09/2024
8	Plastic and E Waste Collection	18/09/2024	24/09/2024
9	Water Conservation Awareness Drive	17/02/2025	
10	YEWS LightHouse Green Club Workshop	21/02/2025	
11	Orientation of Green Club to First Year – Registration to Whywaste App	25/02/2025	
	negistration to willywaste App		

Articles/Write Ups

The Contribution of Indian Scholars to Botany

The Contribution of Indian scholars to Botany India has a rich history of contributions to various fields of knowledge, and botany, the scientific study of plants, is no exception. The Indian subcontinent, with its diverse climate agricultural practices, herbal medicine, and ecological understanding. This delves into the contributions made by Indian scholars to the field of botany from ancient times to the modern era.

Ancient Contributions to Botany

The ancient Indian tradition of studying plants and their medicinal properties can be traced back to the Vedic period (circa 1500 BCE - 500 BCE). Texts like the Rigveda mention a variety of plants, and the Vedic people had a deep understanding of their uses. However, it was in the later periods that the systematic study of plants took shape.

Charaka Samhita and Sushruta
 Samhita

The classical texts, Charaka Samhita and Sushruta Samhita, written by sages Charaka and Sushruta around 300 BCE, laid the foundation for Ayurvedic medicine. These texts provided extensive knowledge of plants used in healing practices. For example, Charaka wrote about hundreds of medicinal plants, their properties, and their applications.

and geography, has long been a land of botanical exploration. Indian scholars have contributed immensely to the development of botany, not only through the classification and study of plants but also in advancing

His work helped in creating a classification system for medicinal herbs, which significantly impacted botany in the Indian subcontinent.

Sushruta's Sushruta Samhita also discussed the use of medicinal plants for surgical and

purposes.

therapeutic

descriptions of plants and their healing properties show an early form of plant classification based on their therapeutic uses, thus laying the groundwork for botanical science in India.

His

detailed

Brihat Samhita by Varahamihira

Varahamihira, an Indian polymath and scholar of the 6th century CE, made significant contributions to the field of botany through his work Brihat Samhita. This treatise, which is a part of the classical Indian knowledge system, discusses topics ranging from astronomy to agriculture and plants. Varahamihira is considered one of the first scholars to introduce the idea of climate-based plant growth in India. His contributions helped in understanding how various plants adapt to

different climatic conditions, making him one of the pioneers of early plant ecology.

 The Medieval Era and the Influence of Islamic Scholars

During the medieval period, the Islamic influence in India led to significant advances in various sciences, including botany. Indian scholars, working under the Mughal Empire and other regional kingdoms, began to interact with scholars from the Islamic world, bringing in new perspectives on the study of plants.

 Modern Era: Colonial Period and Indian Botanists

The colonial period in India, spanning from the 18th century to the mid-20th century, saw increased interaction with Western scientific methods. Indian botanists played a crucial role in both preserving indigenous plant knowledge and contributing to the global understanding of plant biology.

One of the most notable figures in the development of Indian botany during the colonial period was William Roxburgh, a Scottish botanist. Roxburgh was appointed as the first Superintendent of the Calcutta Botanic Garden in 1793, where he worked extensively on the documentation of the flora of India. He discovered and described thousands of plant species, many of which were previously unknown to Western scientists. His work laid the foundation for the formal classification of

plants in India, which continues to influence botany today.

• Sir George Watt and Economic Botany
Sir George Watt, another important figure in
colonial India, contributed significantly to
economic botany. He was instrumental in
classifying the numerous plant species used
for economic purposes in India, such as those
used in food, medicine, and textiles.

Indian scholars have made significant contributions to the field of botany, enriching global scientific knowledge. Ancient texts like the Rigveda and Ayurveda provided early insights into plant classification and medicinal uses. In modern times, scientists such as Sir Jagadish Chandra Bose advanced our understanding of plant physiology, while others like Prof. M.S. Swaminathan have contributed to agricultural science and plant genetics. Their work continues to influence contemporary botanical research, fostering innovation in agriculture and environmental conservation.

The genesis of botanical knowledge in India lies in the ancient Vedic texts. The Rigveda, Atharvaveda, Yajurveda, and Samaveda, dating back to around 1500 BCE, contain detailed descriptions of plants and their uses, particularly in medicine and rituals. These texts reveal an early understanding of plant

morphology, classification based on growth habit (herbs, shrubs, trees), and the significance of plant anatomy in determining medicinal potency. The presence of terms like 'vriksha' (tree), 'oshadhi' (herb), and 'trina' (grass) demonstrates a basic yet functional classification system. Furthermore, concept of 'rasa' (taste) as a determinant of medicinal properties suggests an early attempt at understanding the chemical constituents of plants. These ancient texts, while not strictly botanical treatises, laid the foundation for later developments by embedding the importance of plants in the cultural consciousness of India.

The period between the 6th century BCE and the Gupta era (4th-6th centuries CE) witnessed a further refinement of botanical knowledge, particularly in the fields of medicine and agriculture. Ayurveda, the ancient Indian system of medicine, is inextricably linked to botany. Scholars like Charaka and Sushruta, authoring the Charaka Samhita and Sushruta Samhita respectively, meticulously described hundreds of plants, their therapeutic properties, and methods of preparation for medicinal use. These encyclopedic works are not merely catalogues of medicinal herbs, but also demonstrate a profound understanding of plant physiology and pharmacology. Charaka, for instance, classified plants based on their pharmacological action, such as 'sotho

shodhana' (cleansing of channels), 'deepana' (stimulating digestion), and 'virechana' (purgative), reflecting sophisticated а understanding of how plants interact with the human body. Sushruta, known for his contributions to surgery, also described various plants used as antiseptics, hemostatics, and wound-healing agents, providing crucial insights into plant-based remedies.

The medieval period saw a continuation of the Ayurvedic tradition and the incorporation of new plant species into the Indian flora through trade and cultural exchange. The works of Vagbhata, Madhava, and Sharangdhar further refined Ayurvedic knowledge and documented the uses of plants like cannabis and opium, highlighting the evolving understanding of plant pharmacology. During this era, the Unani system of medicine, influenced by Arabic and Persian traditions, also flourished in India, incorporating plants from different regions and enriching the botanical repertoire.

The establishment of botanical gardens like the Royal Botanic Garden, Calcutta (now Acharya Jagadish Chandra Bose Indian Botanic Garden, Howrah) in 1787, provided a platform for systematic botanical research in India. Indian scientists gradually gained access to these institutions and began to contribute to the fields of plant taxonomy, ecology, and

physiology. Jagadish Chandra Bose, a pioneering scientist, made groundbreaking discoveries in plant physiology, demonstrating that plants respond to stimuli and have a form of nervous system. His invention of the crescograph, an instrument used to measure plant growth, revolutionized the study of plant physiology and challenged the prevailing view of plants as passive organisms.

The Role of Indian Scholars in Modern Botany

- The early 20th century saw the emergence of several Indian scholars who played an essential role in advancing botanical science.
- 1. <u>Birbal Sahni:</u> Known for his work in paleobotany, Birbal Sahni's research in fossil plants has helped in understanding the evolution of plant life in India. He was one of the founding members of the Indian Botanical Society, which aimed to promote the study of plants in India.
- 2. J.C. Bose: Jagadish Chandra Bose, a physicist and biologist, is famous for his pioneering work on plant physiology. Bose's experiments on plant response to stimuli were groundbreaking and contributed to the understanding of plant behavior and communication.

- The Current State of Botany in India
 Today, India is home to a thriving
 botanical community, with numerous
 institutions dedicated to the study of
 plants. Institutions such as the <u>Indian</u>
 <u>Institute of Forest Management</u> (IIFM)
 and the National Botanical Research
 Institute (NBRI) continue the legacy of
 India's botanical tradition.
- Indian scholars continue to make significant contributions to various subfields of including botany, conservation biology, plant genetics, and sustainable agriculture. India is recognized for its diverse flora, and Indian botanists play an essential role in the study of biodiversity, plant conservation, and addressing challenges such as climate change and deforestation.

Conclusion:

The contributions of Indian scholars to the field botany have been immense multifaceted, ranging from ancient medicinal texts to modern plant genetics. The rich tradition of botanical knowledge in India, reflects the spanning millennia, deep relationship between the people of the subcontinent and their natural environment. Indian botanists, both past and present, have significantly shaped the global understanding of plant biology, and their work continues to have a profound impact on various fields, including agriculture, medicine, and ecology.

As the world faces new challenges related to climate change and biodiversity loss, the contributions of Indian scholars will remain vital to the study and conservation of plant life, both in India and worldwide. Their legacy continues to inspire new generations of scientists who seek to understand and protect the plant world for future generations.

- Vinita Patade, Fourth Year B. Pharm.

Article on Indian Knowledge System, regarding Indian Literature

A knowledge system is a program for extending/ querying a knowledge base. A knowledge base is a collection of knowledge, expressed, using some formal knowledge representation language. When it comes to countries, like India (Bharat), it will have its own knowledge system. The Indian Knowledge System (IKS), is a cell of the Ministry of Education, which helps in promoting the preservation, dissemination & interdisciplinary research of India's traditional knowledge. IKS is based on idea that knowledge is passed down from one generation to the next, aiming to integrate ancient knowledge, with contemporary knowledge systems.

In our country, right from the Vedic Period, texts/written records of <u>Vedas</u>, <u>UpaVedas</u>, <u>UpaVedas</u>, <u>Upanishads</u>, <u>Shrutis</u>, <u>Smrutis</u>, <u>Puranas</u>, and many more were said to be found & studied in many parts of our nation, as a part of imparting knowledge to the people. Even, ancient Sanskrit epics of our nation, Ramayana & Mahabharata are also a part of our literary knowledge system, as we learn many values, whether good or bad, play a crucial role in our life. Also, in the ancient times, plays, poetry,

other written works are considered as a part of our Indian literature, as in Mahakavi Kalidasa wrote epics-Raghuvansham & play named Kumarasambhavam, а Abhidnyanashakuntalam, poetry compilation-Meghadutam, Ashtadhyayi- a written work on Sanskrit Grammar by Grammarian Panini, Mrichhakatika- a play by playwright Shudraka, Arthashastramwritten work on management & accounting by Kautilya(Chanakya), Natyashastramcompilation written by Bharatamuni, etc. Apart the mentioned from literary works, Silappadhikaram & Manimekhalai - the epics of the Sangam literature, are also a part of Indian knowledge & literature. Even, there were many saints, who, in their era, wrote many verses, poems, expressed their teachings to the common folk.

Still, in our nation, these literary works are studied in today's world, in a very great depth, by people across India & also people throughout the world.

- Vibhav Patil, Third Year B. Pharm.

The Concept of Rasa in Indian Aesthetics

Indian aesthetics is one of those richest and complex systems wherein, makings of art illustrate the marriage of emotion and spirituality within the human experience. The central idea behind this aesthetic framework is embodied in the term Rasa, which may be described simply as that emotion or flavor of feeling that the art purportedly invokes in the audience. Rasa deals with not merely visual or auditory appeal but is directed towards achieving otherworldly emotional experiences that elevate the spectator or listener toward a realm of heightened awareness. The theory of Rasa provides a slant to classical Indian performance arts-drama, music, poetry, and other visual arts. The Nāṭ yaśāstra is an ancient text that forms the classical foundation of all performing arts in India. Gradually, the theory was enriched and further developed, largely through the initiatives undertaken by well-versed philosophers such as Abhinavagupta. In this essay, we deal with a detailed of Rasa-enhancement study processes, its theoretical framework, types of Rasas, how it is applied in different art forms, and its continued relevance in contemporary practices-a view of Rasa since the Nāt yaśāstra the theory of Rasa was first formally detailed in the ancient classical work of Bharata Muni, the Nāṭ yaśāstra (200 BCE-200 CE). In it, Bharata explains principles which presupposed a certain understanding of Rasa as the important function of art connected with emotions through drama enactments. The art must create the emotion of Rasa in order to fulfil its role in society. In the further explanations written by Bharata, Rasa is seen not only as an emotional state but also as an experience elevating within spirituality; that is to say, one in union with a universal reality

Bharata presents Rasa as a transcendent experience beyond the immediate personal emotions of the performer, being thus a universal experience that can be shared by every audience, crossing cultural and personal barriers. Bharata discusses four processes through which the Rasa is created: Vibhāva (Determinants): The determinants are those things acting, causes or stimuli evoking an emotion. A beautiful garden would evoke love, while a battlefield would incite fear or anger. Anubhāva (Consequents): The visible expressions of the Rasa, including the gestures, physical gestures, body movements, or all that can connote the emotional quality to the audience. Vyabhicāri Bhāvas (Transitory States): The transitory emotions that fluctuate according to the Stimuli usually accompany and heighten the Sthāyibhava. They may include feelings of hope, anxiety, despair, etc. Sthāyi Bhāva (The Dominant Emotion): Is the central emotion represented in any Rasa being the basis for the aesthetic experience? So, these forms go together to bring forth the emotion of Rasa, whereby the audience could feel themselves connected in the emotions in a performance. Eight Primary Rasas Bharata in the Nāt yaśāstra introduces those eight primary Rasas, Asta Rasa, connected to different emotional experiences: Śr ngāra (Erotic): This Rasa has relationships with love, beauty, and attraction, with feelings of romance and passion-seeking sensual pleasure. Śr ngāra is thought to be the king in Rasas, as it is associated with the most important emotions in a person's life. Hāsya (Comic): This Rasa laughs and plays to amuse and amuse. It is an emotion that is, therefore, light-hearted, playful, and often used in funny displays to elicit joy in an audience.

The Raudra Rasa denotes an angry, violent, and intensive type. Raudra is a rasa dominated by fury, wrath, and aggressiveness. The major instances where this type was used primarily involved fights and confrontations. The Karuṇa, that is sorrow, grief, and compassionate emotions, invokes sympathy and empathy, generating catharsis within the audience. The bībhatsa is therefore its Rasa associated with disgusting, revolting, and

grotesque. Sixth, this explores darker themes, like sickness, deterioration, and the anxiety of contagion. The terror referred to is bhayanaka and depicts fear, terror, and horror. These emotions stimulate a feeling of dread and apprehension and are often showcased in thrilling or suspenseful arts or performances. Virya, or heroic, is the Rasa of courage valor, and heroism. It celebrates strength, resilience, and noble battle and usually engenders admiration and respect. It brings forth wonderment and awe. Characterized by surprise or wondrous discovery in the commonplace: adbhuta. Later philosophers like Abhinavagupta gave birth to the concept of the Śānta Rasa, expressing tranquility, disinterestedness, and spiritual contentment. Śānta stands witness to the spiritual ideals of moks a, meaning liberation and inner peace. Abhinavagupta's contribution to the theory of Rasa is immense. While Bharata's Nāṭ yaśāstra laid the aphorism for the theory of Rasa, it was Abhinavagupta who in the tenth century CE developed and enlarged its scope. In his Abhinavabhāratī, Abhinavagupta considered the key philosophical ideas that transformed the expression of Rasa.

One of the earliest and most enduring contributions of Abhinavagupta is the well-known concept of sādhāraṇīkaraṇa, meaning "to universalize." According to it, the emotions

expressed by an Art-work release themselves from the individual context of the character or performer and become universalized. Thus, when an emotion such as grief or joy is actually experienced by the audience, it does so without any personal attachment and enters some kind of collectively shared emotional space.Abhinavagupta also associated Rasa with ananda (bliss). The Rasa experience is thus not merely sense enjoyment or pleasures of the mind and body, but a glimpse into a higher spiritual state. Through the enjoyment of Rasa, the audience is temporarily elevated beyond the individual self and its concerns into the realm of the universal self, where such a distinction dissolves altogether. Also, that profundity of Rasa and spirituality is what makes Indian aesthetics distinctive, an art metaphysical.It is everywhere, away from theatre and dramas one can see Rasa in all the traditional performances, namely within dance, painting, and sculpture music, arts. Indian theatre provides an excellent stage for the exploration of the theory of Rasa. Plays by Kalidasa such as Abhijñānaśākuntalam and Bhavabhūti's Uttararamacharita illustrate how, throughout the course of a performance, classical Indian dramatists expertly evoke a wide variety of Rasas. So, while moving from love to sorrow, to heroism and, again, wonder, and thus always keeping engagement and involvement at the level of the audiences, the

gamut of rasas presents itself throughout Kalidasa's Abhijñānaśākuntalam.For instance, Abhijñānaśākuntalam is primarily a love play, but that does not mean that it does not explore earlier Karuṇa and Adbhuta, especially at the times when the supernatural elements (the curse) come along in the play.

Dance Arising from the very technique of Bharatanatyam, Odissi, Kathak, and Kathakali is the ingrained presence of Rasa-it's the context. Each of those Rasas now becomes the mysterious epitome, and by use of obesity of body and enriched expressions of features, use of hands aimed at gestures provide a signal of Rasa. The training of classically inclined dancer provides emphasis upon achieving identified states of life very accurately and deliberately, in turn affecting harnessing the nature of such Rasas upon the audience. As an illustration, when a solo Bharatanatyam dancer performs a scene of celestial love, Śṛ ṅgāra comes alive, while on the hand, a warrior-dancer attracted towards battle induces Raudra or Vīra. Kathakali encourages performers to establish a visual mythological of image characters, representing feelings of fear (Bhayānaka) or heroism (Vīra)—all being capped by the theme of the story. Music The raga system in Indian classical music will express Rasa. Each rāga is rendered to bring into existence the respective

emotional state of a listener. Different ragas flow along specific melodic patterns and rhythms, which either trigger or sooth the emotions catered to by the shady or brightknown time of day. Raga Yaman brings in feelings of longing and devoutness (Śr ngāra), whereas raga Bhairavi is synonymous with agony and agony (Karuna). The ragas were played to be able to empathize with an emotional or spiritual state according to the Rasa in the sound. Visual Arts Thus in painting and sculpture, Rasa is richly manifested in pictorial narration of mythological landscapes and deities, embodying however a messenger - the look on the deity's face, the gesture of the dancer or the warrior - Salamanca that is colorful translate into various Rasas; like such pugristan resembling the demeanor of tranquility with Buddha idols, presenting thereby the theme of Śānta with the other being picturesque elucidations of divine love in the direction of Śr ngāra developed through the medium of Rajasthani miniature paintings.

Rasa: Its Persistent Relevance Because the concept of Rasa originated in ancient Indian theory, it has universal relevance even today. It still influences traditional Indian art forms and contemporary global aesthetics. Modern-day Indian cinema employs Rasa for impactful storytelling, capturing the attention of audiences around the world by its directors,

Satyajit Ray and Mani Ratnam, among others. Such representations of love, tragedy, heroism, and amazement continue to capture minds across cultural boundaries, showing the power and timelessness of such emotional and spiritual experiences in art. The theory of Rasa, however, may be also linked to the global aesthetics: the catharsis of Aristotle, sublime by Romanticism. Such concepts do thus, however, share the fundamental aim of art to open up deeply transformative emotional responses. Conclusion of their Various Monitions-the deal of Rasa is one of the most profound and most meticulously designed rubrics of Indian aesthetics. It is the striking model of the special ability of art to go beyond the realm of routine reality by opening human beings to higher states of awareness, both spiritual and emotional. In a nutshell, ancient authorities in the form of Nāţ yaśāstra, and their revolutionary contributions to aesthetic by Abhinavagupta, continue to impact different Indian classical art forms. Rasa remains one of the most dynamic libraries and the most charged vocabulary of grounded manifestations of one's experience in-between art. Rasa denotes, in this modern scenario, the inner and also the outer worlds provided between concrete, subjective emotions and spirituality, between the inner, personal realm and the transcendent. Art has turned into, through Rasa, not just a certain

instance for retrieving pleasure, but a bridge to living the identification with each other in emerging understanding and enlightenment.

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- Varsha Choudhary, Fourth Year B. Pharm.

The concept of Dharma in Indian philosophy

The concept of dharma, one of the basic aims of human existence (purus ārthas), takes central importance in ancient Hindu life, being one of the foremost guiding principles in life that expresses righteousness. Some merit the founding word 'dhr', meaning that which binds, supports, makes valid, dharma manifests as the very essence of Indian civilization, trying to capture all aspects of human existence, with varied interpretations in different situations. Though the central meaning has been evolving and revolving around the law and righteousness, the genesis of dharma may be traced from the Vedic idea of rta: cosmic law or moral order and the workings of nature that regulates the universe. Born from rta, dharma acts as the very life force of the universe holding everything in line with its inherent laws. The whole ambience of Indian culture revolves around the individual always being part of a larger whole, where cooperative living becomes the ideal basis for living. It is this very dharma that serves as a unifying principle.

Dharma is usually understood to contain two intertwined aspects: constitutive and regulative. The constitutive aspect of dharma is perceived as the deepest law of nature-the fundamental law of being. As Praśastapāda in his commentary on the Vaiśeş ikasūtras

articulates, 'Every padārtha (entity) has its separate dharma that gives it individuality and defines its nature'. For instance, inherent in all magnets, the property of a magnet to attract iron is its dharma. In this manner, dharma becomes the principle that gives essence to each entity and sustains its existence in the larger order of cosmos. Dharma is also of importance as an ethical principle guiding activity both for abhyudaya (material prosperity) and nihśreyasa (the pursuit of spiritual liberation).

The various types of dharmas include:

Sanatana Dharma is the term in Hinduism that represents what is called "eternal" or the absolute set of duties or set of practices ordained by the religion to all Hindus, irrespective of class, caste, or sect. In general, Sanatana Dharma consists of virtues such as honesty, non-violence, purity, goodwill, compassion, tolerance, forgiveness, selfcontrol, charitable disposition, and asceticism. Being the oldest of all religions, the roots of Sanatana Dharma cannot be fixed on an individual but, rather, are traced back in history by Vedic scriptures.

While traces of Sanatan Dharma within the Vedic period go back to 1500 BC, it is unclear

whether it would be Islam in specific or Christianity. That is the religion which is the rooted traditions developed, based on the Brahmanic teachings he gave in the Vedic sources originally by the unique kind of people. Sanatan Dharma boasts a rich collection of sacred texts, categorized into two primary groups: Shruti (Heard): These are said to be the revealed by highest divine authority. The oldest of all the 4 Vedas. They are along with the Upanishads containing philosophical insights of the world. The texts are written by saints, these are famous Mahabharata and Ramayana, Pauranic text and Dharma Shashtra like Manuscript.

"The spiritual lore of Hinduism enumerates a set of eternal truths, eternal laws, and codes as Sanatana Dharma."

Varnashrama Dharma-or duties and responsibilities according to the varna (social class) and asharmas (stage of life)-is a moral and ethical code whereby a balanced and meaningful life can be led while fulfilling one's worth in society. Varnashrama Dharma is closely related to Varna, whereby society is divided into four main classes or varnas: Brahmana (priestly among scholars), Kshatriya (rulers, soldiers), Vaishya (traders and farmers), and Shudra (labourers and servants). Parallel to the Varna system is the Ashrama

system, wherein life itself is divided into four stages:

Brahmacharya (The student stage) when education and learnings take place. Brahmacharya can be divided into two: 'Brahma' denotes the ultimate reality or enlightenment-the god's knowledge, and 'arya,' meaning 'living' way. This stage is concerned with complete focus on one's education or learning that can be acquired from one's teacher or guru. The teaching which has come down from generation to generation is emphasized. Unadulterated integrity and vitality in all we do should be aimed at in all Brahmacharyas. In this phase, a very close connection exists between the student and the teacher, where great knowledge, guidance, and life lessons are bestowed.

Grihastha (The householder stage) when one's obligations toward family begin. The Grihastha signifies the party when a person marries and establishes his own household. They start and become responsible for their families, including raising children and providing for their families. Individual engage in careers, businesses. They also pay attention to meeting social responsibilities in the name of community development. The Grihastha is concerned about marrying, material pursuits with spiritual growth. While living in a good

world for sure, one should be led by a high moral and spiritual consciousness.

Vanaprastha (The forest-dweller) where a person will slowly detach from worldly matters. Vanaprastha is described by reducing a person's attachment to materialistic things. Individuals may divest themselves of worldly belongings and luxuries. Those in the Vanaprastha stage retire from active participation in societal and family affairs. This gives them a chance to spend more time on spiritual reflection and contemplation. Although not as ascetic as the final stage (Sannyasa), Vanaprasthas lead a semi-ascetic life in relative tranquillity, preferably in rural surroundings or hermitages, while becoming absorbed in meditation, prayer, and selfrealization.

Sannyasa (Renunciant stage) focusing on spiritual pursuits and complete withdrawal from material possessions. At this stage, everything is renounced, including material possessions, family ties, and societal roles. They adopt a simple and minimalist lifestyle. Characterized by an unwavering commitment to spiritual practice, people are throwing themselves into meditation, self-observation, and exercising their will to be learned or awakened. Some Sannyasins take the role of

teachers, leading or advising others in the way of sannyasa.

Āpad-dharma (conduct permitted during calamities). If there is any word which is repeatedly used in the religious works, it is the word 'dharma.' Out of the several versions that have evolved over the centuries the two which has been widely accepted are: 'Code of conduct' 'Duty and responsibility'. This interpretation has been almost universally applied to the varna-dharmas and asrama dharmas. Members of each of the four varnas have been allotted their respective duties and responsibilities as follows: Bhramanas - Vedic studies and preaching, Ks attriyas - Fighting and administration, Vaishyas - Trade and agriculture, Sudras - Cleanliness and serving the first three varnas.

They are normally expected to follow these avocations. However, in times of tragic disasters like war, floods or famine, when the societal norms become disturbed, or during a period of severe tragedy, disturbances in the individual's life, it might not be possible for them to do so. During such periods of āpad or calamity, the dharma śāstras allow people to take to any dharma or avocation, even the ones given to someone else, as an emergency help, to sustain themselves.

However, even in dire calamities one is warned not to accept service under evil persons. As soon as normalcy return's they are expected to go back to the original norms of society.

Sadharana Dharma mentions about the common duties everyone needs to follow. It contains values such as truthfulness, kindness, and honesty. Sadharana Dharma applies to all people regardless of their role. It allows people live with compassion and dignity. By following this Dharma, we create peace and compassion in society. Sadharana Dharma is an important part of the more complete concept of Sanatana Dharma.

Truthfulness (Satya) is one of the well-known elements of Sadharana Dharma. It relates to telling the truth always and to do truthful actions. Being truthful gains trust and respect from others. When we speak the truth, we respect ourselves and in turn show our respect to others. The truth allows us to make proper decisions.

Non-violence (Ahimsa) is another important part of it. This means not injuring any living creatures, neither by words nor by actions. This supposed "violence" causes pain, fear, and anger, while the opposite brings about peace. To be gentle and understanding to all other human beings is to follow Ahimsa.

Compassion is taking care for others and helping them in their time of need. Showing it may be as simple as offering a help or a nice word. Compassion enables one to feel for others' pain and suffering. This motivates a person to do something that would change things for the better.

Self-discipline is a self-control over all parts of our acts and emotions. It helps us concentrate on our aims and keeps us away from the distractions. Being self-disciplined teaches us patience and endurance too. It's a principle value that contributes to making one's life more meaningful and wholesome.

Seva is the simple and basic idea of administering help and service to others. Seva may often involve giving our time, resources, or means to help others in need. In helping other people, we learn to be humble and grateful by helping those in need, we become close with them and also develop a connection with them.

In conclusion Dharma and Indian philosophy are deeply intertwined and they provide with values that if followed will set an individual on a moral and ethical path to success.

Nashita Attarwal, Fourth Year B.
 Pharm.

The Philosophy of Advaita Vedanta

One of the primary and deepest Indian philosophical traditions, it is primarily associated with the teachings of philosopher sage, Adi Shankaracharya. A nondualistic system of thought that emphasizes the ultimate reality of the universe as an unchanging, formless, singular entity, often referred to as Brahman. Atman, the true Self, is considered identical with Brahman, the ultimate reality; in Advaita Vedanta. Advaita Vedanta has profound and lasting impact on the spiritual and philosophical thought in India and the world. In this essay, we discuss key concepts of Advaita Vedanta, its metaphysical perspective, its epistemological approach, as well as its practical dimensions as a means to liberation (moksha). This involves training on data until October 2023.

Advaita Vedanta, meaning "non-duality," is a philosophical branch of Hinduism, earlier known Puruş avāda. This spiritual framework aims to guide seekers past duality and misconceptions. The core idea of Advaita is that the true self, or Atman, is the same as the ultimate reality, Brahman, while the material world is not ultimately real. Followers are called Advaita Vedantins, Advaitins, or Mayavadins. They view the material world as a mere illusion arising from ignorance (avidya) and an overlay on the singular reality of Brahman. To attain spiritual liberation, one must recognize this illusion and gain true knowledge (vidyā) of the self as Atman, linking it with the Supreme Self and Brahman. The key figure of this tradition is Adi Shankara, who significantly shaped Advaita Vedanta. This school's origins trace back to the ancient Upanishads, relying on three main texts: the Upanishads, the Brahmasutras, and the Bhagavad Gita, offering a cohesive interpretation that imparts true knowledge of Brahman and its manifestations. As the oldest existing sub-school of Vedanta, Advaita Vedanta is part of Hinduism's six philosophical perspectives. Its roots can be traced to the first millennium BCE, with Adi Shankara being its most influential proponent in the 8th century.

Origins of Advaita Vedanta

It is based on the ancient texts of Hindu philosophy, especially the Upanishads, which are core to the Vedic tradition. The Upanishads are seen as the philosophical backbone of the Vedas, and deal with the self (Atman), the ultimate reality (Brahman), and the relationship between the two. The Advaita Vedanta lineage derives its fundamental insights and approach from the Upanishads, but in a non-dual interpretation.

Advaita, a system of the Advaita doctrine was popularized by a revered philosopher, theologian, spiritual leader, and teacher called Adi Shankaracharya (also written as Shankara; circa 788-820 CE). Shankaracharya's commentaries on the Upanishads, Bhagavad Gita and Brahma Sutras are the foundation of Advaita Vedanta. He claimed via his teachings that the ultimate reality is formless, transcendental, and indivisible, and the perception of multiplicity in the world is an illusion (Maya) caused by ignorance (Avidya).

Central Tenets of Advaita Vedanta

A distinctive feature of Advaita Vedanta, is based on the concept of a single reality, which is saying, Atman (individual self) and Brahman (the universal self) are one and the same and the division between the two, is an illusion. Some basic tenets of Advaita Vedanta may be briefly stated as under:

1.Brahman is the ultimate reality.

Brahman is the sole unchanging reality in Advaita Vedanta. It is timeless, shapeless and unqualified (nirguna). It is the ultimate reality which is changeless and indivisible, and it is also beyond time, space and causation. The statement "Brahman alone is real" expresses the central belief that everything else in the universe is temporary and an illusion. The plurality of the world, the multitude of objects and beings and events, is regarded as the effect of ignorance.

2. Atman and Brahman: The Oneness

There is distinction between Atman, the individual self, and Brahman. Self and supreme reality, who knows them apart? — but ignorance creates this illusion. This is seen in the phrase "Tat Tvam Asi" (You are That), which is from the Chandogya Upanishad, and relates to this foundational principle of Advaita Vedanta that the individual soul (or the superior self-called Atman) is not separate from the universal soul (or the universal consciousness or superior self-called Brahman) To accept this identity is to be free.

3. Maya: The Illusion of Duality

Maya refers to the illusion that creates a sense of duality and diversity in the world. Advaita Vedanta teaches that the universe is not truly as it appears; it is a manifestation of Brahman, obscured by human perception and ignorance. Maya acts as a veil that distorts our understanding of reality, leading us to view the world as made up of separate entities.

Recognizing the unity of Atman and Brahman is essential for overcoming this illusion.

4. Avidya: Ignorance and the Cause of Suffering

Avidya, or ignorance, serves as the primary source of human suffering in Advaita Vedanta. This ignorance inhibits individuals from perceiving their true essence as Brahman. Consequently, they become overly identified with their physical bodies, mental states, and ego, which fosters a misleading sense of disconnection from the entirety of existence. Avidya represents the underlying cause of samsara, the continuous cycle of birth, death, and rebirth, during which the soul remains ensnared in suffering.

5. Moksha: Liberation from Ignorance.

The paramount objective of Advaita Vedanta is moksha, or liberation. Moksha is achieved through the realization of the non-duality between Atman and Brahman. This insight culminates in the dissolution of the illusion of separateness and the ego, yielding the profound experience of unity with the entirety of existence. Liberation is not about acquiring something novel; rather, it entails the dispelling of ignorance, which unveils the intrinsic truth of oneness with Brahman.

The Path to Liberation: Knowledge (Jnana Yoga)

In Advaita Vedanta, the pathway to liberation primarily involves the cultivation of knowledge (Jnana Yoga), rather than reliance on devotional or ritualistic practices. Overcoming ignorance is fundamentally achieved through self-inquiry (Atma-vichara), where individuals endeavor to comprehend their true nature via introspection and contemplation. The renowned method of self-inquiry proposed by

Shankaracharya involves the question "Who am I?" (Tat Tvam Asi). By consistently reflecting on the self and the ultimate reality, an individual can transcend the ego and recognize their unity with Brahman.

Inana Yoga consists of three critical stages:

- Sravana (Listening): This stage encompasses the study of scriptures and the teachings of a qualified teacher (guru), with the Upanishads, Bhagavad Gita, and Brahma Sutras serving as foundational texts.
- 2. Manana (Reflection): In this phase, individuals contemplate the teachings and work to address any doubts or misconceptions that may emerge.
- Nididhyasana (Meditation): The concluding stage involves deep meditation, wherein one meditates on the oneness of Atman and Brahman, progressively internalizing the truth of non-duality.

The Role of Maya and the Nature of the World

A distinctive feature of Advaita Vedanta is its perspective on the empirical world. While the world of experience is regarded as illusory, it is not entirely dismissed. The world holds reality in the sense that it is perceived by us, but it is not ultimately real in the context of being independent or separate from Brahman. The empirical world resembles a dream or a mirage, existing solely within our limited perception.

Shankaracharya employs the metaphor of the rope and the snake to elucidate this concept. When one perceives a snake in darkness, it is actually a rope; however, due to impaired

vision, one misinterprets it as a snake. Similarly, the world is perceived as distinct and separate from Brahman due to ignorance, but upon attaining knowledge, one realizes that all distinctions are merely appearances.

The doctrine of Maya can pose challenges, as it seemingly undermines the reality of the world we experience. Nonetheless, Advaita Vedanta asserts that the world of experience remains valid for practical purposes. While ultimately illusory, it provides the context necessary for engaging in spiritual practice and inquiry. It is through interaction with the world, employing our faculties of reason, intellect, and intuition, that one arrives at the realization of the oneness of Atman and Brahman.

Ethical and Social Implications

While Advaita Vedanta highlights the illusory character of the world, it does not promote renunciation or detachment from society. Instead, it advocates for living within the world with an understanding of its transient essence. Principles such as ethical behavior, compassion, and non-attachment are integral to Advaita Vedanta, as they aid in the development of wisdom and in the realization of one's true self.

The fundamental ethical concept in Advaita Vedanta is the recognition that all beings are expressions of the same ultimate reality. Consequently, the perception of separation between self and others gradually diminishes, fostering a natural inclination towards empathy, kindness, and respect for all living entities. The teachings of Advaita Vedanta inspire individuals to coexist harmoniously with the world, guided by wisdom and a profound sense of interconnectedness.

Conclusion

Advaita Vedanta stands as one of the most significant philosophical systems in the annals of human thought. Its focus on the principle of non-duality challenges numerous dualistic viewpoints that are common in both Eastern and Western philosophies. The doctrine of Advaita Vedanta presents a pathway to liberation through self-awareness, emphasizing the unity of Atman and Brahman and the illusory nature of the material world. By transcending ignorance (Avidya) and comprehending the truth of non-duality,

individuals can attain moksha, which signifies liberation from the cycle of birth and death.

The teachings of Advaita Vedanta have not only influenced the spiritual framework of India but also exerted a considerable impact on philosophical and spiritual traditions worldwide. The principles of Advaita Vedanta continue to motivate those in pursuit of truth, wisdom, and emancipation from the deceptions of the material realm.

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THE SIGNIFICANCE OF THE MAHABHARATA IN INDIAN KNOWLEDGE SYSTE

The Mahabharata is the most robust of Indian epics and has been a pivotal element in shaping Indian knowledge systems. Composed about 2,000 years ago, the Mahabharata is an expansive and elaborate work that grapples with a wide range of philosophical, moral, and theological concerns. It is a Hindu sacred scripture and has greatly influenced Indian religion, culture, and philosophy.

The Mahabharata, one of the longest grand encyclopedically, runes stands an abecedarian part of the Indian knowledge system, deeply bedded in the artistic and intellectual geography of India. Drafted over centuries, this grand narrates the tale of a dynastic conflict while offering a rich shade of literal environment and artistic influence that reverberate continues to moment. lts characters reflect intricate mortal feelings and dilemmas, furnishing a profound source for examining philosophical receptivity and ethical training that remain material in ultramodern conversations.

The narratives within the Mahabharata explore vital themes including duty(dharma), justice, and morality, encouraging compendiums to contemplate significant questions about life

and actuality. Its impact extends beyond gospel, shaping literature and the trades; a multitude of acclimation have surfaced across different mediums — from classical cotillion to contemporary cinema — pressing its lasting appeal and versatility.

As it was composed over numerous times, the Mahabharata not only glasses the literal environment of ancient India but also plays a pivotal part in putrefying its artistic identity. The grand recounts the struggles between the Pandas and Caravan while probing into profound philosophical dilemmas and ethical questions that are still applicable moment. Its characters make complex moral opinions, furnishing precious receptivity into mortal get that contribute meaningfully to ethical debates.

Also, the Mahabharata has significantly told literature and art throughout history, inspiring in numerous acclimations in theater, cotillion, and visual representations. This vast array of narratives serves as an indefatigable well of themes and motifs that claw into universal treeless about mortal actuality. In contemporary settings, the training of the Mahabharata has decreasingly made their way

into educational fabrics and societal discourses, marking it as an essential resource for understanding governance, justice, and interpersonal connections.

The Mahabharata stands as a monumental epic from ancient India, deeply settled in the fabric of the Indian knowledge system. Further than just a story of feuding relatives, it is a treasure trove of philosophical, ethical, and social receptivity that have told Indian study and culture for centuries. Its impact is felt across a diapason of life, touching everything from religious practices to legal fabrics, and it continues to hold applicability in ultramodern India.

A crucial aspect of the Mahabharata is its profound engagement with the conception of Dharma. This idea. which embodies righteousness, duty, and moral order, serves as the epic's core theme. The characters' battles with Dharma — embracing both their palms and lapses — offer rich moral assignments. Take Arjuna, for illustration; his inner fermentation on the battleground of Kurukshetra, specially illustrated in the Bhagavad Gita, confronts the challenges of fulfilling one's duties amid complex moral predicaments. This deep dive into Dharma informs present-day ethical conversations in India, particularly around social justice and environmental responsibility.

Other than Dharma, Mahabharata lights up major aspects of Indian gospel, similar to Karma and Moshe. The narrative vividly portrays the outcomes of conduct and wheel of existence cycle of regeneration, explaining the term, Karma. Ironically, it describes ways towards liberation (Moshe) in terms of conduct conducive to Dharma and in pursuit of toneknowledge. Krishna's Bhagavad Gita training, which emphasize unselfish action (Mishkan Karma) and spiritual development pursuits, continue to reverberate through lively seminaries of Indian learning, indeed provoking ultramodern interpretations connected with problems of contemporary living like stress reduction and conscious living.

Furthermore, the Mahabharata extends its influence into the legal and social fields. The epic is a bountiful repository for legal and political precepts, with many legal bywords and canons of behavior drawing their origin from its narratives and discourses. Moment, researchers and legal interpreters continuously draw on the receptivity chosen from the Mahabharata in discussions of governance, justice, and societal form, attesting to its enduring relevance in forming legal and executive practices. For example, the

concept of Raj dharma,' defined as the right behavior of rulers, remains responsible for sparking discussion on leadership and governance. Ongoing discourse in equitable resource dispensation and cohesiveness has often sought refuge in ideals delivered within the Mahabharata.

India, having been blessed with its own great cultural traditions, has always been a cradle of civilization with ancient textbooks and Holy Writs being the wellspring of its knowledge systems. Among these irreplaceable dateless treasures of learning, the Mahabharata is one such gigantic epic that encapsulates the quintessence of Indian gospel, ethics, and church. Written thousands of times unto itself

the Mahabharata still exercises tremendous impact in the formation of Indian study and belief systems, providing invaluable receptivity into the intricacies of human nature, the ethical conundrums encountered by individualizes, and the age-old conflict between what is right and wrong. Through this essay, we will investigate the importance of the Mahabharata within the Indian system of knowledge, analyzing its immense impact on rich facets of life and society.

The Mahabharata, ascribed to the scholar Vyasa, is not just a product of invention or a

word-for-word account but a holistic guide to the intricacies of human reality. Against the backdrop of the Kurukshetra War, the epic goes deep into the intricacies dharma(righteousness), air(action), and Moshe(emancipation), offering a nuance of characters whose actions and views are moral paradigms for generations to come. Fundamentally, the Mahabharata struggles with timeless issues of duty, loyalty, honor, and sacrifice, pushing individualizes to find their way through the moral challenges that emerge in the course of their lives.

One of the most important themes of the Mahabharata is the idea of dharma, the moral principle that regulates the macrocosm and the obligations individualizes are expected to perform in their diverse places relationships. The epic explores the struggle of the virtuous Pandas with the cunning Caravan, pinning the aftermath of following or divining through one's dharma. Using the figures of Arjuna, Yudhishthira, and Krishna, the Mahabharata explains the importance of respecting one's obligation in fact when faced with tragedy and moral uncertainty, highlighting ethical behavior and living righteously.

Furthermore, the Mahabharata is a storehouse of philosophical training and spiritual insight,

providing deep receptivity into the nature of reality, the meaning of life, and the way to tone- consummation. The Bhagavad Gita, a textbook in the holy Mahabharata. summarizes the content of Indian study, philosophical elucidating the generalities of air yoga, Shakti yoga, and Nana yoga as ways to emancipation. Through the exchange between Arjuna and Krishna, the Rita communicates dateless treeless of the character of the tone, the transitoriness of the world of materiality, and the importance of submission to the godly will. Aside from its ethical and philosophical discipline, the Mahabharata is a repository of aesthetic and literal information, providing receptivity into ancient Indian life, mores, and practices.

The grand provides a glimpse into the sociopolitical geography of the era, portraying the
intricacies of royal courts, the dynamics of
domestic relationships, and the practices and
rituals that governed everyday life. By setting
compendiums within the world of the
Mahabharata, one develops a greater
understanding of the fragility and complexity
of Indian culture and the values that have
endured to preserve its heritage over the
periods. Similarly, the Mahabharata has left a
lasting influence on vivid art forms ranging
from literature and theater to cotillion and
music, challenging artists and actors in

generation after generation to retell its stories and characters in their own unique way. The dateless themes of love, greed, bravery, and salvation in the epic have been reinterpreted in many ways, allowing cult to communicate its universal message in various media. Whether in the retelling of Alias, Elnora's puppets, or Katakana's performances, the Mahabharata still entices and inspires, crossing time and space boundaries to resonate with cult globally.

Lastly, the Mahabharata has a central position within the Indian system of knowledge, being a lamp of wisdom, guidance, and relief to in many generations. Its deep training on dharma, air, and Moshe still echo with individualizes pursuing moral direction and spiritual illumination, while its representation of human conundrums and trials provides consolation and outlook during periods of wretchedness. As an epic without a date, connecting the past and the present, the Mahabharata is a witness to the lasting power of the liar and the overwhelming influence of literature on the human mind. By questioning complexities and investigating underlying significances, we may obtain valuable receptivity into the complexities of life and the relentless pursuit of verity and meaning. The Mahabharata's place in the Indian knowledge system is unquestionable.

Its persistent impact arises from its deep examination of abecedarian philosophical truisms, its exposition of moral precepts, and its influence on law and social organizations. The epic continues to mold Indian scholarship and practices, revealing its astonishing firmness and adaptability in the ultramodern era, providing a timeless structure for

approaching ethical issues and striving towards a fair and peaceful society.

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Indian Knowledge Systems of Architecture

Systems of Knowledge Indian architecture is a warped fabric of history, philosophy, culture, and religion. It goes beyond the mere act of constructing physical structures. It showcases the deep understanding of the cosmos, the environment, and the human condition. The Indian Knowledge Systems (IKS) of architecture that transcend-modern texts embody an ancient approach to building encompasses practical tips and spiritual and symbolic techniques. This paper examines the basic concepts, historical development, and the persistent relevance of IKS architecture.

Vedic Foundations

The roots of Indian architecture ideals can be found in the Vedic period (2500-1500 BCE). The Vedas, which are age-old scriptures comprising hymns, philosophical insights, and mystical instructions, forms the bedrock of many subjects of Indian society including architecture. The design and construction of Vedic altars (Yajnashalas) were constructed with precise geometric principles, symbolic considerations, and functionalities. It is utilized as microcosmic representations of the universe during sacrificial rituals.

Another important aspect from the Vedas and Upanishads is the perception that all things are interrelated, in addition to time being a cyclical phenomenon, and this contributed to the general conception and organization of space. The image of Prajapati, Vedic rites and construction design emanated from the Primordial Man, whose fragmentation and reassembly represented the inception of the universe.

Each altar was constructed as an attempt to bring back unity and peace, with the pieces placed in a precise manner where the cosmic process would be restored.

Architecture finds its nugget of essence in the very fabric of India through the theory of Vaastu Shastra, a measurement of construction.

The term Vaastu means Bipartite, and Shastra stands for Structured. Hence, it easily translates to Bipartite Structures. It is thought to foster harmony between people and their surroundings and is regarded as an essential component of the Vedas.

Guidelines for designing structures that are in harmony with cosmic energy and natural forces are provided by Vaastu Shastra. With particular directions linked to various deities and spirits, it highlights the significance of orientation. For instance, the northern region is frequently set aside for places of prayer or meditation since it is thought to be the most sacred.

A key component of Vaastu planning is the Vaastu Purusha Mandala, a symbolic diagram that depicts the cosmic man. It creates a grid of squares on a piece of land, each of which is connected to a different deity and controls a different area of life.

The goal of architect's work is to design buildings that promote prosperity, health, and spiritual well-being by lining them up with this grid.

The characteristics of the soil, the surrounding environment, and the impact of the elements are also taken into account by Vaastu Shastra. It highlights the value of natural light and ventilation and suggests particular material types for various climates. The use of traditional building materials like thatch, wood,

stone, and mud is preferred since it is environmentally friendly and sustainable.

Temple Architecture's Development:

Over the years, temple architecture in India changed to represent various religious beliefs and local traditions. Indian temples exhibit an amazing fusion of technical mastery and spiritual meaning, from the earliest rock-cut temples to the ornate constructions of the medieval era.

Regardless of style or time era, the fundamental components of a Hindu temple are always the same. The most revered area of the temple is the garbhagriha, or inner sanctum, which is home to the main deity.

Other buildings, including parikrama (ambulatory walkways), Antaralas (antechambers), and mandapas (congregation halls), surround the garbhagriha. A shikhara (tower) atop the garbhagriha's exterior acts as a visual cue and represents the interface between the divine and terrestrial worlds.

Different regional styles of temple architecture developed over time. Intricate carvings and curved shikharas are hallmarks of the Nagara style, which is popular in North India. Towering gopurams (gateways) and pyramidal vimanas (towers) are characteristics of the Dravida architectural style, which is prevalent in South India. The Deccan region is home to the Vesara style, which is a cross between the Dravida and Nagara traditions.

By combining Persian, Islamic, and Indian architectural forms, the Mughal Empire profoundly influenced Indian architecture. Grand monuments that display the mixing of Persian and Indian components, including the Taj Mahal, Red Fort, and Jama Masjid, are clear examples of this.

The following are important facets of the Mughal influence on Indian architecture:

Combination of Styles: The Timurid Iranian, Persian, Turkic, Central Asian, and Indian Hindu architectural styles were all combined to create the Mughal architecture. It evolved from Central Asian and Iranian traditions, as well as previous Indo-Islamic architectural styles.

Construction Supplies: Mughal architecture became known for its use of white marble and red sandstone, with marble being used for calligraphy and elaborate carvings and red sandstone for walls, domes, and minarets, big bulbous onion domes, thin minarets at the corners, enormous halls, and big arched entrances are some of the architectural features that define Mughal architecture. They also consist of intricate masonry, calligraphy, tilework, geometric and floral patterns, and exquisite decoration.

Gardens: The Charbagh style, a quadrilateral garden pattern modeled after the four gardens of Paradise described in the Qur'an, was a favorite of the Mughal rulers. Terraces, well-defined borders, and water elements like fountains, canals, and pools are all included in these gardens.

Regional Influence: Mughal design concepts were adopted by regional constructions throughout India, demonstrating the Mughal Empire's architectural influence. For instance, the Badshahi Mosque in Punjab employs white marble and red sandstone, while the Amer Fort in Rajasthan has elaborate decorations and courtyards in the Mughal style.

When Shah Jahan ordered the construction of the Taj Mahal, the Mughal architectural style peaked. During Akbar's rule, Hindu architectural motifs were very frequently used.

Architecture in the Indo-Islamic Style

Following the introduction of Islam to India, a architectural style emerged combined Indian and Islamic components. The use of arches, domes, minarets, and geometric patterns are characteristics of this Indo-Islamic This architectural style was architecture. heavily influenced by the Delhi Sultanate and the Mughal Empire, which left behind a wealth of tombs, palaces, mosques, and forts. The pinnacle of Indo-Islamic artistic expression can be found in Mughal architecture in particular. Through the use of white marble, elaborate embellishment, and Charbagh gardensquadrilateral gardens separated by walkways or watercourses—the Mughals introduced Persian influences to India.

The most famous example of Mughal architecture and evidence of the blending of Islamic, Persian, and Indian styles is the Taj Mahal, which was constructed by Emperor Shah Jahan in honor of his wife Mumtaz Mahal.

Modernism with Colonial Influences

European architectural styles including Neoclassical, Gothic Revival, and Baroque gained popular in India during the British colonial era. These designs were frequently modified for the Indian setting, giving rise to a hybrid Indo-Saracenic style that blended Indian themes with European elements. Modernist concepts were popular among Indian architects following the country's independence in 1947. Le Corbusier, who created Chandigarh, had a significant impact and advocated for a functionalist approach to building and urban planning. Indian modern architecture aims to combine regional materials, traditional ideas, and foreign influences.

IKS's Current Significance:

The importance of IKS in tackling the problems of sustainable development and cultural

preservation becoming increasingly is acknowledged in the modern period. Architects and planners are increasingly drawing inspiration from traditional knowledge systems to design socially just, culturally relevant, and environmentally conscious structures and cities. With its focus on occupant well-being and harmony with the natural world, Vaastu Shastra provides insightful guidance for creating sustainable and healthful structures. Modern construction is reviving and adapting traditional building methods that reduce environmental effect and use local materials. IKS concepts are also being used in urban planning, with an emphasis on developing mixed-use. walkable neighborhoods that foster cultural identity and social interaction.

To preserve India's architectural legacy, IKS research is crucial. Architects and conservationists can create successful plans for the preservation and adaptive reuse of structures historic and cities by comprehending the ideas and methods that shaped them. A methodology for evaluating the cultural significance of architectural sites and involving local communities in their stewardship is also offered by IKS.

Famous instances of British colonial architecture in India are as follows:

Kolkata's Victoria Memorial: This memorial, which was created by William Emerson and proposed by Lord Curzon, is constructed of white Makrana marble and blends Mughal and British architectural features.

Gateway of India (Mumbai): Designed by George Wittet to honor King George V and Queen Mary's 1911 visit to India, this monument is a prime example of Indo-Saracenic architecture, fusing European, Islamic, and Indian design elements.

Built in the Gothic Revival style with a clock tower, Chennai Central Railway Station (Chennai) was the entry point to South India during the British Raj and was designed by George Harding. Mumbai's Victoria Terminus: This railway station, which was created by Frederick William Stevens in the Victorian Gothic Revival style, has intricate carvings, sculptures, pointed arches, turrets, and a tall dome.

Originally called Viceroy's House, Rashtrapati Bhawan (New Delhi) was designed by Sir Edwin Lutyens and Sir Herbert Baker and is situated atop Raisina Hill.

The Secretariat Building in New Delhi is a grand government structure that served as an administrative hub during the colonial era.

Chennai's Madras High Court is a significant building with Indo-Saracenic design.

Founded in 1644, Fort St George in Chennai was the first English fortification in India.

Examples of Gothic colonial architecture are St. John's Church in Kolkata and Mutiny Memorial Church in Kanpur. The Bombay High Court in Mumbai also has Gothic-style architecture.

Conclusion

A rich and diverse legacy that incorporates pragmatic building methods, intellectual ideas, and spiritual symbolism is represented by the Indian Knowledge Systems of architecture. IKS provides a comprehensive method for designing constructed environments that are in balance with the natural world, cultural norms, and human nature. It is based on the Vedas and expanded upon in books like Vaastu Shastra.

Indian architecture has an astounding diversity of forms and styles, from the early Vedic altars to the imposing temples and Mughal buildings, all of which are bound together by a shared set of fundamental ideas. IKS remains important today as a source of inspiration for community development, cultural preservation, and sustainable design. Architects and planners can design a future where the built environment embodies the principles of sustainability, justice, and cultural identity by incorporating the knowledge of the past.

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The Science of Ayurveda: Ancient Indian Health Practices

The "Science of life," or Ayurveda, is a profound and timeless illustration of the Indian Knowledge System (IKS). Ayurveda, a holistic medicinal system with roots in the ancient Vedic tradition, has been used for more than 5,000 years in India. Ayurveda is more than simply a medical system; it is a holistic approach to health and wellness that emphasizes the interdependence of the body, mind, and spirit in relation to nature. This essay will examine Ayurveda's historical underpinnings, core ideas, and current applicability as an essential part of the IKS, emphasizing its special contributions to healthcare and its capacity to be incorporated into contemporary medical procedures.

Historical Roots and Development

Early references to herbal treatments and magical methods of disease treatment can be found in the ancient Vedic scriptures, especially the Atharvaveda (circa 2nd millennium BCE), which is where Ayurveda had its start. Traditional traditions hold that Brahma, the creator, gave Ayurveda to Dhanvantari, the gods' physician. This knowledge system's holiness and significance are highlighted by its divine origin.

In foundational writings like the Caraka-Samhita and the Susruta-Samhita, Ayurvedic ideas were codified and systematized during the 800 BCE-1000 CE golden age of Indian medicine. The Caraka-Samhita, which is credited to the doctor Caraka in the first century CE, is mostly on internal medicine and offers thorough explanations of Ayurvedic diagnosis and treatment techniques. The Susruta-Samhita, which was completed by the 7th century CE and credited to the surgeon

Susruta in the last years BCE, is well known for its thorough explanations of more than 1,000 ailments and surgical procedures, including grafting and cosmetic surgery. In addition to the three body humors (vata, pitta, and kapha), which are essential to Ayurvedic physiology and pathology, these writings examine the human body in terms of earth, water, fire, air, and aether.

Essential Ayurvedic Principles

The foundational idea of Ayurveda is that harmony and balance between the body's components as well as between a person and their surroundings characterize wellness.

The following are the main ideas that support Ayurvedic theory and practice: The Five Elements (Pancha Mahabhutas): According to Ayurveda, the five fundamental elements of fire (Tejas), air (Vayu), ether (Akasha), water (Ap), and earth (Prithvi) make up the cosmos, including the human body. The three doshas are made up of these components. Tridosha, or the Three Doshas: The bio-energies that control the body's physiological psychological processes are known as the three doshas: Vata, Pitta, and Kapha. Vata (ether and air) is linked to catabolism, nerve impulses, and movement. Transformation, digestion, and metabolism are governed by pitta (fire and water). The elements of kapha (earth and water) are in charge of anabolism, lubrication, and construction.

Each person's Prakriti (constitution), which is a unique combination of these three doshas, dictates their mental and physical traits as well as their vulnerability to particular illnesses. It is crucial for health to keep these doshas in

balance. The Seven Tissues (Sapta Dhatus): According to Ayurveda, the body is made up of seven different types of tissues: Majja (nerve tissue), Mamsa (fat), Rakta (blood), Rasa (plasma), Mamsa (muscle), and Shukra (reproductive tissue). The condition of these tissues, which are fed in turn, is essential to general health. The Three Malas (Products of Waste): For health maintenance, waste products (Malas) must be properly eliminated. Sweda (sweat), Mutra (urine), and Purisha (feces) are the three main malas. The metabolic fire that is in charge of nutritional digestion, absorption, and assimilation is known as Agni (Digestive Fire). While imbalanced Agni can result in sickness and the buildup of poisons (Ama), balanced Agni is necessary for optimum health. Mind-Body Connection: Ayurveda stresses the significance of mental and emotional health for general health and acknowledges the significant impact that the mind has on the body. Mental and emotional states are influenced by the three mental doshas (Gunas): Tamas (evil), Rajas (kingly), and Satogun (godly). Maintaining a balance between these doshas is essential for mental wellness.

Methods of Diagnosis and Treatment

A thorough evaluation of the patient's lifestyle, surroundings, and mental, emotional, and physical health are all part of the Ayurvedic diagnosis process. Important diagnostic techniques include of: Analyzing the radial pulse to ascertain the dosha balance is known as pulse diagnosis (Nadi Pariksha). Examining the patient's bodily attributes, such as their skin, tongue, and eyes, is known as observation (Darshana). Asking questions (Prashna): Learning about the patient's symptoms, lifestyle, and medical background.

By treating the underlying cause of the illness rather than just its symptoms, Ayurvedic

medicine seeks to bring harmony and balance back.

Among the therapeutic modalities are:

Dietary Modifications (Ahara): Adapting the diet to the imbalances and constitution of the individual. Using herbal medicines to detoxify the body, balance the doshas, and encourage recovery is known as herbal medicine (Dravyaguna). Lifestyle Modifications (Vihara): Suggesting suitable daily and seasonal routines, physical activity, and sleep schedules. Panchakarma, or detoxification, is a collection of five medicinal techniques meant to rid the body of impurities and bring it back into equilibrium. Meditation and yoga are techniques to improve one's mental and spiritual health.

Relevance and Integration in the Modern Era:

Because of its holistic approach, emphasis on prevention, and ability to treat chronic ailments, Ayurveda is seeing a resurgence of attention in today's society. Ayurveda provides a complementary and alternative strategy that can improve general welfare and quality of life while healthcare systems struggle with the growing expenses and constraints of mainstream treatment.

Ayurveda's relevance in the modern world is becoming increasingly acknowledged for a number of reasons:

Holistic Approach: People looking for a more thorough and individualized approach to healthcare find resonance in Ayurveda's emphasis on treating the full person—mind, body, and spirit.

Preventive Focus: The expanding emphasis on preventive medicine is consistent with Ayurveda's emphasis on promoting health and preventing disease through dietary changes, herbal medicines, and lifestyle modifications.

Natural and Safe Therapies: Unlike many pharmaceutical medications, Ayurvedic treatments mainly use natural medicines, dietary modifications, and lifestyle changes, all of which are generally regarded as safe and having fewer adverse effects.

Effectiveness in Chronic Diseases: Ayurveda has demonstrated potential in the treatment of autoimmune diseases, diabetes, arthritis, and mental health illnesses.

Integration with Modern treatment: In order to provide patients, the best of both worlds, there is growing interest in combining Ayurveda with modern treatment. The holistic and preventive methods of Ayurveda can be combined with the diagnostic and interventional powers of contemporary medicine through collaborative approaches.

There are a number of possible dangers when combining Ayurvedic and contemporary medical treatments:

Drug Reactions: Despite being natural, ayurvedic treatments contain active ingredients that may interact with chemotherapy medications to worsen side effects such nausea, vomiting, or diarrhea or to lessen the chemotherapy's effectiveness. Some herbs have the potential either increase or decrease effectiveness of contemporary drugs, which could have negative consequences.

Organ Stress: Certain Ayurvedic drugs may put undue strain on the kidneys and liver, which are already exerting a lot of effort to digest chemotherapy, which could result in toxicity or damage to the organs.

Unpleasant occurrences: Adulteration or natural ingredients like alkaloids may result in unpleasant occurrences when using Ayurvedic medications. Heavy metals including lead,

arsenic, and mercury may be present in certain. Lack of Standardization: It can be difficult to guarantee consistent outcomes due to the wide variations in the potency and quality of Ayurvedic medications.

False information: The idea that Ayurvedic medicine is completely safe because it is "natural" is false because "natural" does not always equate to safety, particularly in complicated medical conditions like cancer.

Steroid Adulteration: It has been discovered that certain Ayurvedic medications include steroids, which can cause side effects like weight gain, hypertension, and hyperglycemia that are common with steroid excess.

Use of Banned Substances: Due to their numerous adverse effects, several Ayurvedic medications may contain ingredients that have long been banned from use in contemporary medicine.

Unrealistic Expectations: Because they seek safety and a solution, patients with chronic illnesses may be more susceptible to accidents using Ayurvedic products.

Obstacles and Prospects: Despite its increasing appeal, Ayurveda still has a number of obstacles to overcome before it can be widely accepted and incorporated into conventional medicine:

Lack of uniformity and Quality Control: There are questions over the safety and effectiveness of Ayurvedic products due to their broad variations in quality and uniformity.

Limited Scientific Evidence: Although Ayurveda research is expanding, more thorough clinical studies are required to confirm its effectiveness and mechanisms of action.

Regulatory Concerns: To guarantee the security and caliber of Ayurvedic procedures and goods, precise regulatory frameworks are required.

Education and Training: To create certified Ayurvedic practitioners who can deliver safe and efficient care, standardized education and training programs are crucial.

The following actions are essential to maximizing Ayurveda's potential as a beneficial element of the IKS:

Encourage study: To confirm the effectiveness and safety of Ayurvedic medicines and to comprehend their mechanisms of action, fund thorough scientific study. Set up criteria for quality: To guarantee competence and moral behavior, establish uniform training and education programs for Ayurvedic professionals.

Integrate with contemporary Medicine: Encourage cooperation between practitioners of Ayurveda and contemporary medicine to deliver comprehensive, integrated care.

Increase Public Awareness: To encourage well-informed healthcare decision-making, educate

the public about the tenets and advantages of Ayurveda.

Conclusion

Ayurveda is a fundamental component of the Indian Knowledge System and embodies a long and rich history of providing comprehensive medical care. Ayurveda, which has its roots in ancient wisdom and has been developed over millennia, provides a holistic approach to health and wellbeing that takes into account the connection between the mind, body, and spirit. In an era marked by rising healthcare costs and the increasing prevalence of chronic diseases, Ayurveda's emphasis on prevention, natural therapies, and personalized care holds immense potential for enhancing individual and public health. By addressing the challenges and embracing the opportunities for research, standardization, and integration, Ayurveda can play a vital role in shaping a more holistic, sustainable, and patientcentered healthcare system for the future.

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The Concept of Karma in Indian thought

Indian concept of karma is an extremely profound and advanced philosophical thought that has conditioned the religious, ethical, and social structures of Indian civilization over thousands of years. Karma can be traced to ancient Hindu, Buddhist, and Jain literature and is a generalized principle that can be used in explaining the morality cause-and-effect systems that come under the sphere of activity of the universe.

It is a belief system that is beyond actions and encompasses the ethical outcome of acts, the cycle of existence, and the path to enlightenment. In order to truly know about karma, you need to include its inception, philosophical underpinnings, your function in scheming personal and group destiny, and how it impacts religious freedom. The term "karma" is derived from the Sanskrit path "kri" and means "do" or "action." In effect, karma explains the cause-and-effect processes by which all activity, bodily, verbal or mental, produces an effect which influences a person's future. The teaching is not limited to immediate consequences of activity, but extends to lifespan and is the basis of faith in reincarnation. The notion of karma is directly related to the concept of Samsara, birth and death and rebirth, and is of paramount importance to Indian philosophy. According to

this belief, the soul (Atman) is eternal, with an infinite number of lives depending on the karma accumulated in the past lives.

The nature of action determines the quality of the text of the next life. One of the oldest texts, Rigveda, speaks about moral causality but the karma theory is fully developed in Upanishaden. The Upanishads describe karma as the process by which Samsara controls the soul's path. Selfish deeds put the soul under a lower cycle of rebirth, and selfless deeds performed by replacing them cause spiritual development. Bhagavad Gita, the earliest of Hindu philosophical treatises, offers an explanation of karma and its payoff in terms of exemptions (Moksha). Lord Krishna instructs Arjuna that he must act on his duty (dharma) without stifling the effect and reaffirms selfless action as the means to freedom from within.

This teaching is focused on intentions and attitude in governing the karmic implications of action. Buddhist karma is not associated with an immortal soul but with continuity of consciousness throughout life. According to the Buddha, all action backed by intention (setana) has karmic consequences that affect future lives. Karma law is viewed as a natural occurrence and not one where God intervenes, and an integral part of the four noble truths, an eight-fold path to establish a

system for suffering transcendence and enlightenment (Nirvana).

In contrast to Hinduism, where there is service and ritual obedience esteemed, Buddhism focuses on the attainment of mind purification and the karma doctrine. Karma in Jainism was thought of as an intangible material entity that carries the soul (Ziba) to engage in actions born out of passion and lust. Karmic matter obscures the natural state of the soul, the knowledge of the soul, and bliss, and binds them to the cycle of birth and death. Jain-Weg to exemptions consists of rigorous ascetic practices, non-violence (Ahinsa), and culture of true knowledge, belief and behavior to eliminate accumulated karma and stop flow of new karma. Jain concept of Karma is highly elaborate in the categorization of various types of karma based on its effect on the soul.

Accountability for your actions. It provides a sense of accountability. For because it is presumed that all activities, ideas, and words shall have consequences outside immediate framework. It is a moral assumption regarding causality that promotes such virtues of pity, honesty, unselfishness, yet individuals seek to generate favorable karma and avoid ill fate. But the theory of karma has been criticized on grounds of potential maintenance of societal injustice and suffering as the payoff for previous activities. This is an argument dispelled by modern thinkers and reformers. Karma is also responsible for structuring Indian society's ordering of social and cultural practice. For example, the box system was justified traditionally through the lens of karma, which viewed a person's social status as a result of what he or she had done in the past. The idea was used to maintain social stratification but also fought against attempts at achieving social justice and equality.

Karma also remains a compelling motive force for art, literature, and ritual and thus stories and parables describe karma's operation as ethical instruction for the self and society. Attempts at deliverance (Moksha or Nirvana). Exceptions are the final goal of the human life, i.e., freedom from the cycle of birth and death and realization of the true nature. Selfless action, meditation, and cleansing of karma by the generation of wisdom are the stages to freedom. In Hinduism this is achieved by a yoga and devotion (bhakti) practice, while in Buddhism through the extinction of mindfulness and ignorance and craving. Jainism is non-violence and renunciative as the path to freedom. All the three traditions concur that the vanquishing of karma is a requirement for freeing the soul.

The concept of karma also raises philosophical concerns regarding free will, determinism, and self. If the whole world runs according to the principle of karma laws, then

how much control can a person exercise over his or her destiny? Indian philosophy is a bit more subtle in its answer to this, referencing the coexistence of free will and fate. What results due to previous karma determines the circumstances of present experience, yet there is freedom to cause things to happen in the future by one's own actions and decisions. This creative reading of karma teaches the potential for transformation and growth even in the limits of what has been popular culture and spirituality.

It's generally taken to be a law of cause and effect that can be applied in all walks of life. This modern interpretation may be distinct from the original source, but is the ongoing linking of karma as an ethical law and psychological examination. Evolution and its application in other walks of life. The idea of karma developed with Indian society's development and enunciates a change in the social, cultural and religious desire of the masses. The Vedas during the initial period were concerned with ritual deeds and their immediate effects, but as the thinking grew stronger, the concept of karma refined and was developed with the ethical and moral factors. It was being achieved. The Upanishads expressed immense changes, conveying inner consequences of actions and self-satisfaction. Dharma and karma in Hinduism are closely related to each other. This is due to the fact that good deeds are meant to create good karma and make him spiritually advanced.

The practice of yoga, e.g., ethical realms (Yama and Niyama), is a concrete way of matching his actions with the law of karma and dharma. Similarly, eight-fold Buddhist practices provide an entire map of moral living, mindfulness, and religious self-discipline. This is essentially a requirement for bad karma submerging and enlightening. (Ahinsa) and asceticism describe an extreme dedication to karma suppression. Jains eat austere veggie meals and avoid charity involving getting injured by living creatures, performing charities, and eliminating karma. These are the habits that reflect the actual application of karma in the development of a life style in terms of spiritual ethics and moral virtues. Interpersonal relations and harmony in society are also governed by the law of karma. The awareness of the fact that every action and the interaction of their consequence compel people to act with consideration, sympathy, and respect towards others. Recognizing this creates a sense of duty and social consciousness because individuals strive to perform good karma for themselves as well as for collective reservoirs in society. And yet, the law of karma in current times motivates individuals to live well and act well.

Karma principles teach us about the importance of creating power of action and

good intentions. Whatever that is – quality, green, or social justice – the principles of karmic lead the people to spill from the larger wells and assume responsibility for their mark in the world.

Last but not least, Indian philosophy's karma idea is a deeply rich and strongly significant concept, moral causality, cycle of rebirth, and means of liberation. This is a principle that assumes all action and effect to be interconnected and reminds human beings to be with awareness, responsibility, and compassion. Whether one receives it or does not receive it through the eyes of Hinduism, Buddhism or Jainism.

Karma is the ground of Indian philosophy and provides deep insight into the nature of existence and human meaning and human freedom. His timelessness speaks to

this day in guiding and directing individuals on spiritual paths, both within and outside the Indian subcontinent. The ancient history, ethical implications and application of karma highlights the long-term relationships as the model of ethical existence and psychological critiques. In Indian philosophical thought, karma is the comprehensive law of causality whereby every action creates consequences that impacts one's future life. Enjoining self-responsibility, moral accountability, & greater awareness, compassion, and righteous living,' karma' inspires individuals to strive for liberation from the cycle of repeated birth and death.

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Timeless Cure: Presenting the Significance of Indian Folk Medicine

Ancient and comprehensive traditional medicine systems in India show spirituality, nature, and healing are linked throughout nations. Using centuries-old wisdom, many civilizations have integrated these ancient medicinal techniques into their daily routines. Indian traditional medicine uses herbs, roots, minerals, and rituals to treat physical, mental, and spiritual issues, unlike contemporary medicine. Ayurvedic and Siddha herbal medicines have been spread using regional methods influenced by indigenous flora, oral traditions, narrative practices, and experiential learning to heal various ailments while conserving ecological balance.

Indian traditional medicine goes beyond basic therapeutic methods to include indigenous and tribal cultures' ecological expertise and cultural history. Traditional tribal spiritual rites and plant-based remedies demonstrate a deep understanding of local ecosystems. Unfortunately, modern medicine has rendered many traditional methods obsolete. They defend public health and preserve Indian traditional knowledge by providing ecologically sustainable, cost-effective medical solutions.

The Atharvaveda (approximately 1500 BCE), one of the first medical texts, describes Vedic Indian conventional medicine. This ancient text shows how spirituality and health were intertwined in early Indian civilization through herbal remedies, rites, and incantations. These rituals evolved throughout millennia in response to regional biodiversity, intercultural exchanges, and numerous subcontinental

tribes' needs. This led to a range of healing methods tailored to each social context.

Ayurveda and Unani were written systems, while Indian traditional medicine was oral. Tribal practitioners, local healers, and community leaders passed down knowledge through families or tight communities. By using local resources and adapting to social needs, this oral tradition provided flexible and responsive healing. Folk medicine has helped millions, especially in rural and indigenous communities, find affordable and culturally suitable treatments without professional training.

Indian folk medicine varieties

Many consider Ayurveda the most established and methodologically rigorous form of traditional Indian medicine, but its roots lie in old folk practices before its textual codification. Over 3,000 years ago, Ayurveda focused on balancing the three doshas—Vata (air and space), Pitta (fire and water), and Kapha (earth and water). Each dosha controls psychological and physiological functions; an imbalance is supposed to cause sickness. Herbal medicines, specialized diets, Panchakarma, cleansing, and lifestyle changes like yoga and meditation are Ayurvedic. The Charaka Samhita and Sushruta Samhita support Ayurveda, although its origins are in rural and tribal India's oral traditions and therapeutic methods.

An ancient Indian medical system, Siddha medicine, is widely practiced in Tamil Nadu and

incorporates Ayurveda despite its philosophical roots. Siddhars, ancient spiritual masters known for yoga, medicine, and alchemy, started it. To prevent illness, Siddha emphasizes the equilibrium of Vatha (air), Pitha (fire), and Kapha (water). Herbal treatments, minerals, and animal-derived components may be used to rejuvenate and increase lifetime. Yoga and meditation in Siddha medicine, steeped in mysticism, promote spiritual and physical transformation better than other medicinal systems.

Persian philosophers and physicians, influenced by Hippocrates and Galen, brought Unani medicine to India in the Middle Ages. It developed a cohesive therapeutic approach by combining Arabic, Persian, and Indian medicinal traditions. Unani medicine treats phlegm (Balgham), black bile (Sauda), yellow bile (Safra), and blood. A theory says disrupting this homeostasis causes sickness. Unani therapies include herbal formulations, nutritional management, physical therapy, cupping, and massage. It was originally used as traditional medicine, but it became popular in Mughal India, especially in Islamic areas.

Indigenous knowledge systems of numerous Indian tribal tribes contain unique and diversified folk cures. Knowledge of native medicinal flora, minerals, and animal-based remedies has grown from ecosystem interaction. Tribal medicine combines ceremonies, spiritual healing, and shamanism to emphasize that health is deeply linked to nature and spirit. Northeastern tribes use forest-based herbal remedies, whereas Central Indian Adivasis use plant-based concoctions and traditional incantations and ceremonies. Despite sometimes neglect by big medical institutions, tribal medicine protects

ethnobotanical knowledge that rural populations need for health.

Conventional medications disregarded over time

Some old pharmacological systems in India still exist, although others have declined. Reviving lost pharmaceuticals enhances appreciation of India's medical history. The importance of information for society is highlighted.

Vishachikitsa—Poison Therapy—was a unique treatment method from Kerala. Vishavaidyas are experts at treating venomous snake bites and other toxins with herbs, mantras, and rituals. They weathered other poisonings well. The tested herbalists knew cleansing herbs. Modern antivenom therapies and structured medical care have reduced the need for poison healers.

Mental Health Therapy, or Manasika Chikitsa, treated mental health issues before modern psychiatry. Rituals, herbal medicines, and community support were used to manage mental health issues in traditional India. Music, dance, storytelling, spiritual ceremonies, and therapy are common in many cultures to reduce stress and restore emotional balance. As modern psychiatric therapies have grown and mental health stigma has increased, these culturally rich and community-focused traditions have declined.

Traditional medicine relied on bone setting, especially in distant places. Traditional bone setting treatment Puttur Kattu used herbal pastes, natural splints, and massage to cure fractures and dislocations. Communities in Puttur Kattu hired specialists. Despite their speed and availability, especially in

underserved areas, orthopedic care has outpaced even effective treatments.

Traditional Indian medicine

Tribal people make up a large part of India's population and have honed medical expertise for millennia. Their approaches match their environmental activism and awareness of local wildlife. These cures are generally spoken and tied to indigenous rites and beliefs.

The Santhal Tribe of Jharkhand, West Bengal, Odisha, and Bihar are known for herbal remedies made from local plants. Terminalia arjuna, the Arjun tree, is used for heart issues in women's reproductive health, whereas Asparagus racemosus, Shatavari, is used. The Santhals are known for their bone-setting skills and efficient fracture and dislocation therapy employing ancient massage and herbal pastes.

The Central Indian Gond Tribe invented many novel cures for common ailments. Azadirachta indica (Neem) infusions have antipyretic and immunological effects. These infusions lower fevers. Herbal pastes for cuts and infections use natural antiseptics like turmeric and tulsi to promote wound healing.

Trichopus zeylanicus, or arogyapacha, boosts vitality and rejuvenates the body. The Kerala Western Ghats Kani Tribe's use of this herb has garnered attention. Jeevani, a herbal concoction developed with professionals to boost energy and stamina, uses this plant's traditional use. This proves the value of traditional wisdom in modern medicine.

Indigenous societies' holistic and sustainable healthcare practices demonstrate ecological knowledge and natural cures.

Benefits, and importance

Indian traditional medicine protects biodiversity, cultural identity, and well-being while treating specific illnesses.

Traditional medicine's accessibility and costeffectiveness benefit remote people without modern medical services. Dependence on accessible resources and indigenous vegetation makes it sustainable and community-focused.

Conventional therapy sometimes integrates spiritual, psychological, and physical wellness. This combined approach boosts health and prevents disease.

Traditional Indian medicine dominates its intangible cultural legacy. These traditions preserve cultural knowledge and rituals, providing vital historical insights.

Traditional medicine is crucial to preserving native plants and animals. Understanding the significance of wild species helps communities conserve the environment. Modern pharmacology supplements modern medicine with several clinically proven traditional medicines. Ashwagandha, or Withania somnifera, relieves stress, while Curcuma longa, or turmeric, fights inflammation.

Challenges and Next Steps

Modern society makes Indian traditional medicine difficult to administer, despite its long history.

Due to rapid urbanization, changing lifestyles, and the appeal of new medications, younger generations are abandoning traditional ways. Two groups' age differences hinder traditional medical knowledge transmission.

Oral communication is quickly lost owing to absence of recording. Chronicling and

organizing these events is crucial to their preservation.

Many traditional remedies have potential, but scientific validation is needed to prove their efficacy and safety. Scholars working together bridge the gap between traditional wisdom and modern science.

Protecting indigenous rights over traditional knowledge prevents exploitation and ensures that economic usage of indigenous knowledge benefits them.

In summary, Indian folk medicine emphasizes natural therapies and a wide range of

treatments and is a wealth of knowledge on general health and well-being. Keeping and incorporating this information strengthens global medicine and recognizes various cultures. Traditional approaches may help create more inclusive and sustainable healthcare solutions to address modern healthcare's complexity.

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The Evolution of Indian Dance Form

Development of Indian Dance Formats:

Indian dance is a lively, breathing, historical, dedicated, creative and dynamic art form. It is an

implicit language, an expression of emotions, culture, and spirituality. It has evolved for thousands of years, from rough ritual movements to formal refinement of classical dance forms.

the vibrant vitality of folk dance, and the formal refinement of dynamic modern and modern modes. An elegant embodiment of Bangla godly rhythm, celebration and happiness. These

dances not only spoke, but also maintained tradition, maintained myths and danced as an act

of worship in the temple. And a lively modern era. It survives to political revolutions, foreign invasions, and to become richer and more diverse. This essay follows the development of dance in India and the development of classical dance forms, the survival of popular traditions, colonial influences, and the development of modern and contemporary styles.

Indian Pondan: The Prehistoric Period of Vedic The history of Indian dance dates back to the earliest human society. Even before an organized

society is established; people use movement and rhythm as expressions. From cave paintings

showing dance figures to Vedic texts, to detailed descriptions of dance rituals, it shows that

dance played a central role in early Indian life.

1. Prehistoric dance tradition: early expressions of movement

A. Rock art and cave painting: earliest evidence of dance

Prehistoric rock art is one of the oldest and most known pieces of evidence in India. It constitutes a cave

painting found at the Binbetkarok Accommodation in Madhya Pradesh (30,000 BC) shows the

figure dancing. These expressions indicate that early people use dance to celebrate the victory of hunting, seasonal changes, or the appearance of collective ritual, social and spiritual life.

B. Tribal and Animistic Dance Format

Old Indian tribal communities danced, mimicking natural phenomena such as animals, birds, fire

and water. These were intimately present in their animistic tradition, in which nature and spirit

ruled all aspects of life like the Santhals, Gonds and Bhils, most tribal dances that can be observed today have the ruins of these early rituals.

C. Relationship between dance and shamanism practices

In older societies, shamans performed dance rituals to induce spirits, heal illnesses, and speak

to God. Trance dance, rhythmic drums and repetitive gestures were typical of these rituals. These practices probably contributed to later temple rituals and classical dance styles, with gestures and expressions becoming a means of communicating with the gods.

2. Indus Valley Civilization Dance (2500 BC, 1500 BC)

Indus -Valley -civilization was one of the earliest urban cultures in the world.

Archeological evidence shows that dance is an important part of their religious and social life.

A. The Girl of Mohenjo Daro's Dance

The best-known dance proof of this period is the bronze statue of Mohenjo Daro's "dance girl"

(circa 2500 BC). With elegant and assertive attitudes, the sculpture shows a refined understanding of body movements and rhythms. Scientists assume that Indus danced for

entertainment, religious rituals, or social celebrations.

B. Dance Images

The figures and scenery of the Indus Valley Terracotta show masked dancers showing performances that include story, drama and ritual dance traditions. These artistic ruins show

early structured dance forms. It is probably the basis of the classic tradition that followed.

3. Vedic Period (1500 BC, 500 BC): Dancing as a sacred ritual at the beginning of the Vedic Period, making dance more formal and ritualistic, directly connected to religious rituals.

A. Dance in the Vedic Scriptures

The Rigveda, Samaveda, Yajurveda, Atharvaveda have indications dancing in hymns, temple

settlements, and rituals of the victims. Samaveda, who deals with musical songs, shows that

dance and music enhance the spiritual effectiveness of Vedic rituals.

B. Devadasis and the Temple Dancer

The tradition of Devadasis (women in the service of temples by dance and music) must have

begun at this point. Dance was a common form of worship of the gods, especially at the Grand

Temple Festival. These have evolved into classic dances such as Bharatanatyam, Odissi and

other.

C. Ritual Dances for Gods

Vedic texts describe dances listed for honorary gods such as Indra, Agni, Varna. The myths of heavenly dancers and Apsara were also created during this period. These sacred entertainers,

located in front of the courtyard of Indra, the king of God, were assumed to impress Indian dances and later have dramatic storytelling techniques.

4. The influence of Natia Shastra: The First Formalization of Dance (200 Bc. 200 Gregorian calendar. As summarized later, the principle was influenced by the Vedic dance tradition.

A. Bharata Munis Natya Shastra: First Paper on Dance

Dance rules, drama rules, and codified rules that define an overview of Indian classical dance. It

included a variety of attitudes, gestures, expressions and motor patterns that still influence

today.

B.The notion of Rasa and Bhava

A major contribution of the Natya Shastra is the Navarasa, nine emotions that lie at the center of

dramatic composition in Indian dance. These include:

Shringara (Love)

Hasya (Laughter)

Karuna (Compassion)

Raudra (Anger)

Veera (Heroism)

Bhayanaka (Fear)

Bibhatsa (Disgust)

Adbhuta (Wonder)

Shanta (Peace)

The Mudra (hand pose) and Abhinaya (expressive gestures) classification has its origins also in

ancient temple dances and Vedic rituals.

5. Old Indian in Ancient Indian Epics: Ramayana and Mahabharata

A. Dance in the Ramayana

The Ramayana describes various court dances performed in Ayodhya and Lanka. Sita and the women of Ayodhya's royal court are depicted engaging in festive dances. Additionally, Lord Shiva's Tandava, the cosmic dance symbolizing both creation and destruction, is a striking element of the epic.

B. Dance in the Mahabharata

The Mahabharata references Krishna's Ras Leela, where he dances with the Gopis in Vrindavan. This dance represents devotion and spiritual unity, later influencing several classical

dance forms, particularly Manipuri and Kathak.
6. The Philosophical and Spiritual Nature of Ancient Dance

A. Dance as a Spiritual Experience

In ancient India, dance was more than an art form—it was a path to divine realization. Dancers

were believed to merge with the divine, expressing devotion through intricate movements and

emotive expressions.

B. The Cosmic Dance of Shiva

The Nataraja (Dancing Shiva) sculpture represents the cosmic cycle of creation and destruction.

This philosophy reinforced the belief that the universe itself moves in rhythmic cycles, mirroring

the art of dance.

1. The Rise of Classical Indian Dance Forms
The formalization of Indian dance as a
structured art form was significantly

influenced by the

drama,

Natya Shastra, a Sanskrit treatise written by Bharata Muni between 200 BCE and 200 CE. Often referred to as the "fifth Veda," this text provides an extensive analysis of dance,

music, and stagecraft. It categorizes dance into three primary forms:

Nritta (pure dance) – technical movements performed without narrative expression.

Nritya (expressive dance) – a combination of movement, emotions (Bhava), and aesthetic experience (Rasa).

Natya (dramatic dance) – storytelling through gestures, expressions, and movements.

Following the principles of the Natya Shastra, various classical dance forms emerged, each deeply rooted in regional traditions.

1. Bharatanatyam: The Temple Dance of Tamil Nadu

Bharatanatyam, considered one of the oldest Indian classical dance forms, flourished in the temples of Tamil Nadu as a devotional practice. This dance style is known for its precise geometric poses, intricate footwork (Tatkar), and expressive hand gestures (Mudras).

During British colonial rule, Bharatanatyam faced significant decline as temple rituals were suppressed. However, in the 20th century, Rukmini Devi Arundale played a crucial role in reviving the dance, redefining it as a respected performance art.

2. Kathak: The Storytelling Dance of North India Originally a temple dance that narrated Hindu epics, Kathak evolved significantly under Mughal patronage. Persian and Central Asian influences introduced elements such as flowing

costumes, rapid spins (Chakkars), and a refined courtly aesthetic. Today, Kathak exists in both its traditional Hindu temple form and its Mughal-influenced style, reflecting its rich and dynamic

history.

3. Odissi: Odisha's Dance of Devotion

Odissi is characterized by fluid, curvilinear movements and sculptural poses reminiscent of

Odisha's temple carvings. Initially performed as a religious offering at the Jagannath Temple by

Maharis (temple dancers), Odissi gradually faded over time. However, it was revived in the 20th

century by Kelucharan Mohapatra and other dance pioneers.

4. Kathakali: The Grand Dance-Drama of Kerala Kathakali is a highly dramatic and theatrical dance form that employs elaborate facial expressions (Navarasa), intricate makeup, and dynamic movements to narrate stories from Hindu epics. Dancers undergo rigorous training for several years, mastering over 500 Mudras

(hand gestures) used to convey meaning.

5. Other Classical Dance Forms: Kuchipudi, Manipuri, Mohiniyattam, and Sattriya Several distinct classical dance styles developed in different regions of India:

Kuchipudi (Andhra Pradesh) blends dance, dialogue, and drama.

Manipuri (Manipur) features elegant circular movements and themes of devotion.

Mohiniyattam (Kerala) is a graceful, feminine dance style representing love and spirituality. Sattriya (Assam), introduced by Vaishnav saint Srimanta Sankardev, integrates dance with

devotional storytelling.

Colonial Suppression and Post-Independence Revival

Indian classical dance suffered a decline during British colonial rule. Bharatanatyam and Odissi,

in particular, were deemed "immoral" due to their association with temple Devadasis, leading to

widespread suppression. While folk and tribal dances continued in rural areas, they lost significant patronage.

After India's independence, cultural revival movements led by figures like Rukmini Devi Arundale, Kelucharan Mohapatra, and Birju Maharaj restored classical dance to its former prestige. Institutions such as Kalakshetra were established to preserve and promote these art forms.

Modern Indian Dance: Bollywood and Beyond The rise of Bollywood brought a new transformation to Indian dance. Bollywood choreography

blends classical, folk, hip-hop, and contemporary elements, making it one of India's most

globally recognized dance styles.

Choreographers like Shiamak Davar, Terence Lewis, and Aditi Mangaldas have pioneered contemporary dance fusions, ensuring that Indian dance remains relevant in the modern era.

Conclusion

Indian dance, shaped by history, spirituality, and artistic evolution, remains a vibrant and dynamic tradition. From the sacred temple dances of ancient India to the international stage, it

continues to captivate audiences, seamlessly blending tradition with innovation. Whether

through the rhythmic footwork of Kathak or the energetic beats of Bhangra, Indian dance remains a testament to the country's rich cultural heritage.

-Sakshi Fourth Year B. Pharm. Fulware,

Vedic literature and its influence on Indian knowledge system

Indian Knowledge Tradition finds deep roots in imparting students their heritage to allow them a solid sense of identity and pride of belonging to a culture. It supplements modern learning by offering comprehension of human society, knowledge, and traditions and thus making the learning process meaningful. Beyond curriculum, education is crucial in shaping wise individuals who adopt moral principles, patriotism, and social duty. Education is also a vehicle for social reform. It must change with the progress of time, evolving along with modernization while not losing India's cultural and spiritual heritage. The Vedic practices are detailed by the Brahmanas, while Aranyakas and Upanishads touch upon philosophy and spirituality. Ancient Indian learning was highly influenced by the Vedic system and played a key role in shaping ethics, social values, and spiritual practices. The period between 2500 BCE and 500 BCE is known as the Vedic era when Indian society was more or less governed by Vedic norms. They are not just religious books but collections of rare intellectual, spiritual, and practical knowledge. The influence of the Vedic scriptures permeates into areas of studies into fields of fields of research in such fields of studies such as governance, astronomy, mathematics, medicine, philology, philosophy, shaping the pillars of Indian thought and civilization. Depth and influence of Vedic texts in Indian bodies of knowledge over centuries are elaborated throughout the essay.

Vedic literature has played a significant role in shaping India's intellectual and cultural heritage. The Rigveda, the oldest of the four Vedas, contains hymns that explore cosmology, nature, and divine forces, laying the foundation for early philosophical thought. The Yajurveda provides detailed instructions on rituals and sacrifices, influencing religious societal customs. practices and Atharvaveda brings a practical touch to Vedic wisdom. It deals with everyday concerns health, healing, protection from negativity, and social customs. Many of its teachings laid the foundation for Ayurveda, India's ancient medical system, showing how the Vedas were deeply connected to daily life. The Rigveda, the earliest of the four Vedas, is primarily a hymnal in praise of multiple gods but is also filled with descriptions of cosmology, metaphysics, and social etiquette. Up to date, Vedic philosophy remains the basis of yoga, meditation, and mindfulness practice widely practiced today as the best positive practices globally. Apart from philosophy, Vedic texts were the focal subject of the history of linguistics and Sanskrit grammar.

There is advanced poetry and complex metres in Rigveda, which more than adequately demonstrates a very developed knowledge of the fundamental aspects of phonetics and patterns of language. Panini, the illustrious Sanskrit grammarian, codified Sanskrit in his work Ashtadhyayi, which was immediate inspiration of the Vedic Sanskrit. His work formed the foundation of linguistic sciences that made Sanskrit a most scientifically written

language of the world. The grammatical schools developed out of the Vedic period influenced the science of language not only in India but also computational linguistics and modern artificial intelligence. The Sulbasutras, the appendices of the Vedas, possess geometrical concepts before Greek mathematics.

They describe the Pythagorean theorem hundreds of years before Pythagoras and possess mathematical computations for building altars with precise measurements. The concept of zero, decimal points, and largescale numerical arithmetic operations are in Vedic literature, which serve as precursors to later mathematical developments by Indian mathematicians such as Aryabhata and Brahmagupta. Similarly, astronomy material found in the Vedas also provide accounts of planetary motion, eclipses, and calculation used later in texts like the Surya Siddhanta and also Varahamihira, Medical and health activities in India also have their roots in the Vedas, particularly the Atharvaveda, where surgery, medicines, and treatment procedure are discussed. Ayurveda's most ancient written texts, Charaka Samhita and Sushruta Samhita, have their origin in the Vedic systems.

Sushruta, whose book title is referred to as the "father of surgery," described methods of surgery, including plastic surgery, long before modern medicine started. Ayurveda's philosophy of equilibrium learned in physical humors (Vata, Pitta, Kapha) and herbal medicines by using food, meditation, and yoga still influences today's wellness trends throughout the world. The Vedic scriptures also influenced political science administration. The theory of Rajadharma or the royal duty is developed in detail in the Vedas and further elaborated in treatises like the Arthashastra of Kautilya.

The Vedas emphasize the king's duty to uphold justice, safeguard his people, and govern in alignment with dharma. The mention of Sabha and Samiti, two significant councils in the Vedic texts, indicates the presence of early democratic institutions in ancient India. The Vedas highlight the king's responsibility to ensure justice, protect his people, and rule fairness and righteousness. references to Sabha and Samiti, two important councils, suggest that democratic principles existed in ancient India, allowing for collective decision-making and governance. These values continued to shape Indian systems of governance from the Mauryan and Gupta empires through to modern constitutional systems. Aside from that, Bharata's Natya Shastra, which forms the foundation of Indian dance and drama, was formulated out of Vedic ritual and oral recitation culture. Veda study, yoga, Ayurveda, and Sanskrit studies have seen a resurgence in the past few years all over the world.

Scientists have explored quantum physics concepts in relation to Vedantic philosophy, and AI researchers have studied Panini's grammar for computational models. The Indian educational system, given the worth of Vedic learning, has now included Vedic Mathematics and studies of Sanskrit in contemporary courses. Even in business and management, Vedic ethics, cooperation, and decision-making knowledge is being utilized to manage firms and organizational psychology. Despite enriching Vedic literature to a great degree, maintenance and explanation of the

scriptures have been problematic. Vedic knowledge was transferred for centuries in oral tradition, but after the decline of Sanskrit education, the majority of the scriptures are beyond the grasp of the common man. Gurukul, ancient Indian system of learning, depended highly upon Vedic knowledge. The shishyas resided with the gurus in Gurukuls and studied composite courses such as philosophy, reasoning, astrology, medicine, literature, and moral science. Skill testing, value-based self-self-regulation, and reflective judgment responsibilities were columns on which it operated, all this being recaptured back by learning processes today.

Preoccupation today with lifelong learning, one-to-one mentoring, and interdisciplinarity—these pillars are of education reforms globally—are a reminder of Vedic pedagogic practice. Vedic texts' influence is also seen in Indian legal theory and Indian legal tradition. The Dharma Shastras, evolved from the Vedic usage, were the keystone of classical Indian law. The works, i.e., Manusmriti, Yajnavalkya Smriti, Narada Smriti, were manuals to individuals, families, and kings. Purposes such as justice (Nyaya), duty (Dharma), and moral duty were ensnared in legal controversies. To date, various features of Vedic law continue to prevail over Indian law, most prominently the organization of individual law, morality, and community mechanisms of adjudication. The emphasis placed in contemporary legal systems on natural justice, restorative justice, and dispute resolution can be seen in the Vedic system. The second Gargantuan contribution that the Vedic literature provides is to agriculture and ecoliving. The Vedas are replete with reference to methods of agriculture, land conservation,

water conservation, and planting according to seasons. Krishi Parashara refers to cropping rotation, natural manures, and irrigation methods in accordance with contemporary sustainable agriculture. The philosophy of Valuing of Nature and Rta (cosmic order) developed by the Vedas has a natural inclination towards nature equilibrium which annoys contemporary environmentalists.

Ayurvedic farming modeled on the Vedic practice with Vedic wisdom in conjunction with nature farming is greatly sought after as an alternative green revolution to chemical cultivation. The influence of the Vedas has also crossed geographical boundaries, and its influence spread to a vast number of other cultures and fields of study beyond India. Comparative thinkers have contrasted Vedic thought with ancient Greek thought, i.e., Plato, Pythagoras, and Aristotle. Contact of Indian and Middle Eastern, Persian, Chinese, and European cultures in pre-modern times disseminated Vedic mathematical ideas. medical remedies, and philosophical notions hither and yon. Current quantum physicists, neuroscientists, and psychologists are still inspired bγ Vedantic wisdom consciousness, cognition, and unity of life. This is a sign that Vedic wisdom is still being applied in scientific theory in contemporary times. As the internet is an ancient custom, the transfer and conservation of Vedic literature have new vistas. In the last few days, institutions and scholars are attempting to conserve and spread Vedic wisdom. The older works are being reproduced, online learning facilities for Sanskrit are being established, and an attempt is being made to synchronize Vedic knowledge with the research being conducted currently. Institutions like Bharatiya Vidya Bhavan,

IGNCA, and universities all over the world play a key role in incorporating these ancient texts into the modern world by using modern science and technology. Sanskrit translation facilities using artificial intelligence, Vedic research data bases, and open-source study materials are also making the ancient wisdom accessible for the next generation.

The Vedic texts are not merely historical texts; they are an eternally timeless fountain of knowledge that continues to influence every domain of life, ranging from science and philosophy to administration, jurisprudence, education, health, and nature conservation in

India and the rest of the world. If translated and applied in the current context, Vedic wisdom will be able to heal medical diseases, protect nature, rule the government, and bring peace among citizens in the modern world. With more and more researchers and practitioners finding and learning about Vedic wisdom, it will always be a source of inspiration and guidance for human beings.

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The Science of Meditation in Indian Philosophy

The science of meditation in Indian philosoph y is deeply rooted in the old traditions of Hind uism, Buddhism and Jainism, among other thi ngs. Meditation (or Diana) is seen not only as a spiritual practice, but also as a scientific met hodology for understanding the mind, conscio usness, and reality itself. Here is a breakdown of the various philosophical and scientific asp ects of meditation in these traditions: Soul) and Brahman (the highest, unchanging reality).

The goal of Hindu meditation is to achieve the ultimate unity of the individual self with the u niversal self. This is particularly highlighted in the Vedic tradition, especially in the Upanisha den and Bhagavad Gita. Vedanta and Meditati on: According to Vedanta, meditation is a way to transcend the limits of the body and mind t o experience the nondouble nature of reality directly. The famous Advaita Vedanta Philosop her Adi Shankaracharya argues that meditatio n shows that the essence of the self is identica I to the Brahman, the unchanging reality behi nd all phenomena. Meditation is considered a technique to eliminate the realization of the la yers of ignorance (Avidya) and Inana (selfknow ledge).) As part of the eighth path (Ashtanga Y oga), it leads to the suspension of mental fluct uations (Chitta Vritti Nirodha) and the achieve ment of mental liberation (Moksha). Diana in t he Patanjalis system is a constant, uninterrupt ed concentration in a single focus that ultimat ely leads to an object of thought and a state of deep meditation and unity.

Scientific Understanding of Yoga: Modern inte rpretations of yoga and meditation often highl ight their psychological and physiological ben efits. Research suggests that regular meditation can lead to an increase in grey substances in the brain, a decrease in levels of stress, and i mproved emotional regulation. As detailed in Yoga Philosophy, pranayama practice (respira

tory control) plays an important role in calmin g the nervous system and increasing intellectu al clarity.

To achieve Nirvana, the attitude of suffering fr om the cycle of birth and death and the ultim ate liberation (Samsara). Buddhist meditation techniques are often more systematic and diff erent, as they are supposed to develop focus, insight and wisdom. It usually involves focusin g on a single object (such as breathing, mantr as, visual objects), with the aim of bringing spi ritual clarity and inner silence. Theravada Bud dhism emphasizes the mindfulness and cultur e of insight into the true nature of existence. V ipassana meditation involves the observation of the unsatisfactory and unsatisfactory selfle ss nature of all phenomena (Anicca, Dukkha, A natta). It demonstrated the cognitive benefits of Buddhist meditation. Mindfulness meditati on in particular has been shown to improve at tention, emotional regulation, and cognitive fl exibility. It is also associated with structural ch anges in the brain. B. Increased grey matter in areas associated with sensory processing, att ention, and selfregulation. The heart of the go al of liberation (moksha), the complete end of karma, and the ultimate realization of its pure nature. Jain Meditation emphasizes mental dis cipline, ethical living, and nonviolence (Ahims). Jain contemplative practices are often bound by asceticism, where spiritual discipline and c ontrol over hope are considered essential to s piritual progress. Nonreactive. From a scientifi c perspective, these practices contribute to re ducing stress and emotional stability, improvi ng the ability to concentrate and concentrate.

Kundalini Meditation: Shabiism of Energy Growth) and Tibetan Buddhism. It is shown as a kundalini and aims to awaken the resting ment al energy enveloping at the base of the spine.

It guides the river (life force) of Prana through the chakra (the energy center of the body) to r each the crown of the head, which leads to spi ritual awakening and selfskilling. Clarity and e motional balance. However, the intensive nat ure of experience may be related to psycholog ical consequences and may require careful gui dance. Improve mental health. Modern neuro science has been able to examine some of the allegations of ancient Indian philosophy regar ding the benefits of meditation. Confidence in the prefrontal cortex, amygdala, hippocampus , etc. Regular meditation practices were also a ssociated with increased density of gray matte r, which could lead to improved memory, deci sionmaking and emotional control. . It is also associated with lowering blood pressure, impr oving immune function, and improving sleep quality. These findings correspond to ancient I ndia's understanding of the ability to meditate to achieve a holistic well through harmony of the mind and body. Purpose and approach.

Let's look at key practices that are central to H induism, Buddhism and Jainism.

Bhagavad Gita

A. Dhyana of Bhagavad Gita is presented with meditation as an instrument for achieving spir itual clarity, emotional equality and spiritual w isdom. Lord Krishna advises Arjuna to practice meditation to keep the senses in control and to stabilize the mind. Meditation practices can help you break away from life's duality (e.g. s uccess and failure, pain and joy, etc.) and peac e. About the idea of carefully performing actions without being overly connected to the outcome. This is a form of meditation in actions that are encouraged to meditate while dealing w ith the world.

b. Patanjalis Yogastras Dyana and PranayamaPatanjalis Yoga - Strath. It is explained in the 8th path of yoga. However, you need to practic

e pranayama (breath control) and dalana (concentration) before reaching a deep meditation state. Breathing is considered a connection between the body and mind, and practitioners can calm a problematic mind. Pranayama is in tended to help clean the nervous system, improve mental clarity and improve durability. Dig estion "Answer). Visual symbols found). This is a preliminary step before Dhyana or meditation, and this is an uninterrupted flow of concentration.

c. Vipassana Meditation: Contradictions, as ta ught by The Buddha and practiced in Therava da-Buddhism

Insights into Vipassana meditation is a techniq ue that develops deep insights into the nature of reality. It is often considered mindfulness meditation. Mindfulness meditation observes the body and mind in a non-reactive way, and Anatta (non-

self). By carefully observing physical sensation s, thoughts and emotions, practitioners devel op insights into the temporal and nonnatural of all phenomena. Effects on reducing depression, anxiety and stress. Neuroscientific research suggests that mindfulness meditation increases prefrontal cortex activity (involve s executive function and emotional regulation), and amygdala activity (in combination with f ear and emotional reactivity).

d. Transcendental Meditation (TM)

Transendental Meditation (TM) is not directly r ooted in old texts, but it is a popular techniqu e that originates in the Vedic tradition. It impli citly includes a mantra for overcoming normal thoughts and experiencing pure awareness. T his is considered a state of "uniform consciou sness." In this state, individuals experience th emselves as part of a uniform whole, surpassing the nature of reality dualism. Improved cognitive function. Research shows it reduces blo

od pressure and heart rate, improves brain co nsistency, and promotes a calm and relaxed s ensation.

e. Kundalini Meditation: Awakening of Spiritua I Energy

Kundalini Meditation focuses on awakening p otential spiritual energy, wrapped around the base of the spine and often presented as a sn ake. By activating energy through various prac tices, the goal is to experience a deep spiritual awakening. Through meditation, breathing w ork, and singing, practitioners work to awaken the kundalini energy, which rises through the chakra and peaks in a state of increased spirit ual awareness. The spiritual and esoteric prac tices associated with kundalini meditation hav e been shown to promote relaxation and redu ce stress and improvement in selfconfidence. Become it. The psychological consequences of meditation have become a central area of scientific testing in recent decades.

Selfregulation and emotional intelligence: Me ditation helps individuals develop greater em otional intelligence, particularly when it comes to self-

regulation. By focusing the mind and calming the emotions, they can respond carefully to st ressors rather than impulsively. This is demon strated in practices such as Vipassana. Here, we develop deep awareness of emotions with out binding or disgust. In particular, mindfuln ess meditation has been shown to improve m ental health by promoting self-

competition, reducing anti-

min animals, and promoting positive emotion s. For example, regular practices of mindfulne ss meditation were associated with improved cognitive performance, improved manageme nt functions (such as decisionmaking and problem solving), and increased creativity.

Physiological Effects of Meditation

We recognize the Indian philosophical system that the spirit and the body are closely related . Meditation has deep physiological benefits a nd promotes general wells and physical healt h. This will lower your blood pressure, slow yo ur heart rate, and reduce your physical tensio n. These effects contribute to improving cardi ovascular health and lowering the risk of stres s-related diseases.

Neuroplasticity: Meditation has been shown to promote neuroplasticity. For example, research on longterm meditators has shown thickening of the prefrontal cortex (the cause of decisionmaking and higherorder thinking) and an increase in grey substances in areas related to learning and memory.

EEG Pattern: Meditation showed a shift in EEG activity. In deep meditation states, brain wave patterns often move to more relaxed states s uch as alpha and theta waves associated with deep relaxation, creativity, and improved lear ning. Meditation in Indian philosophy is not a t ool for improving mental health or achieving p hysiological balance. It is a transformative pra ctice aimed at waiving release. Through medit ation, the binding power of ego and material desires is transmitted. This ultimately achieve s the essence of the self (Atman) as a god (Brahman) or something with liberation from all c almic animals.

Nirvana in Buddhism: In Buddhism, meditatio n leads to the realization of Nirvana of desire, hatred and deception. Maintaining mindfulne ss and insight will free you from causes of suff ering and enlightenment. Old Vedic Indian tra ditions, Upanishaden, Yoga Strah, or Buddhist texts describe meditation not only as spiritual discipline, but also as a deep science of self-control.

Modern science has increasingly examined these old teachings and demonstrated that med

itation has a transformative effect on mental, emotional and physical wells. It provides insig ht into overall health, as well as the nature of consciousness, self-confidence and human experience.

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The Role of Indian Alchemy (Rasa Shastra) in Chemistry

The alchemy has always have been major influence in development in chemistry, where western one focus on transformation of base into gold, we were more concerned with holistic and practical approach. Inspired by Ayurveda not only confined to purification but also use in formulations, focusing on enhancing therapeutic efficiency metals and minerals and use for human benefit. Advanced techniques such as distillation, sublimation were developed. Indian alchemist believe that they can also be used as medicines, this was prevalent among natha siddhas and tantric practitioner's they also incorporate spiritual and mystic elements into work, treating substance as scientific as well as divine. Metals like mercury were considered sacred. Mercury, though toxic in its raw form, was considered to possess rejuvenating and life-extension properties if processed properly. approach has its influence on material science, nanotechnology. of these Many explored techniques by researchers today to use it to their full potential. The wisdom of Rasa Shastra not only shaped early scientific practices but continues to inspire innovation in contemporary chemistry and medicine. Major Contributions of Rasa Shastra to Chemistry: Indian alchemists developed a range of chemical techniques that later became fundamental to modern chemistry. The technique sublimination knowns as shodhna to purify sulfur, arsenic, now applied for volatile oils, calcination known as marana use for metals and minerals which were converted to fine powder called bhasma. Distillation or patna was used to extract essential substances from plants. They also developed crystallization and

precipitation to obtain purified salt. These advances not only help to understand chemical reactions but also had long lasting application in industrial chemistry. Indian metallurgist also contributed in production of brass, bell metal, and high-quality steels like wootz steel which later also influenced European metallurgist. A great example is the Iron Pillar of Delhi, dating back to the 4th century CE, which has resisted corrosion for over 1,600 years.

A significant contribution was seen in medicinal chemistry, key practice was bhasma therapy which involved extensive purification techniques and controlled incineration to convert heavy metals in fine powders which are bioavailable carefully formulated to ensure their safety and effectiveness in various diseases. Swarna Bhasmawhich is also called as (gold ash, was valued for its rejuvenating properties, also believed to enhance immunity, cognition. Similarly, Rajata Bhasma (silver ash) was known for its antimicrobial and cooling effects, which was beneficial for inflammatory conditions and infections. Another important part of Rasa Shastra was the use of prepartion from mercury. It was regarded as a divine substance with the potential to purify the body and extend life when used properly. Highly sophisticated detoxification techniques were developed subjecting mercury to a series of purification steps using herbal extracts and other minerals to eliminate its toxic effects. These processed mercury compounds were then included into medicinal formulations which were believed to enhance vitality, support mental clarity, and treat chronic diseases. Rasayana therapy, which is a branch of Ayurveda focused on rejuvenation and

longevity, and relied on these mercurial preparations to promote overall well-being of health. Indian alchemists also had expertise in the integration of herbs and minerals beyond metal base which was leading to the development of unique formulations called Rasaushadhis. These herbal mineral medicinal formulations combined the therapeutic properties of both plant ingredients and purified minerals, which further helped in creating potential remedies for various health conditions, which included digestive disorders and respiratory ailments to neurological diseases. There was careful balancing of elemental properties of herbs and metals, Indian physicians were capable of creating long-lasting, highly effective treatments that are still used today in the world of Ayurveda. In recent years, many of these ancient formulations are subjected to modern scientific studies, where researchers analyse their pharmacological potential and potential bioavailability. Studies have revealed that certain Bhasma preparations also contain nanoparticles, increasing interest in their potential applications in nanomedicine and targeted drug delivery. This growing scientific validation underscores the advanced knowledge of Indian alchemists, whose contributions continue influence to pharmaceutical research and medicine.

The techniques which were developed in Rasa Shastra had a long-lasting impact on modern chemistry, pharmacy. Indian alchemists had an advanced knowledge of oxidation, reduction, and the transformation of various substances before European evolution. The concept of metal transmutation in Rasa Shastra closely aligns with discoveries in metallurgy, making it an early start for modern chemistry. Additionally, it also included processes such as melting, purification, and alloying, which were important in Indian alchemy, and significantly

played a crucial role in shaping industrial metal working techniques. The Ancient Indian texts also describe various laboratory instruments that very closely resemble modern furnaces, and crucibles, showcasing a sophisticated understanding of laboratory chemistry. These contributions not only influenced traditional practices but also helped in laying the foundation for advancements in chemical and material sciences. In colonial period, Indian alchemical traditions were declining due to the suppression of indigenous knowledge and the growing dominance of Western medical and chemical sciences. But in recent years, interest is rekindling in Rasa Shastra, with Ayurvedic research institutions and modern laboratories increasing, exploring the efficacy of ancient formulations. Numerous Scientific studies are being conducted to analyse these Bhasma preparations, which further assess their safety, bioavailability, and pharmacological effects. These alchemical formulations are also now investigated being for their potential applications in nanomedicine and targeted drug delivery system. The metallurgical techniques from Rasa Shastra have also inspired modern advancements in material sciences and nanoparticle technology, highlighting the continued relevance of ancient Indian knowledge in contemporary scientific research.

The Indian alchemy, or Rasa Shastra, had significant influence on chemistry is, helped in shaping development of metallurgy, pharmacology, and other chemical techniques before modern chemistry emerged in the form of scientific discipline. We know Western alchemy primarily focuses on mystical transformations converting the base metals into gold, the Indian alchemy approach was on broader note and more practically aimed at enhancing human health, refining materials, and understanding the nature of substances.

The extensive knowledge and experimental techniques contributed in developing Rasa Shastra and laid the foundation for advancements that continue to impact scientific fields today. The Indian scholars were profound in chemical processes such as distillation, calcination, sublimation, and crystallization, over centuries.

These techniques were not only theoretical but were actively applied in various fields, including metallurgy to medicine., for example the Distillation method, was widely used to extract essential oils from plants, a practice that remains important till today pharmaceutical and cosmetic industries ., the process of calcination, where metals and minerals were subjected to controlled heating to convert them into fine powders (Bhasma), was a precursor to modern material science techniques used for purifying various substances and enhance their activity. Rasa Shastra is an interesting field of integrating chemistry with medicinal science, making significant contribution. The ancient wisdom of Rasa Shastra help in bridging the gap from past to the future. By incorporating ancient knowledge with modern scientific research and methodology, it has the potential to spark various innovations in medicine, material science, and pharmacology. It mainly revolves around purification, transformation, and the therapeutic use of metals and minerals in rasa shastra principles that have been found relevance in many fields like nanotechnology, bioengineering, and advanced drug delivery systems. As we embrace this ancient wisdom and knowledge of the Rasa Shastra and combine it with the methodology of modern science, we are not only preserving an ancient tradition or knowledge but also unlocking new doors to the discovery. This integration of traditional principles with new modern day research methodologies has the potential to revolutionize various scientific fields, which particularly include chemistry, pharmacology, and human health.

Let's Imagine if there was a world where this crucial purification techniques of Rasa Shastra constantly inspire new ways to refine and pharmaceutical molecules enhanced compound's and, making them more effective with lesser side effects. Or when its emphasis on transformation which leads to development of novel biomaterials and products that smoothly integrate with the human body for generating the medicine. These intricate processes were once used by Indian alchemists to enhance the therapeutic potential of metals and minerals which could provide valuable contribution into modern day drug delivery systems, perhaps could also even contributing to the development of nanobased therapies that target various diseases with unprecedented precision. When we look Beyond medicine, Rasa Shastra's has also influence could extend into material science and engineering, offering innovative approaches to the point sustainability, metallurgy, and bioengineering. The ancient practice of metal purification and alloy formation might hold the key to developing stronger, and the lighter, and more durable materials for industries ranging aerospace to biomedical implants. By studying how many ancient alchemists manipulated matter at a microscopic level, researchers today might uncover various new ways to engineer substances with enhanced properties, ultimately pushing the enormous boundaries of what is scientifically possible. The knowledge which is the passed down through generations isn't outdated; rather, it holds the seeds of future breakthroughs. As we here are continue to explore the synergy between the two ancient alchemy and modern science, we may find that the most

revolutionary discoveries of the tomorrow have their roots in the wisdom of our lives the past.

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Indian Contributions to Agriculture: The use of Panchagavya

Agriculture has long been the backbone of India's economy, contributing significantly to employment, food production, and rural development. For centuries, traditional agricultural practices in India have been centered around sustainability, ecological balance, and the conservation of natural resources. India's rich agricultural heritage emphasizes the use of natural inputs, which help preserve soil fertility and ensure longterm productivity. One such significant contribution from India to sustainable farming is the use of Panchagavya—a potent bioenhancer derived from five cow-based products. Panchagavya plays a crucial role in organic farming, improving soil fertility, promoting plant growth, and enhancing disease resistance. This essay will explore in greater detail the composition, historical significance, benefits, and modern applications of Panchagavya in Indian agriculture, highlighting its potential to revolutionize sustainable farming practices.

The word "Panchagavya" comes from the Sanskrit words "Pancha" meaning five, and "Gavya" meaning derived from a cow. As the name suggests, it is a mixture of five products obtained from cows, which together form the foundation of this traditional agricultural formulation. These five cow-derived substances are cow dung, cow urine, milk, curd, ghee.

Cow Dung known for its rich content of beneficial microbes and organic matter, cow dung is essential in improving soil structure. It supports microbial diversity, which in turn enriches the soil ecosystem by facilitating nutrient cycling, enhancing water retention, and increasing soil fertility. Cow urine contains high levels of nitrogen, phosphorus, and potassium, which are essential plant nutrients. It also has antimicrobial properties, making it an effective bio-pesticide and growth promoter. Cow urine helps to maintain soil health by controlling harmful pathogens while encouraging the proliferation of beneficial microbes.

Milk serves as a source of essential nutrients, especially proteins, vitamins, and minerals, which stimulate microbial activity and enhance plant immunity. Its rich nutrient profile makes it an excellent addition to Panchagavya, improving plant health and overall growth. Curd contains beneficial lactic acid bacteria, which help in improving the plant's resistance diseases and enhancing nutrient absorption. These bacteria promote the breakdown of organic matter in the soil, making nutrients more readily available to plants. A clarified form of butter, ghee is a potent energy source for beneficial soil organisms. It helps in improving microbial diversity and soil health. Ghee also provides a source of fatty acids that encourage the growth of certain beneficial organisms.

In addition to these five core ingredients, modern Panchagavya formulations often include other organic substances to further enhance its efficacy. These may include jaggery, which serves as a carbohydrate source to accelerate fermentation, bananas, rich in potassium to aid plant growth, and tender coconut water, which acts as a natural growth promoter. The Panchagavya mixture undergoes a fermentation process that lasts from 15 to 30 days. During this time, beneficial

microbes multiply, enhancing the biostimulant's effectiveness. The final product is a potent organic concoction that can be applied to crops in various ways.

Panchagavya has a deep historical and cultural significance in India, with its roots tracing back to the Vedic period. Ancient texts like the Atharvaveda and Krishi-Parashar (a treatise on agriculture) mention the use of cow-based products for promoting soil health and agricultural productivity. In these texts, cow-derived substances were recommended for both ritualistic purposes and agricultural practices, underlining their holistic significance.

In Indian culture, cows have traditionally been revered as sacred, symbolizing prosperity, nurturing, and ecological balance. The use of Panchagavya reflects the ancient Indian philosophy of sustainability, which advocates minimal external inputs and focuses on maintaining ecological equilibrium. This aligns closely with organic farming principles, where the aim is to harness natural processes for healthy soil, plants, and ecosystems.

Panchagavya has been found to offer a wide range of benefits for agricultural systems. Some of the key advantages include enhancing soil fertility, promoting plant growth, natural pest and disease control, improving crop yield and quality, cost-effectiveness and environmental benefits.

Panchagavya's composition makes it an excellent organic matter source. The rich microbial diversity it provides enhanced soil structure by improving its aeration, water retention capacity, and nutrient availability. Studies have shown that the microorganisms present in Panchagavya lead to improved nitrogen fixation, reducing the need for synthetic fertilizers. Cow dung, one of the

primary ingredients, also facilitates the breakdown of organic material, releasing valuable nutrients into the soil. Furthermore, the presence of earthworm-friendly microbes promoting boosts soil aeration, decomposition process and ensuring a healthier soil ecosystem. It is rich in natural plant growth regulators such as auxins, gibberellins, and cytokinins. These hormones stimulate various growth processes, including cell division, elongation, and differentiation. When applied as a foliar spray or a soil drench, Panchagavya can significantly enhance seed germination, root development, and overall plant growth. Studies have shown that plants treated with Panchagavya show greater resistance to environmental stresses like drought, salinity, and extreme temperatures, which are increasingly becoming a concern due to climate change.

Cow urine and the fermented ingredients in Panchagavya act as natural bio-pesticides. These substances help protect crops from a range of pests, including aphids, whiteflies, caterpillars, and other common agricultural Additionally, the antimicrobial pests. properties of cow urine and the lactic acid bacteria in curd strengthen plant immunity, reducing the risk of fungal, bacterial, and viral infections. Unlike synthetic pesticides, Panchagavya does not leave harmful residues on crops, ensuring both food safety and environmental sustainability. Research has shown that crops treated with Panchagavya produce higher yields with improved nutritional quality. This is attributed to the enhanced microbial activity in the soil, which results in better nutrient uptake by plants. As a result, crops like fruits and vegetables exhibit superior taste, texture, and shelf life. Farmers practicing organic farming with Panchagavya often report increased productivity, better

market acceptance, and premium prices for their chemical-free produce.

One of the key advantages of Panchagavya is its affordability. It is relatively inexpensive to prepare, especially for small and marginal farmers who are burdened by the high cost of synthetic fertilizers and pesticides. Since Panchagavya is biodegradable, it poses no threat to the environment and helps reduce pollution. Moreover, its use promotes carbon sequestration, as it supports healthier soils that store more carbon. By reducing the need for synthetic inputs, Panchagavya fosters sustainable farming practices that can protect ecosystems and promote ecological balance.

Panchagavya can be applied to crops using various methods depending on the type of crop, its growth stage, and the specific needs of the farmer. The most common methods includes, seed treatment in which seeds are soaked in Panchagavya solution before sowing can accelerate germination and improve seed Foliar Spray, spraying diluted vigor, Panchagavya on plant leaves enhances photosynthesis, nutrient absorption, and disease resistance, adding Panchagavya to irrigation water enriches the soil microbiota, promoting better fertility and microbial activity. Compost Enrichment, mixing Panchagavya with compost accelerates the decomposition process and enhances nutrient content, creating high-quality organic manure.

Scientific research and modern applications of Panchagavya have demonstrated its efficacy in improving soil health, enhancing plant growth, and promoting sustainable farming practices. Agricultural universities and research institutions like the Indian Council of Research (ICAR) Agricultural have extensively studied Panchagavya's role in sustainable farming. These studies confirm that Panchagavya serves as a growth enhancer, disease suppressor, and soil fertility booster. Organic farming movements in states like Tamil Nadu, Karnataka, and Maharashtra have also adopted Panchagavya, with promising results in terms of increased productivity and sustainability.

In particular, **Tamil Nadu Agricultural University (TNAU)** has been instrumental in promoting the use of Panchagavya in organic farming curricula and field trials, which further strengthens its scientific credibility. Researchers are also working on improving the shelf stability and formulation of Panchagavya to standardize its use across the farming community.

Despite the numerous benefits of Panchagavya, its widespread adoption faces several significant challenges that need to be addressed for its integration into mainstream agricultural practices. One of the primary obstacles is the lack of awareness among farmers, especially those in rural or remote areas, who remain unaware of Panchagavya's preparation methods, its correct application, and the full spectrum of its benefits. Many farmers are not familiar with the potential of this traditional bio-enhancer, which limits its adoption. Additionally, standardization issues complicate its use, as the composition of Panchagavya can vary greatly depending on preparation techniques and proportions of the cow-derived ingredients. This lack of consistency in formulation affects its overall efficacy and makes it difficult for farmers to rely on it for consistent results.

Another challenge is the limited scientific recognition of Panchagavya, despite its deeprooted presence in traditional farming practices. The lack of large-scale scientific validation and official regulatory approval hinders its broader acceptance within the agricultural community and among policy-

makers. To overcome these barriers, it is crucial to implement awareness campaigns and farmer training programs to educate the farming community on how to prepare and use Panchagavya effectively. In addition, government incentives can help create a supportive environment for its adoption. To ensure uniformity and reliability, standardizing the formulation of Panchagavya is essential, along with improving its shelf stability for wider use. Establishing certification standards for Panchagavya will help regulate its quality and facilitate its integration into mainstream organic farming practices, further driving its potential to revolutionize sustainable agriculture in India.

Panchagavya represents an invaluable contribution to sustainable agriculture and organic farming in India. With its multifaceted benefits—such as enhancing soil health, promoting plant growth, and protecting

against pests and diseases—it is an essential tool for modern farming. As India continues to shift towards more sustainable and regenerative agricultural practices. Panchagavya has the potential to play a pivotal role in ensuring food security, environmental conservation, and rural prosperity. By reviving and refining this ancient wisdom, India can set global example in the pursuit of environmentally responsible farming practices. Through continued research, policy support, and farmer education, Panchagavya can help create a resilient and productive agricultural future, benefiting farmers, consumers, and the environment alike.

- Kimaya Palav, Fourth Year B. Pharm.

Creation and Self in Hindu Wisdom: A Deeper Understanding

Who are we as individuals? What is the reason for our existence? What defines our true nature? What exactly is the nature of the universe that surrounds us?

These inquiries have been a source of contemplation for philosophers, scientists, and thinkers throughout history. They represent deep questions that delve into the core of human life and the enigmas of the cosmos. Still, in the fast-paced nature of contemporary life, it appears that most people seldom take the time to pause and consider such vital issues.

In present times, where distractions are plentiful and the pressures of everyday life are overwhelming, individuals themselves caught up in the chase for material wealth, social acceptance, and transient pleasures. People become so absorbed in their daily habits that they neglect to explore the significance of their identity, their purpose, and their ultimate reason for being. The quest for external accomplishments often overshadows deeper, more significant life questions, leading many to miss out on understanding the more profound aspects of existence. Instead of engaging with the mysteries of life, individuals frequently channel their efforts into amassing belongings, ascending social hierarchies, and seeking short-lived fulfillment—ultimately squandering the valuable and limited time of human life.

This universe goes beyond what we can see or sense. It encompasses a much broader and deeper reality than what our everyday perception captures. Beyond the tangible world, there are richer layers of existence — spiritual and metaphysical realms that are outside our sensory experiences.

Based on the ancient wisdom found in the Vedas, life presents itself in a remarkable variety of forms, totaling 8.4 million species. Each soul, or Atman, embarks on an extensive journey through these different life forms, gradually advancing from simpler, less aware beings to those that are more complex and self-conscious. This cycle of birth and reincarnation ultimately culminates in the human form. The human body is more than just a physical container; it represents a unique and precious chance for the soul. In human existence, consciousness attains its fullest expression, enabling profound reflection, introspection, and the quest for higher truths.

The exceptional opportunity of being born as a human is frequently ignored. Many individuals are oblivious to its true significance and squander their existence pursuing temporary pleasures. Only a few recognize the vast potential within — the abilities of intellect, creativity, compassion, and spiritual awakening. With proper understanding and dedicated effort, one can harness these faculties, transforming life from mere survival into a profound journey of self-discovery and ultimate liberation.

Acknowledging the value of human life is the initial step toward purposeful, wise, and spiritually insightful living. To squander this chance is to forfeit the rare opportunity to rise

above the cycle of birth and death and to realize one's eternal bond with the Divine.

The Brahma Sutra, an essential text from the Vedic tradition, opens with the statement: athato brahma jijnasa — "Now that you have attained human life, seek to understand the Ultimate Reality." Human beings, endowed with developed senses, mind, intellect, and consciousness, are uniquely positioned to engage in such inquiry — the highest duty of human existence.

Engaging in spiritual inquiry (jijnasa) is the fundamental responsibility of every human. From a young age, we pose questions about the world, but true humanity awakens when we delve into profound questions about our identity and purpose. Without this spiritual quest, one's human potential remains unrealized.

While science and technology enhance our sensory experiences, genuine understanding emerges only when we transcend sensory perception to examine the inner spiritual reality. Life itself is a joyful journey of spiritual exploration.

Education ought to equip us for this lifelong quest — initially learning from parents, and subsequently through personal endeavors. Through the challenges of life, we gradually uncover deeper truths that enrich our connections with ourselves, others, and the Divine. Ultimately, the most significant inquiry of human existence is to discover the Absolute Truth — our true Self.

According to Hindu philosophy, the cosmos — or rather the multiverse — did not originate at a specific moment in time, nor will it ever reach a definitive conclusion. Rather, it exists within

an eternal cycle of creation, preservation, and dissolution. This cyclical perspective of time and space views the universe as always in motion — continually evolving, dissolving, and re-emerging in various forms. What we perceive as the present universe is merely one stage in this grand, timeless continuum.

When the current universe eventually dissolves, it will pave the way for the emergence of another. This idea closely resembles contemporary theories in cosmology, especially inflationary cosmology, which posits that our observable universe is simply one "bubble" in an infinite quilted multiverse. According to this theory, innumerable bubble universes are perpetually inflating within a broader multiversal realm.

Each of these bubbles might operate under different physical laws and constants, indicating that the fundamental nature of reality could shift from one bubble to another. However, the possible range of constants is thought to be finite, suggesting that certain patterns will eventually recur — leading to the emergence of parallel universes within parallel multiverses.

This deep perspective, where ancient spiritual wisdom coincides with leading scientific theories, encourages us to rethink the essence of existence itself. It serves as a reminder that what we observe and experience is merely a small fragment of a vast, infinite, and endlessly creative reality — a reality that is perpetually unfolding within and beyond our understanding.

This tale illustrates how Lord Krishna revealed to Brahma the presence of innumerable universes, demonstrating that creation is much more expansive and enigmatic than even the creator himself could comprehend. Brahma, under the impression that he was the ultimate creator, once attempted to test Krishna by concealing Krishna's friends and cows. In response, Krishna effortlessly replicated them all. Upon Brahma's return, Krishna unveiled countless universes, each inhabited by its own Brahma — some having 4 heads, others 10, and some even 1000. Brahma came to understand: "I am not the sole creator. I am merely one small Brahma among countless worlds. And Krishna transcends all of them." This narrative conveys that reality is far broader than what any single being can understand. Even the highest creator in our universe is simply a minute part of an infinite cosmic tapestry. Krishna, embodying the eternal divine, exists beyond the confines of time, space, and creation itself.

Reflect on the fictional realms conjured by a dreamer — populated with characters, happenings, feelings, and struggles, all emerging from the mind only to dissolve back into it. In a similar vein, ancient teachings suggest that this entire universe is a manifestation of divine creativity — the spontaneous play (lila) of Siva, the Supreme Consciousness. Siva, who is formless and absolute, acts as the pure Observer, while Sri Tripura, His divine energy (Sakti), serves both as the mirror and the reflection. United, they constitute an inseparable whole.

Within this cosmic drama, time and space emerge from consciousness itself. Time organizes events in sequence, while space situates objects into specific locations — yet both are ultimately projections of the mind.

The reality of entities hinges entirely on perception. Much like reflections in a mirror, objects lack independent substance apart from the awareness that perceives them. The seeming solidity and intricacy of the world do not render it any less an image mirrored on the pristine surface of consciousness.

These reflections are influenced by the clarity and purity of the reflecting consciousness, akin to how clearer mirrors yield sharper reflections. However, unlike physical mirrors, which are external and susceptible to distortion, consciousness is self-contained, perpetually pure, and unaffected by the images it reflects. Therefore, the external world exists solely as an image within the radiant field of awareness — it has existence only because we observe it.

This insight clarifies that creation is neither self-aware nor self-existent; rather, completely relies on the illuminating awareness of consciousness. lust daydreams or hallucinations vividly manifest within the mind without any underlying reality, so does this world present itself within the supreme consciousness — a manifestation of divine intention.

Prior to creation, consciousness existed in its pure, formless essence. With the emergence of divine will (iccha sakti), the vision of the world began to form upon this canvas of consciousness. What sets this cosmic creation apart from ephemeral human thoughts is the strength and perfection of the divine will that underpins it. This will supports the world with such reliability and order that it appears substantial, stable, and real.

In the end, all forms, experiences, and appearances are contained within the selfilluminating field of pure consciousness — the eternal, all-encompassing Tripura, Supreme Goddess. She is identified by numerous names: Brahman in the Vedas, Vishnu by the Vaishnavas, Siva by the Saivites, and Sakti by the Saktas. In essence, there is nothing that exists outside of Her. She encompasses all of creation within Her, just as mirror contains its reflections simultaneously the source of light and the lighted image.

This cosmic phenomenon — evolving from pure awareness to a differentiated universe — occurs through successive stages of divine expression referred to as the tattvas. These stages progressively transform the pure, unified awareness into the perception of individual existence. Space, time, and matter emerge, followed by individuality, desire,

karma, and the continuum of birth and rebirth. Still, even in this conditioned reality, the fundamental truth remains unchanged — the universe ultimately exists as a projection within consciousness, no more authentic than a dream.

This insight provides a profound emancipation: the understanding that the world exists solely as a reflection of your awareness. By exploring this truth directly, the veil of illusion slowly lifts, allowing one to awaken to the eternal reality of the undivided Self, the radiant source of all creation. This is the supreme knowledge that frees one from suffering and reveals the timeless unity of self, world, and the Divine.

- Rishika Potam, Fourth Year B. Pharm.

The Impact of Indian Knowledge Systems on Contemporary Global Thought

It is seen that from the ancient texts, philosophical pacts and literature, and scientific studies conducted by various institutions, the Indian Knowledge System forms a cross-disciplinary body of knowledge that amalgamates philosophy, mathematics, astronomy, medicine, linguistics, spirituality, and all other concepts that are known to man or those the man will gain knowledge about in the future. This wide repository of knowledge developed over centuries has provided for a holistic and integrative perspective on the universe, human consciousness, and the unit oneness of all living beings. Today, in the wake contemporary global challenges, the applicability and utility of the Indian Knowledge System in global discourse are being felt more and more strongly. One of the notable facts about our Indian most Knowledge System are the concepts of Ahimsa, and Dharma which shaping are philosophical landscape globally. Another example that comes to mind is related to the study of matter at the most fundamental level possible, which today's world sees as the realm of quantum physics which was introduced in the early 1900s. The concept of a unified field in quantum physics and other related concepts, that suggest a different perception of the universe from what we currently see, through complex mathematical equations and proofs was described in the Vedas especially Upanishads through metaphysical exploration centuries ago which even Schrodinger, one of the founding fathers of quantum mechanics, referred to and was influenced by. This highlights the crucial role played by the Indian Knowledge system in our modern world.

But none can be exempt from the contribution to Indian mathematics and science. The discovery of zero, the decimal system, and initial advances in algebra and trigonometry provided the basis for powerful advances in the mathematics and technologies of the world. Indian astronomers such as Aryabhata and Brahmagupta have produced paradigmbreaking results that still affect contemporary space science and cosmology. Both Yoga and Ayurveda, being integral parts of IKS, have earned world recognition for the holistic philosophy towards well-being and health and influenced contemporary medicine, mental health interventions, and way everywhere.

Indian linguistic ideas in language and literature, such as those articulated by Panini in his foundational text on Sanskrit grammar, have influenced modern-day linguistics and computational linguistics. The epic poetry of the Mahabharata and Ramayana, and their profound knowledge about life and morality, have influenced literary and artistic forms and cultural storytelling in the world. Indian notions of aesthetics, Rasa theory for example, have influenced the world understanding of art, performance and human emotion.

Today various societies in the world make great attempts towards sustainability and equity in daily life. If the interdependent nature of life in Indian civilization accepts that human intervention must be there to establish ecological balance, it will help in maintaining biodiversity and promote sustainable development. This environmental wisdom thus becomes more significant in resolving ongoing global issues like global warming and environmental degradation.

Finally, the Indian Knowledge System stands as a bridge between ancient knowledge and modern innovation, making the world more aware of eternal holistic and ethical ideals and integrative thought. By embracing and consolidating this eternal wisdom, the advanced community can become more

resilient, innovative, and collectively healthy in a rapidly changing world.

A resurgence of respect for IKS serves at once to recognize India's intellectual legacy and to carve a path towards the more civilized, balanced, and enlightened world of tomorrow.

1. Philosophy and Spirituality: The Path to Inner Equilibrium

Indian philosophies provide illumination to the human mind, consciousness, and the universe for millennia. The Vedas and Upanishads planted seeds for the concepts of self (Atman), cosmic consciousness (Brahman), and Advaita-Muslim duality of existence. This kind of thought has been hugely influential in the like distinguished Western minds like Schrödinger and Thoreau. Yoga and meditation, according to the principles of the Patanjali Yoga Sutras, have gone mainstream as essential disciplines for global health. Vipassana and Transcendental Meditation are among the practices commonly used for mindfulness and stress reduction. The rationale for the International Day of Yoga observance on June 21 is to symbolize the growing significance of yoga in the whirlpool of avenues for holistic and integral well-being. The term mindfulness describes meditative tradition based on Indian and Buddhist heritage, paving the way for the

development of Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT).

2. Medicine and Health: Ancient Practices with Modern Applications.

Ayurveda, India's ancient medical science, provides a unity of body, mind, and spirit for health. Charaka Samhita and Sushruta Samhita are classical texts recommending customized medicine, botanicals as medicine, and preventive medicine—principles that are becoming more and more popular in integrative medicine today. Medicinal Ayurvedic remedies such as turmeric, ashwagandha, and amla are studied around the world for the treatment of inflammation, stress, and chronic diseases. Along with that, Panchakarma treatments are becoming a fad in wellness tourism, drawing in tourists from abroad magnetic with the charm of India's traditional healing systems.

Example: It is primarily the powerful bioactive agent, turmeric, that has been researched for years for its anti-inflammatory and anti-cancer properties and thus is included in contemporary pharmaceutical formulations.

3. Contributions of Science and Mathematics:

Indian scholars founded principles for contemporary development in most sciences and mathematics. Formalising the use of the zero, attributed to an Indian mathematician and astrologer, Brahmagupta; and the introduction of a decimal system and discovery of the number zero by Aryabhata make the foundation of contemporary computational science. The Surya Siddhanta in ancient Sanskrit astronomy makes an accurate view of astronomical phenomena such as the motion of celestial bodies and the diameter of Earth. These studies provided a solid foundation for astrophysics and chronology thereafter.

Example: Aryabhata has outpaced two centuries in giving pi-value approximations and theories on the motion of the Earth.

4. Sustainability and Environmental Harmony:

Indian culture stresses the significance of coexistence with nature, as demonstrated through practices and literature (for example, Vrikshayurveda, or the knowledge of plants). This knowledge ought to have contributed to more sustainable approaches to farming: crop rotation, organic farming, and mixed cropping, which are being brought to bear to respond to the food crisis the world is currently facing. Adding to these ecological fascinations was the rainwater harvesting systems and centralized and decentralized drainage systems right from the Harappan Civilization which consolidated in the Mauryan empire are proving effective in tackling current world problems

Example: Revival of ancient water harvesting practices in Rajasthan has restored ground water levels and revived agricultural lands.

5. Governance and Ethical Leadership:

Kautilya (Chanakya) who was known for his brilliant tactics, strategies and policies in various domains, wrote the Arthashastra, a compilation on governance, economics, and diplomacy. The topics touched by him in the book about administration, economy, leadership are still relevant in the policymaking of the modern era. The beliefs of Mahatma Gandhi which included non-violence or ahimsa and satyagruh or truth were practised by profound leaders such as Martin Luther King Jr. And Nelson Mandela during their fight against oppression.

6. International Impact of Culture:

Both of India's epics, the Mahabharata and the Ramayana, have had a lasting effect on storytelling around the globe as they both treat ideas of morality, duty, and perseverance. Cultural celebrations such as Diwali and Holi showcase cultural pride and acceptance, as they have both exported our wonderful way of life and shown us that our way of life is worthy of respect.

Example:

The most exciting example for culture would be the Indian food that is recognised and loved by people all across the world. The food combinations in all the Indian cultures are complementary and represent a complete meal of which understanding in the modern world where aliments are rising continuously, is essential.

7. Influence on Emerging Fields:

These Indian philosophical ideas are contributing to existing emerging fields such as Ai and neuroscience. Samkhya and Vedanta concepts on consciousness and mind-body relations find precedence in cognitive science. In a similar vein, ethical thoughts such as Dharma are being incorporated into sustainable business and leadership models.

Example:

Interconnectedness in Indian philosophy drives the AI systems that make ethical decision-making a priority while thinking about the whole of the world.

Conclusion:

The Indian Knowledge Systems (IKS) acted as an antidote to the overwhelming dosages of modern global thinking steeped in the hegemony of Western paradigms, thus stimulating the need for balance and harmony in understanding the world's many social,

ecological, and individual problems. To the very problems confronting the meaning of his existence, Indian philosophy, science, and spirituality serve as a light in the dark, favoring holistic thoughts that foster balance, harmony, and greater understanding.

Perhaps the most prominent impact of IKS is in the area of wellness and mental health. Yoga, Ayurveda, and meditation practices originating from ancient Indian traditions have been adopted around the globe as similar methods for improving physical and mental health. Concepts such as mindfulness, which come from Indian contemplative practices, and the associated teachings of yogic philosophy have entered psychotherapy, stress management programs, and corporate wellness programs far beyond their original context, demonstrating the universal nature and adaptability of these ancient practices.

Simply put, Indian Knowledge Systems today continue to strengthen and enrich global modern-day thought by imparting ageless wisdom that knows no geographic, cultural, or any other such boundaries. It reminds the world to value meaningful living, development of inner peace, and respect oneness with each other and that of the universe. As these traditions are increasingly looked upon by the world to solve modern problems, IKS represents a luminous beacon of knowledge to evoke an era of wisdom, compassion, and wellbeing for all to supplant the development of human society.

- Pratham Shah, Fourth Year B. Pharm.

INDIAN CONTRIBUTION TO THE WORLD OF TEXTILE

India is one of the leading country in the field of textilesyl Mahatma Gandhi when he urged the use of cotton and silk fabrics exported from India. Cotton woulld sade! And spun and woven cloth as a means occupy an important place among India's great giftsotselfhaufficiency and resistance against colonial world of textiles. Indeed, the subcontinent was the verly.firstese days, India remains, among other place to be cultivated and woven into a breathatblingspoin the position of a textile powerhouse comfortable fabric that received an infinite amblemeding layer upon layer of ancient with the admiration from world traders and merchants. Dyred dwith Indian fabrics have continued to inspire natural materials prepared from indigo and madder, globyalarfashion designers, while the sustainable vividly colored textiles in every sense that could fill many foreign such as hand loom weaving and markets. The now-famous "Muslin" produced in Bengatusaso dyeing has experienced renewed thin and transparent, even delicate, to be described as broweightion across the globe. So, India's great air," making it a luxury in Europe. The same holds true fooxthen beritage recalls no less than that country fabrics, which became the rage in Europe during the 19th andoubtedly great in 18th centuries because of their vibrantly floral prints; aftsamanship, and in the eternal beauty of its later on took to copying out their ideas in textile designswoquallyast.

significant are the regional textile traditions of India, with each Historical Significance state cherishing a different kind of weaves and art-a fine

example. Banaras silk brocade tempts the eyes with talley Civilization (c. 3300–1300 BCE) was opulence, Patola ikat of Gujarat tells civilization with elaboration of Indian textile, archaeological textures, while Tamil Nadu's Kanjeevaram sarees fill the air with reveals cotton cultivation and weaving. elegance, and Punjab's Phulkari, with embroidery on some arry Indians were the leaders in cotton textiles, constitutes testimony to various Indian Eultivation and established spinning and weaving storytelling, and high degree of craftsmanship with skills of arts on which their economies primarily

that have continued into decades and centuries.

Indian textiles have influenced world history not simply from an aesthetic point of view. British colonization in India was basically intended to control the profitable textile industry, whereas the struggle for independence was symbolized rested. Under the Roman Empire, Indian fabrics, cottons, and silks were and formed the great demand in the global market. They described Indian cotton as woven wind, due to its lightness and softness and it was an emblem of luxury in Europe.

Indian textiles throughout Asia, Africa, and Europe werforoughtexcellent varieties of silk in India is the after in the Middle Ages. The coming of the Mughalkanholagouram silk from Tamil Nadu

1857) spurred enormous textiles on the accession of the **3. Block Printing:** The art of Block Printing Emperor unto his throne. Dhaka muslin became some of the has no owners other than more of Rajasmost expensive and unbelievably fine and delicate textiles, a than any of Gujarat. for eg.- Ajrakh designs symbol of luxury and an exhibit of Indian superiority. Textiles and Bagru, with the most pillowing sulptures that spread throughout the world were loved by the imperial rested upon natural dyes, For ages a courts because of their grand designs and high quality. The age wonderous work telling its tales through the of British colonialism and rule, which lasted from 1765 to 1947, patterns of fabric, block printed fabrics did introduce many radical changes in the industry of textiles in become more worthy with each word India. Treated like any other entity, textiles in India displayed spoken! sheer acceptability owing to the vibrancy of finesse that shows the craftsmanship of distinct regions of the nation. Few of the broidery: Zardozi, Chikankari,

of those who love Indian embroidery ways, Muslin and Cotton: Muslin is probably one of the finest completing brilliance with manifold view of 1. fabrics ever, described as "as light as a cloud," and India was style. The great Mughal emperors were ever

extraordinary in cotton weaving. Muslin made in Dhaka is highly fond of Zardozi, for it is the very technique in , its which regarded because, in ancient and medieval times, embroideries in gold and silver

production required the finest skill with such a thin fabric. They threads were made.on top of that, Kantha say, in this time of a widened pantry, webs of muslin so delicate stands for that particular stitch embroidery

it exists.

that they can be conjured only in the light of dawn have become of finer layers of frayed fabric creating the synonym of luxury. The weaving procedure is highly beautiful quilts, while Chikankari from the

particular and requires skill and detailed orientation.

renowned ones are:

2.Silk Weaving: Brought to India by Varanasi, Banaras is popular with silk, especially for its sarees. bind intricately worked with great silver and gold zari, capable of sustaining time; these sarees become a wedding favorite among brides. The sarees resemble a deep cultural and a great passionate symbol in our India. Another

5. Bandhani and Tie-Dye: Bandhani is a tiedyeing technique that involves binding the cloth together before introducing it to various dyeing

region of Lucknow is a white embroidered

cloth most sought after. Each stitch itself

carries an ancient history, part of its very

corporeality and that of the culture in which

Kantha have become quite dear to the hearts

techniques. Bandhani is also practiced profusely in Rajasthan and Gujarat states, for the embellishment of turbans, sarees, and dupattas. To make some interesting art pieces, it consists particularly in pleating the fabric and tying it tightly with string at several points, leaving no bare spot, which then will form a nice piece of art thereafter when dyed.

6. Pashmina and Cashmere: Are shawls made from the soft wool of Himalayan goats. These shawls have cultural significance as tokens of respect and love. With softness and warmth given as definitional attributes, such shawls find their place amongst the most sought-after hand-woven beauties from Kashmir. Making these shawls takes endless patience and work. Impact India had made a huge impact on the world of textiles. The period of colonization witnessed the rise in Indian demand for European textiles, and the demand was so robust that trade was established, leading to the formation of the East India Company.

These Indian printed goods have indeed furthered the industry in England and Europe as a whole, with a steady demand for calico and chintz, along with the stencils set to be imprinted on these fabrics. Styles and motifs from far and near merged together, mixing with Indian and Western Indian and Western themes. Indian fabrics keep mesmerizing international fashion brands and Indian

designers. Again, this points to the amazement inspired by India, with Indian prints, fabrics, and techniques being embraced. Sabyasachi Mukherjee, Manish Malhotra, and Anita Dongre brought Indian textiles to the worldwide arena to showcase the workability and flexibility of Indian textile processes. Furthermore, the global rise of sustainable and artisanal textiles opened the doors once again for India's ancient methods, viz., natural dye and handloom weaving. The textile brought forth another aspect of culture diplomacy; Khadi was synonymous with the self-reliant and independent post-independence India and the independence movement led by Gandhi. Despite all luxuries deservedly owned by its historical importance, the Indian textile industry has faced a lot of challenges, such as competition with mechanized production, shrinking traditional crafts, and exploitation of artisan workers. Mass-produced textiles due to industrialization left the weavers and artisans lowly-rated, poor, because their products remained in negligible demand. Correspondingly, technological advancement was inadequate, and limited integrated modern market access brought traditional textile communities further out into the periphery. However, many efforts have been made over the years towards bringing these very traditions to resurgence and survival. These include numerous government programs and also the Handloom Reservation Act and craft cluster development to grab a hold on these kinds of fabric traditions. Concessions are being provided through the countrified effort of the National Handloom Development Program and the Integrated Handloom Development Scheme to help and provide artisan training.

To this end, designers and NGOs are reviving the traditional arts while providing a sustainable living for the artisans. Campaigns such #VocalForLocal and #MakeInIndia have inspired consumers to buy handloom work and handicrafts to keep these ancient arts alive. Designers and brands join artisans to create modern designs for the global market while preserving traditional craftsmanship. Sustainable fashion is sustainable growth for Indian textiles, as increasingly consumers seek out clothes made of ethically sourced, sustainable materials. Natural dyeing and handlooms are on the rise for a reason, and, with this clear demand, Indian textiles featuring sustainability and handmade quality are wellsuited to satisfy the expectations of a pointing market.

Conclusion:

India's textile industry has a unique history starting from the muslins of yesterday to today's colorful block prints and sumptuous embroideries that speak about centuries of invention, artisanship, and cross-cultural exchange. Indian textiles have taken the form of a forward contribution to world fashion and culture. The history of Indian textiles is more than just a materialistic existence; it's the everlasting testimony to human craftsmanship and inventiveness. Today, when sustainability and craftsmanship are in great demand, the textile heritage of India becomes an area of pride. The resurgence of old-fashioned methods with renewed interest in hand-spun textiles are natural reflections of the need to keep alive some of the cultural traditions. Indian textiles are not mere cloth; they are traditions of wealth, pride, and a gifted human heritage. With ongoing attempts to preserve and promote these traditions, India's textile heritage shall continue to cast a spell on generations to come.

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The Impact of Indian Classical Music on Global Music

Feelings, sentiments, and emotions are beautifully crafted together through music, bridging the gap between separate cultures and communities. Residing alongside the many distinguished melodies of the globe, Indian classical music takes the cake for its its beauty, intricacy, and exceptional integration of spirituality. Generations of musicians and composers have drawn inspiration and crafted a plethora of musical genres, from Western classical compositions to jazz, rock, and even electronic music.

Buddha wrote, "Rather than seeing the world as it is, let us demonstrate to others how the world ought to be." This powerful statement embodies the very ethos of Indian classical music because, just like Buddha, Indian classical music has no geographic boundaries. Indian classical music is the center of existence for millions of people across southern Asia. But how has this timeless musical genre steeped itself in the lives of countless generations? The answer is simple — it has made an everlastingly profound impact and has trickled down to the world.

Through the wonders of time travel, imagine being one of the British colonials dwelling in the western region. Seeing Indian priests embrace their faith and culture with the sitar would definitely serve as an epiphany, considering the essence of India — its folklore and history blended harmonically like a perfectly brewed cup of tea. It is indeed mesmerizing how such traditions and cultures, through the years, have inspired generations of musicians across borders. So let's dive deeper to witness how Indian classical music

has molded global sounds. Ranging from Indian kings' courts to world concert halls, from Europe through New York jazz clubs to electronic music bashes in Goa, Indian classical music has earmarked its presence across the globe.

A Meeting of Worlds: Early Cross-Cultural Influences

From the very beginning, Indian classical music never static, and it underwent modification due to many different cultures interacting with one another. In the early periods of the Indian subcontinent, it was a point of trade and civilization, which allowed the music to interact with Persian, Middle and Central Asian Eastern. music. Nevertheless, the expansion of Indian music throughout the globe almost doubled after the nineteenth and twentieth centuries with the British colonial rule in India.

Their intellectuals and musicians had access to the Indian subcontinent's rich ragas and talas. The real breakthrough came in the mid-20th century when Indian musicians like Ravi Shankar and Ustad Ali Akbar Khan began to showcase their art to the world. Their work with Western musicians created tremendous fascination with Indian music, positioning it as a critical source of inspiration for numerous styles.

The Impact on Western Art Music

What intrigues Western art music composers most about Indian classical music is its unique approach to melody, improvisation, and rhythm. Each of the Western classical genres builds on written scores.

On the other hand, Indian classical music is rooted in creativity. The concept of Cārandā Svarā improvisation styles heavily impacted 20th-century composers such as John Cage, Philip Glass, and La Monte Young.

For example, the emergence of interest in Eastern philosophy and spirituality, through particularly Transcendental Meditation, allowed Indian classical music to enter the consciousness of Western society. Vivekananda. Swami Paramahansa Yogananda, and Maharishi Mahesh Yogi exposed Western cultures to the depth of Indian traditions — Indian traditions that included, but were not limited to, the art of music.

Composers and artists looking to view music as a form of meditation and transcendence turned to Indian classical music. The Nādabrahma philosophy was an easy sell to Western musicians — sound is divinity. This fundamentally altered composition and improvisation methods in the West.

New Tuning Systems and Scales

The discovery of microtonality in the Indian music system (srutis) quickly fascinated Western composers looking to "expand" the European scale. These new tuning systems and melodic structures were based on the ragas.

New Rhythmic Concepts

The term definitions of talas, complicated rhythmic cycles, along with the structure itself, were a pleasant surprise for Western artists. For example, Philip Glass studied Indian music under Ravi Shankar and adopted its repetitive cyclic rhythm into his minimalist style.

The Relaxation of Strings: Western classical music is highly structured and performed as written.

Indian classical music stands apart due to its emphasis on free-form improvisation within the framework of a raga. This unique approach piqued the interest of Western musicians, encouraging them to explore greater freedom in their own expressions

Imitation of Indian Classical Music in Jazz: The Two Harmonious Types

Many jazz musicians recognized the parallels between their genre and Indian classical music. In the 1960s, jazz soloist John Coltrane delved deeply into Indian music, even naming one of his pieces "India" as a nod to this influence. His middle-period works clearly showcased a connection between the two styles, incorporating Indian-inspired modal structures into his compositions.

Other jazz artists, such as Alice Coltrane, Yusef Lateef, and Don Cherry, also embraced Indian music. This fusion gave rise to what is known as Indo-Jazz.

The Psychedelic Rock Revolutions

One of the most notable examples of Indian classical music's global influence is its lasting impact on rock music during the 1960s. George Harrison of the Beatles incorporated Indian elements into songs like "Norwegian Wood" and "Within You Without You," marking a high point in the musical revolution. Many Western listeners are often surprised to learn that Ravi Shankar taught Harrison how to play the sitar. Other artists, including The Rolling Stones and The Byrds, also experimented with the sitar, tabla, and melodies inspired by raga in their rock music. The extended, hypnotic improvisations characteristic of Indian classical music meshed seamlessly with the psychedelic rock movement's goal of transcending musical boundaries and creating deeply immersive experiences.

Indian classical music not only influenced rock and jazz but also played a crucial role in the evolution of electronic and ambient music. Artists like Brian Eno and Terry Riley incorporated Indian elements to create soothing soundscapes, while the long, flowing ragas and rich, droning sounds of Indian classical music laid the groundwork for ambient and new-age genres.

The reality of Indian Classicals broadens in the context of the easter and western globe. The more the people wait for all the rubies of Indian Classicals and Borders the golden medley of blend with the western universe.

partition, country, ermita, bational, rage band new short emphasize the extraordinary potential of them.

The Potential of the Blend broadened to such level uly of every sprinkle of India.

With the potential, the carve of their culture greatly rok modern western new generation remains a huge. With the narrowing, even more scope of cherootion one unlike g xion ed like unsin reason all the great produced of the Indo Global 'fusion' redefine strive.

- Fatima Choudhary, Fourth Year B. Pharm.

The Role of Manuscripts in Preserving

Indian Knowledge

The Introduction

With an intellectual tradition that spans several disciplines, including philosophy, medicine, astronomy, mathematics, literature, and religious studies, India has long been a fount of insight and knowledge. Manuscripts were essential to maintaining and disseminating this enormous body of knowledge prior to the invention of the printing press. Indian manuscripts, which are composed of materials like parchment, birch

bark, and palm leaves, have played a crucial role in preserving the country's intellectual and cultural legacy. This paper examines the historical development, diU'iculties, and attempts to preserve Indian manuscripts for future generations.

Historical Significance of Indian Manuscripts The Vedic period (1500-500 BCE) has some of the oldest Indian writings, which have been preserved for thousands of years. The earliest known Indian scripture, the Rigveda, was first passed down orally before being recorded in manuscripts. Written manuscripts were used to carefully preserve other ancient works, including the Mahabharata, Puranas, and Upanishads. Brahmi, Kharosthi, Devanagari, Tamil, and Grantha are just a few of the scripts that academics and scribes have created over time to record information in many linguistic traditions. In ancient India, the spread of manuscripts greatly aided in the development of education and intellectual interactions.

Types of Manuscripts and What They Cover

Religious and Intellectual Texts: The Puranas, Vedas, Upanishads, and writings from

Buddhism and Jainism all other spiritual and moral guidance. These texts shaped the spiritual beliefs and values in India.

Scientific and Mathematical Works: Manuscripts like Aryabhata's Aryabhatiya and Brahmagupta's Brahmasphutasiddhanta introduce key ideas in math and astronomy, such as the decimal system and the number zero.

Medical Knowledge: Ayurveda, India's ancient medical system, is explained in texts like the Charaka Samhita and Sushruta Samhita. These books talk about surgeries, medicinal plants, and natural healing methods. Grammar and Linguistics: Panini's Ashtadhyayi is a key work for Sanskrit grammar. It's really complex and has a lot of details. Arts & Aesthetics: Bharata Muni wrote the Natya Shastra. It gives rules for performing arts like theater, dance, and music. Ethical and Legal Codes: Ancient and medieval Indian law came from important texts like the Manusmriti and Arthashastra. They shaped how things were run back then.

Keeping Up with Manuscripts

Manuscript preservation has proven to be quite challenging for political and environmental reasons. Because traditional manuscripts were made of perishable materials like palm leaves and birch bark, they were prone to degradation. Indian experts employed methods including oil treatment, lacquering, and lamination to improve its endurance.

Temples, monasteries, and libraries were crucial to the preservation of these texts. The universities of Nalanda and Takshashila, which served as centers of learning and scholarship, housed thousands of manuscripts. During the Middle Ages, many Indian manuscripts were destroyed or destroyed by fire as a result of colonization and war. However, eUorts were made to recover and preserve them by Indian kings, intellectuals, and subsequent groups such as the Asiatic Society of Bengal.

The Role of Manuscripts in the Modern Age 1 Religion and Philosophy.

The preservation of India's intellectual and religious traditions has been greatly aided by manuscripts. Generation after generation of people have painstakingly copied and transmitted the Upanishads, the Bhagavad Gita, and numerous Smritis and Sutras. The Vedanta, Nyaya, and Samkhya schools of thought were influenced by these books, which served as the cornerstone of Hindu philosophy.

Likewise, the teachings of Gautama Buddha were preserved in Buddhist texts like the Gandhara and Pali Canon, which allowed them to spread throughout Asia. Core Jain cosmology, ethics, and philosophy were recorded in Jain scriptures such as the Kalpa Sutra and the Tattvartha Sutra. Many of the great philosophical and religious ideas of India would have been lost to time in the absence of these manuscripts.

2 Health and Ayurveda

Ayurvedic medicine in particular was well chronicled in ancient Indian writings. Books like the Sushruta Samhita and Charaka Samhita oU'er fundamental knowledge about

pharmacology, surgery, and medicine. Indepth descriptions of illnesses, herbal cures, and surgical techniques that are still used in contemporary Ayurveda were included in these documents.

The preservation of information about Rasashastra, or alchemy and metallurgy, which was applied to therapeutic and medical applications, was another important function of manuscripts. Later translations of many of these old medical texts into Arabic and Persian had an impact on the advancement of medicine both inside and outside of the Islamic world.

3 Astronomy and Mathematics

Much of the important work that Indian intellectuals produced in the fields of astronomy and mathematics has been preserved in manuscript form. Bhaskara, Brahmagupta, and Aryabhata's writings provide light on ideas like planetary motion, algebra, trigonometry, zero, and negative numbers.

The astronomical calculations and planetary models that were utilized for calendrical calculations and astrology were chronicled in manuscripts such as the Surya Siddhanta and Siddhanta Shiromani. These studies established the groundwork for subsequent developments in astronomy and mathematics both domestically and internationally.

4 Grammar and Linguistic Analysis

Manuscripts played a major role in the study of Sanskrit and other Indian languages. Handwritten versions of Panini's Ashtadhyayi, a seminal work on Sanskrit grammar, were saved and distributed. This study o'U'ered a methodical framework for linguistic analysis, which had an impact on contemporary linguistics as well as Indian languages. Several regional languages and dialects were guaranteed to survive thanks to the vast corpus of linguistic variety maintained by other manuscripts, such as those pertaining to Prakrit and Tamil literature.

5 Poetry and literature

The main tool used to document and preserve Indian literary traditions was manuscripts. Epics like the Ramayana and Mahabharata, written by Valmiki and Vyasa, respectively, were preserved in Indian culture for centuries by being copied and recorded.

Classical drama and poetry, including the plays of Bhasa and Kalidasa's Abhijnanasakuntalam, were painstakingly preserved in manuscript form. The variety of

Indian literary expression was demonstrated by the inclusion of vernacular literary traditions, such as Tamil Sangam literature, in palm-leaf manuscripts.

6 History and Law

Many historical chronicles, royal edicts, and preserved through legal texts were manuscripts. The Manusmriti, one of the earliest legal texts in India, provided guidelines on ethics, law, and governance. Similarly, inscriptions and manuscript records of dynastic histories, such as the Rajatarangini by Kalhana, provided insights into India's political and social history. Manuscripts documenting trade, commerce, and economic policies also exist, revealing the advanced nature of Indian economic thought in pre-modern times.

7 Innovations in Science and Technology

A multitude of scientific information in disciplines including engineering, metallurgy, agriculture, and architecture has been preserved in Indian manuscripts. While innovative methods for extracting metal and producing alloys are described in metallurgical documents, which were eventually copied by other civilizations, the ancient literature Vastu Shastra provides principles of architectural design.

8 Cultural Relics: Manuscripts

Manuscripts themselves are artistic creations, with elaborate pictures, calligraphy, and ornamental aspects that transcend their written content. Visual art and intellectual heritage are fused in the creative traditions of manuscript illumination, especially in Jain and Mughal manuscripts.

Indian Manuscript Preservation Challenges Indian manuscripts are extremely valuable, yet they also confront several dil'iculties:

 Fragility of Materials: Manuscripts are susceptible to deterioration due to the high

perishability of traditional writing materials including paper, birch bark, and palm leaves.

- Climate and Environmental Factors:
 Manuscript deterioration is
 exacerbated by high humidity, bugs,
 and fungus.
- 3. Neglect and Loss: Due to colonial pillage, poor storage, and ignorance, many manuscripts have been lost.
- Absence of Qualified Conservationists:
 Manuscript preservation calls for
 specific expertise, which is sometimes
 absent.
- 5. Digital Accessibility and Preservation: Despite ongoing digitization initiatives, many manuscripts are still unavailable to researchers and the general public.

Indian Manuscript Conservation Initiatives

Because of their importance, a number of institutions and organizations have made an eUort to preserve manuscripts:

Initiated by the Indian government, the National Mission for Manuscripts (NMM) seeks

to scan, preserve, and catalog manuscripts throughout the nation.

In addition to supporting conservation initiatives, the Indira Gandhi National Centre for the Arts (IGNCA) is home to an extensive collection of manuscripts.

The Bhandarkar Oriental Research Institute and the Asiatic Society have been instrumental in the cataloguing and preservation of old Indian manuscripts.

Collaboration with International Institutions: A number of manuscripts have been digitized through partnerships with international institutions, guaranteeing increased accessibility and study opportunities.

Local and Community EU orts: Manuscripts are still preserved by several monasteries

and traditional scholars as a part of their cultural legacy.

In conclusion, manuscripts from India showcase the country's rich cultural heritage. Over time, they have been crucial in the transmission of knowledge. Despite certain obstacles, efforts to digitize and preserve them contribute to their continued enjoyment by future generations. In addition to providing us with a window into India's past, studying and preserving these manuscripts inspires fresh perspectives and insights.

- Shravan Choudhary, Fourth Year B. Pharm.

Siddha Medicine: A Holistic Approach to Health

Siddha Medicine, one of the oldest traditional systems of medicine, originates from the ancient Tamil culture of South India. Rooted in the concept of holistic health, Siddha Medicine emphasizes the balance of body, mind, and spirit to achieve optimal well-being. This system is believed to have been developed by Siddhars, enlightened sages possessed profound knowledge of medicine, yoga, and spirituality. The term "Siddha" itself means "perfection" or "achievement," reflecting the system's ultimate goal of attaining physical, mental, and spiritual harmony. Siddha Medicine is not merely a therapeutic approach but a way of life that integrates diet, lifestyle, herbal remedies, and spiritual practices to promote longevity and prevent disease.

At the core of Siddha Medicine lies the concept of the "Five Elements" (Pancha Bhootam) and the "Three Humors" (Tridosha). The five elements—earth, water, fire, air, and ether are the fundamental building blocks of the universe and the human body. These elements combine to form the three humors: Vatha (air and ether), Pitha (fire), and Kapha (earth and water). According to Siddha philosophy, health is a state of equilibrium among these humors, while disease arises from their imbalance. The Siddha system identifies 96 unique factors that influence these humors, including physical, mental, emotional, and environmental factors. By understanding and addressing these factors, Siddha Medicine aims to restore balance and promote healing.

Diagnosis in Siddha Medicine is a comprehensive process that involves

examining the patient's physical, mental, and spiritual state. Practitioners use eight diagnostic methods, collectively known as Pariksha," "Ashtasthana which include analyzing the pulse, voice, eyes, tongue, complexion, stool, urine, and touch. Pulse diagnosis, or "Nadi Pariksha," is particularly significant, as it provides insights into the balance of the three humors and the overall health of the individual. This holistic approach allows Siddha practitioners to identify the root cause of illness rather than merely treating symptoms. Treatment is then tailored to the individual's unique constitution and condition, emphasizing personalized care.

Siddha Medicine employs a wide range of therapeutic modalities, including herbal medicine. meditation, diet. yoga, detoxification procedures. Herbal remedies form the backbone of Siddha treatment, utilizing plants, minerals, and animal products to prepare medicines. These remedies are often formulated as powders, decoctions, oils, or pills and are designed to restore the balance of the humors. For example, herbs like turmeric, neem, and ginger are commonly used for their anti-inflammatory, antimicrobial, and digestive properties. Siddha Medicine also recognizes the importance of diet in maintaining health, advocating for a diet that aligns with an individual's constitution and the seasons. Foods are classified based on their taste, potency, and effect on the humors, and dietary recommendations are made accordingly.

In addition to herbal medicine and diet, Siddha Medicine places great emphasis on lifestyle practices that promote physical and mental well-being. Yoga and meditation are integral components of the Siddha system, helping to harmonize the body and mind. Yoga postures (asanas) and breathing techniques (pranayama) are prescribed to enhance flexibility, strength, and vitality, while meditation is used to calm the mind and cultivate inner peace. These practices not only support physical health but also foster spiritual growth, aligning with the Siddha goal of achieving self-realization.

Detoxification is another key aspect of Siddha Medicine, aimed at eliminating toxins and impurities from the body. Procedures such as "Panchakarma" (five actions) and "Vamana" (therapeutic vomiting) are used to cleanse the body and restore balance. These therapies are often combined with herbal treatments to enhance their effectiveness. Siddha Medicine also recognizes the importance of seasonal detoxification, recommending specific practices and remedies to align with the changing seasons and maintain health throughout the year.

One of the unique features of Siddha Medicine is its integration of spirituality into the healing process. The Siddhars believed that true health could only be achieved by transcending the physical body and realizing the divine within. As such, Siddha Medicine incorporates spiritual practices such as mantra chanting, prayer, and meditation to support the healing journey. The system also emphasizes the cultivation of virtues such as compassion, humility, and self-discipline, which are seen as essential for achieving holistic health. This spiritual dimension sets Siddha Medicine apart

from other medical systems and underscores its holistic approach to well-being.

Siddha Medicine also recognizes the interconnectedness of the individual and the environment. The system emphasizes the importance of living in harmony with nature adopting practices that promote environmental sustainability. For example, Siddha practitioners advocate for the use of natural and locally sourced materials in medicine and daily life, reducing the impact on the environment. This ecological awareness reflects the Siddha philosophy of unity and respect for all life forms.

Despite its ancient origins, Siddha Medicine remains relevant in the modern world, offering valuable insights into holistic health and wellness. Its emphasis on prevention, personalized care, and the integration of physical, mental, and spiritual health aligns with contemporary approaches to integrative medicine. In recent years, there has been growing interest in Siddha Medicine as a complementary and alternative therapy, particularly for chronic conditions such as diabetes, arthritis, and respiratory disorders. Research into Siddha remedies has shown promising results, highlighting their potential as safe and effective treatments.

However, the practice of Siddha Medicine faces challenges in the modern era. The lack of standardized regulations and quality control for Siddha remedies has raised concerns about their safety and efficacy. Additionally, the integration of Siddha Medicine into mainstream healthcare systems requires greater collaboration between traditional medical practitioners and modern

professionals. Efforts are underway to address these challenges, including the establishment of research institutions and the development of standardized protocols for Siddha treatments. By bridging the gap between tradition and modernity, Siddha Medicine can continue to thrive and contribute to global health.

In conclusion, Siddha Medicine offers a holistic approach to health that addresses the physical, mental, and spiritual dimensions of well-being. Rooted in ancient wisdom, this system emphasizes the balance of the five elements and the three humors, using herbal remedies, diet, yoga, meditation, detoxification to restore harmony. integration of spirituality and environmental awareness further distinguishes it as a comprehensive and sustainable approach to health. While challenges remain, Siddha Medicine holds immense potential as a complementary and alternative therapy, offering valuable insights into the prevention and treatment of disease. By embracing the principles of Siddha Medicine, individuals can achieve not only physical health but also mental clarity and spiritual fulfillment, embodying the true essence of holistic wellbeing.

Historical Background of Siddha Medicine:-

Siddha Medicine traces its origins to the ancient Tamil civilization, which flourished in the southern part of India thousands of years ago. The Siddhars, the founding figures of this system, were not only healers but also philosophers, alchemists, and spiritual masters. Among the most renowned Siddhars were Agastya, Thirumoolar, and Bogar, who are credited with authoring numerous texts on

medicine, alchemy, and spirituality. These texts, written in Tamil, form the foundation of Siddha Medicine and provide detailed insights into the preparation of medicines, diagnostic methods, and spiritual practices.

The Siddhars believed that the human body is a microcosm of the universe, and thus, the same principles that govern the cosmos also apply to the body. This belief is reflected in the emphasis on the five elements and their influence on health. The Siddhars also pioneered the use of metals and minerals in medicine, developing advanced techniques for purification and preparation. For example, they created "Muppu," a universal salt believed to have potent healing properties, by combining purified forms of salt, mercury, and mica. These innovations highlight the scientific and experimental nature of Siddha Medicine, which was far ahead of its time.

Detailed Treatment Methods in Siddha Medicine:-

Siddha Medicine employs a wide array of treatment methods, each tailored to the individual's unique constitution and condition. Herbal medicine is the most widely used modality, with thousands of plants and herbs being utilized for their therapeutic properties. Some commonly used herbs include:

- -<u>Turmeric (Curcuma longa):</u> Known for its antiinflammatory and antioxidant properties, turmeric is used to treat a variety of conditions, including arthritis, skin disorders, and digestive issues.
- Neem (Azadirachta indica): With its antimicrobial and blood-purifying properties,

neem is used to treat infections, skin diseases, and diabetes.

- <u>Ginger (Zingiber officinale):</u> A powerful digestive aid, ginger is used to alleviate nausea, improve digestion, and reduce inflammation.

In addition to herbs, Siddha Medicine also uses metals, minerals, and animal products in its formulations. These substances undergo rigorous purification processes to ensure their safety and efficacy. For example, mercury, sulfur, and gold are used in various preparations to treat chronic diseases and enhance vitality.

Diet and lifestyle modifications are also integral to Siddha treatment. Foods are classified based on their taste (sweet, sour, salty, bitter, pungent, and astringent) and their effect on the humors. For instance, a person with a predominance of Pitha (fire) is advised

to avoid spicy and acidic foods, which can aggravate the humor. Instead, they are encouraged to consume cooling foods like cucumbers, melons, and leafy greens.

Yoga and meditation are prescribed to enhance physical and mental well-being. Specific yoga postures and breathing techniques are recommended based on the individual's constitution and health condition. For example, a person with Vatha imbalance may benefit from grounding poses like Tadasana (Mountain Pose) and slow, deep breathing exercises to calm the nervous system.

- Vaishnavi Wadekar, Fourth Year B. Pharm.

Jauhar: A fiery honorary victim in Rajasthani history

Rajasthan is a land of courage and pride and is deeply rooted in stories about heroism and victims. One of the most moving traditions is Jauhar, in which women in Rajput commit a massive immolation to protect their honour from pervasive enemies. The women led by queens and royal ladies would gather and light a large fire, then enter it, sacrificing themselves. The Rajput men pulled the saffron lob and fought around the final stand (called Saka), and the women are led by their queens from the Queen's Library Pier. It was seen not as an act of fear but as a violent pride. There is a well-known instance, the Jauhar of Rani Padmini of Chittorgarh in 1303 during Alauddin Khilji's siege. Other surprising Jauhar continued in the same in 1535 and 1568,

marking Chittorgarh as a symbol of unparalleled courage and casualties.

Jauhar has a complex historical location. On the one hand, it is recalled as a powerful expression of Rajput's apprentice. Meanwhile, modern scholars question the tragic roots of patriarchy and war. But for many in Rajasthan, it remains a sacred heritage celebrated with monuments such as ballads, folk tales and Jauhar Kundas. It reflects an era in which dignity is valued for life itself and leaves behind a legacy of fire, courage and memory.

- Gauri Chandak, Second Year B. Pharm.

Tantra and Its Misunderstood Legacy

Introduction:

Tantra, a very ancient and complex system of spirituality, has been veiled in secrecy, controversy, and confusion for centuries.

Tantra, having originated in India, has impacted Hinduism and Buddhism, providing a very different pathway to spiritual awareness that accepts all of life. Other systems of spirituality, that call for renunciation and detachment, call on Tantra to ask for an integration of the material and spiritual, discovering the divine everywhere in all of life.

Although deeply philosophical and meditative in bent, Tantra has been vastly misconceived—more often than not simplified to rough sexual rituals, black magic, or mystical occultism. Much of this misinterpretation rests upon colonial biases, translator prejudices, and commodification today as its foundation. Tantra is an extremely spiritual path of personal realization that includes meditation, ritual, visualization, energy practices, and bhakti.

The essay below will outline the history and origins of Tantra, its primary postulates, myths about it, and in what ways it continues to be relevant to our modern times. By appreciating its nature, we can revere Tantra as a valid and deserving spiritual practice that is rich with insights into human and cosmic consciousness.

The Origins and Evolution of Tantra

Etymology and Meaning

The term Tantra itself comes from the Sanskrit term tan, which is "to expand, weave, or extend." This etymology suggests the philosophy of Tantra, which is to expand human perception and interweave the threads of existence into an integrated experience. Tantra is not simply a compendium of occult practices but a highly developed spiritual philosophy that prefers direct experience to dogma.

Tantra is thought to have developed between the 3rd to the 6th century CE, but other experts trace it to much older Vedic traditions. Tantra arose as a reaction to rigid casteism and cult dogmatism of orthodox Hinduism based on greater equality and inclusivity of spirituality. As opposed to such Brahmanical conventional practices requiring rigid adherence to the law of segregation by caste, Tantra permitted men and women from all classes to reach spiritual truths through direct experience and practice.

Tantric Texts and Traditions

Tantra is not limited to one religious system but has occurred in Hinduism, Buddhism, and even Jainism. Its scriptures, or Tantras, Agamas, and Samhitas, provide elaborate metaphysical doctrines, meditations, and rituals.

Hindu Tantra

Hindu Tantric practices are devoted to the worship of gods and goddesses like Shiva, Shakti, Kali, and Tripura Sundari.

It encompasses such schools as Kashmir Shaivism, Sri Vidya, and Nath traditions that have diverse practices but a common focus on inner transformation.

Some of the ritual practices of Hindu Tantra are fire ceremonies (homa), recitation of mantras, and intricate meditation practices to integrate the practitioner's consciousness with the divine.

Buddhist Tantra (Vajrayana)

Buddhist Tantric, or Vajrayana Buddhism, evolved in Tibet and Nepal.

It lays great emphasis upon mantras, mudras (hand positions), mandalas (sacred patterns), and the guru's role to speed up enlightenment.

The Siddha (realized master) motif is central in Buddhist Tantra, where wisdom and compassion are developed together by esoteric means.

Jain Tantra

Although less prominent, Jainism does incorporate a few Tantric features emphasizing the use of mantras and sacred symbols to bring about spiritual growth.

Certain Jain schools employ Tantric meditative methods to enhance their superior spiritual perception.

The Spread and Impact of Tantra

Tantric practices spread through India, Tibet, Nepal, China, and Southeast Asia and impacted many domains of culture, art, and spirituality. The temples, the sculptures, and the philosophical treatises of these places testify to the impact of Tantra on religious philosophy and practice.

While of spiritual value, Tantra was persecuted during medieval times, especially when orthodox religious forces grew stronger. More recently, with the onset of British colonialism, Tantra became considered to be superstitious, immoral, or even risky, and its true sense was further tainted.

Fundamental Principles of Tantra

Tantra is a Rich and Multiple tradition but rests upon some shared presuppositions that make Tantra different from other traditions of spirituality.

1. Non-Duality and the Divine Within

Tantra is founded on the philosophy of non-duality (Advaita), i.e., worldly and spiritual are not distinct. Unlike renunciatory traditions involving renunciation, Tantra instructs us that anything—the body, senses, emotion, and appetite—are expressions of the divine.

This awareness is achieved through the union of Shiva (stable awareness) and Shakti (dynamic power), the cosmic balance between inertia and activity symbolized.

2. Shakti and the Cult of Feminity

Tantra singularly positions Shakti, a feminine divine power, at the peak of spiritual practice. Orthodox Hindu devotionalism is malefocused, yet Tantra recognizes that female power is called upon to generate, maintain, and change.

Gods like Kali, Durga, and Tripura Sundari are worshipped as the supreme consciousness in their female form. Tantric ceremonies worship the union of male and female energies within every human, going beyond patriarchal values.

3. Mantra, Yantra, and Mudra

Tantric practices employ divine tools to access spiritual energy:

Mantras – Sound waves vibrating to pray and spiritually awaken.

Yantras – Geometric shapes symbolizing divine powers, for concentration and protection.

Mudras – Symbolic hand gestures that help to guide the flow of consciousness and energy.

4. Guru-Disciple Tradition

The guru's role (spiritual master) is the core of Tantra. As much Tantric practice depends on profound esoteric knowledge, there must be a qualified guide in the form of a guru. The guru

transmits wisdom through oral transmission (parampara) so that the student uses the path judiciously.

5. Kundalini Awakening

Kundalini energy, symbolized at times by a serpent wrapped around the bottom of the spine, is an important part of Tantra. Through activities like yoga, meditation, and control of the breath (pranayama), the dormant energy is awakened and directed through the chakras (energy centers) in hopes of achieving spiritual illumination.

Misinterpretations and Distortions of Tantra

While based on very deep spiritual wisdom, Tantra has been essentially misinterpreted and thus misrepresented by humans.

1. Sexual Association

Perhaps the greatest misconception regarding Tantra is that Tantra is somehow involved with sex. While some schools engage in sexual Tantra, it is a fringe element of the broader Tantric tradition. The purpose of sexual Tantra is not sensual pleasure but transcendence, energy transmutation, and spiritual union with the divine.

Western translations, particularly in the 20th century, made Tantra into "Tantric sex" seminars and misleading books that avoid its esoteric meditative aspect.

2. Black Magic and Occult Stereotypes

Tantra has become linked with black magic and the occult because of misinformation presented in books and movies. Some Tantric orders do have rituals that might appear strange, but they are typically designed for self-transformation and cleansing and not to practice sorcery.

The British colonial administration demonized Tantric believers by spreading the canard that Tantra was deviant, dangerous, or evil.

3. Social Transgression and Taboo

Some of the Tantric cults like the Aghoris indulge in strange rituals like meditation near cremation grounds. These rituals are meant to overcome fear, go beyond social conditioning, break the ego, and not indulge in deviant acts.

Tantra's Relevance in the Modern World

Rarely mentioned in myth, Tantra is as relevant now as it has ever been, with profound teachings to be learned from concerning spiritual evolution, self-knowledge, and wholeness or integral wellness.

1. Meditation and Mindfulness

Tantric meditative techniques such as mantra repetition, visualization, and breath work easily align with modern mindfulness and health memes.

2. Feminine Empowerment

Tantric Shakti worship dethrones patriarchal hierarchies and consecrates gender equality. Most modern spirituality movements take a page from Tantric theology of the divine feminine.

3. Healing and Energy Work

Tantric theories of the chakras and energy flow have influenced yoga, Ayurveda, Reiki, and holistic healing traditions.

4. Spirituality in Daily Life

Whereas renunciatory traditions withdraw from the world and every day, Tantra takes spiritual immersion in the world and the everyday.

Conclusion

Tantra is a very old and profound spiritual tradition, which has been much too frequently misunderstood, most frequently to distort its very nature. Tantra is not a group of mystical techniques at its core but an integrative and transmutational path that synthesizes the material and immaterial aspects of life. Tantra offers a unique method of self-realization based on the perception of the divine in all—body, mind, energy, and consciousness.

If Tantra's most significant contribution is its nondual philosophy that teaches us to perceive the holy and the worldly as one, then the majority of the spiritual practices provide the renunciation of worldly life but Tantra calls us to live life itself as spiritual growth. This can be done in the world today, where individuals desire a balance between spirituality and worldly life.

Further, Tantra's hallowing of Shakti, or feminine divine power, is a violation of the historic patriarchal system, making gender equality possible and allowing people to see the sacredness of male and female energies. Its use in meditation, mindfulness, energy healing, and integrative health has rendered it more applicable to modern spirituality and wellness practice.

But despite its boundless profundity and religious complexity, Tantra has been victimized by global myths. It has been indiscriminately equated with crude sexual mysticism, black magic, and occultism by selective interpretations, colonial biases, and marketization. Through redescribing and redeeming its original sense, we can reestablish Tantra's place as a legitimate and worthy spiritual legacy.

Rather than looking at Tantra through a distorted glass, we must look at it as a passionate spiritual way of reaching enlightenment and learning profound truths about self-discovery, global consciousness, and the unity of all existence. If we learn from and respect its teachings, we can unlock its wisdom and live more aware, satisfying, and spiritually enlivening lives.

- Nidhi Mishra, Fourth Year B. Pharm.

Traditional Indian Dietary Practices and Modern Science

The Indian dietary system has its own heritage of plethora of food categories and values passed onto generations for decades. The dietary system dates back from around 5000 years. Recording back from the Indus valley civilization where several pieces of evidence have been excavated. This rich food consists of various vitamins, minerals, carbohydrates and proteins which help nourish the human body and can also be processed by the body as easily as possible. Since the modern world has revolutionized due to rapid growth in the food industry; The Indian traditional dietary practices continue to hold on to its ground with its significant relevance into modern science.

The staple food which were considered as Indian folktales are now under the eyes of modern medicinal science having a major impact in the ayurvedic, pharmaceutical and nutraceutical industry through its biochemical mechanisms. The staple food of the Indian diet is wheat, rice, millets, legumes, vegetables, fruits and lentils which can easily grow in the Indian region of the subcontinent. Vegetarianism has been followed by a major part of the population because of its cultural and religious beliefs and thus it is believed that vegetarianism is thought to have originated from India; Vegetarianism provides various job opportunities and business models in the modern lifestyle for local farmers. The Indian diet mainly promotes its food as having a mindful eating habit which includes resisting overeating, weight management, improved digestion and also by acknowledging the efforts put in for cultivation of these products thus creating a better relationship of mankind with food and food products.

The significance of 'Ayurveda' in India has a major role in the diet of the Indian cuisine as it contains three types of philosophy that are 'Sattvik', 'Rajasik', and 'Tamasik'. Sattvik food is is unprocessed and doesn't require any animal cruelty and its main purpose is to promote health and spiritual wellbeing; examples consisting of vegetables, fruits and edible vegetable oil. The 'Rajasik' food contained food consisting of spice and a mix of flavours. this food is thought to provide more alertness to the mind and the body. At last 'Tamasik' food is called to be the worst for human consumption as it is said to have heavily processed food and also contains food which is non-vegetarian and thus indulged in animal cruelty. It is said that if you consume 'Tamasik' food it can cause several diseases and cause heat in the body leading to imbalance in thought process. The ayurvedic dietary system can also be classified into philosophies such as 'hot' or 'cold' food. 'Hot' food can generate heat in the body, rashes on skin increases the appetite and can destroy the semen; thus should be avoided in large quantities, examples are- spices. 'Cold' food has a cooling effect on the body but can also negatively impact the immune system of the body, examples are- cucumbers, milk, buttermilk and apples.

Indian food now has a system of eating all the characters of nutrition in a single plate called 'Thali'. It is a perfect combination of nourishment, balance and overall health. In this system different eateries are provided such as a Roti, Dal, Rice, Bhaji, Pickle and Papad. The roti contains fibre, the dal contains protein, rice contains carbohydrates, bhaji of various different vegetables which provides vitamins and minerals, pickle consisting

fermented food product which has probiotics as well as prebiotics and papad as a source of appetizer. Therefore, a thali is said to be an allrounder one food plate for a major widespread region of India.

The diversity of the Indian states such as Kerala and Karnataka in which their general public eat fermented food such as 'Idli' and 'Dosa' which provides healthy gut bacteria called as probiotics and provides healthy digestion which in turn helps in absorption of essential Similarly, nutrients. in Gujarat Maharashtra major chunk of their population eat lentils, and millets as their primary source of food examples such as jowar, bajra, ragi and pulses which improve blood sugar level and helps in weight loss. Today in modern science millets are recommended to diabetes patients. Along with the above; leafy vegetables are easily to grow and available in the Indian subcontinent their nutritional benefits are exceptional as they are rich in iron, calcium, magnesium and zinc; many vitamins are also provided in them which helps combat against malnutrition. Indians also include fruits commonly eaten throughout their tradition such as jackfruit, papaya, oranges, mangoes, banana and Indian berries which are rich sources of antioxidants, vitamin C, potassium and fibre.

Milk and milk products have always been a crucial part of their diet where milk is converted to other products such as curd, buttermilk, cottage cheese, shrikhand (cream dessert) and ghee i.e clarified butter. Each one has been commercialized today by many companies' weather national or international on a large scale as more and more people attract towards the benefits of these products due to their wide variety of tastes which is quite different from today's modern food culture and easy to consume by any person whether paediatric, geriatric or an adult.

International market is opting for more and more demand of such product to implement these products in there day to day life as they are less processed and high in proteins and calcium which help in bone strength without any side effects and prevent children against various diseases like rickets and helps in their bone development. Curd or 'dahi' is a traditional Indian version of yoghurt which is better than yoghurt, it neutralizes the spice content in the food and is very widely used in the Indian cuisines such as curries rich in protein, phosphorus, vitamin B12, iron and potassium thus, being a connecting link between overall well-being and gut health.

Spices which were local are now the most popular and high in demand around the globe as they provide both taste along with many beneficial properties like cumin antioxidant, saffron for controlling blood pressure, asafoetida as an anti-bloating, fenugreek for libido, black pepper increases metabolism and used against infection, garlic for allicin and blood pressure, cardamom in inflammation, cold, cough and asthma and turmeric rich in phytonutrients also being a powerful anti-inflammatory and antioxidant used to treat digestive and liver problems, wounds and diseases.

In recent research curry leaves were found to have antioxidant properties and used in various modern medicines as an anti-hair fall treatment. Amla i.e. Indian gooseberry is also found to produce norepinephrine believed to improve the functioning of the brain in patients with dementia. It is also a widely marketed product used in skin due to high vitamin C content and health industry due to its immunity boosting property where and hence used in various nutraceutical ingredients and many formulations such as juice, syrup creams and lotions.

Turmeric being the most commercial product of all spices as many recent research studies suggest turmeric consists of anti-cancer properties and it is also being widespread due to it being a natural colouring agent. Similarly, tulsi, a medicinal herb used for centuries as a medicinal herb previously used crushing it and eating it or whether applying on open wounds because it being anti-inflammatory and an anti-tussive agent. Another medicinal herb called 'Mint' having a cooling property, used as flavouring agent, menthol in it being used in the dental industry as a dental analgesic and antiseptic and used in varieties of oral product such as toothpaste, mouthwash and dental powders.

The practice of fasting has followed for several decades whether it being religious or spiritually influenced. The western culture has been influenced by us through a recent trend called intermittent fasting. Fasting helps in lowering blood sugar levels and increases cell repair, detoxification, boost metabolism, heart risks and major diseases like cancer

Food since the beginning has always been given prominence in each and every festival and cultural/religious events in India. Diversification of the food according to the geography has led the locals to find food in their own surrounding and different

geographical regions, this benefited us as individuals to know our local dietary food about its pharmaceutical and medicinal properties in modern science today.

Just because of our diverse history many processed and refined products can be avoided. The Indian dietary system contains a plethora of health benefits with scientific evidence and provides us with the best ground of health freedom to enjoy our food while providing not only taste, hunger, aroma of food, texture and fulfillment but also with benefits. many nutritional Years observation, experience and wisdom by our ancestors helped us in eating development within its science behind it. Modern science is now increasingly realizing the health benefits of our Indian diet and integrating it continuously into the healthcare development in combating many major diseases and avoiding the risk of getting diseases.

In conclusion, it is better to protect our Indian dietary system in order to maintain our healthy lifestyle of our future by promoting and implicating our diets and to have a better knowledge about our own local food and food products.

- Yatish Chauhan, Fourth Year B. Pharm.

Conservation of Indian Knowledge System through TKDL (Traditional Knowledge Digital Library)

India is land of knowledge and abundance. We are diverse and have had a lot of diversity in all aspects from languages to food to wildlife. We have been having this knowledge system imbibed in our lives that we have not realised that the rest of the world was ready to take our knowledge and call it theirs. Traditional Knowledge (TK) is a valuable yet vulnerable asset to indigenous and local communities who depend on TK for their livelihood. The healthcare needs of more than 70% of the population and the livelihood of millions of people in India is dependent on traditional medicine. Globally too there has been renewed attention and interest in the use of traditional medicine increasing its vulnerability to exploitation.

The Traditional Knowledge Digital Library (TKDL) is a significant initiative by the Government of India, aimed at preserving and protecting the country's rich heritage of traditional knowledge, particularly in the fields of medicine and health. Established in 2001 through a collaboration between the Council of Scientific and Industrial Research (CSIR) and the Ministry of AYUSH, TKDL serves as a digital documents repository that traditional knowledge in a structured format, making it accessible for research and protection against biopiracy. The grant of a US patent to wound healing properties of turmeric flags the danger of complacency in proactively guarding the traditional knowledge. The time, effort and money spent on revocation of turmeric patent at USPTO highlighted the need for putting in place a proactive mechanism for TK protection. The problem related to Indian TK is further compounded by the fact that India's traditional medicinal knowledge exists in languages such as Sanskrit, Hindi, Arabic, Urdu, Tamil etc. that too in ancient local dialects that are no more in practice. Thus, the published Indian TK literature is neither accessible nor understood by patent examiners at international patent offices.

Objectives and Goals

The primary objectives of TKDL include:

- 1. Protection Against Biopiracy: TKDL aims to safeguard traditional knowledge from exploitation by preventing the granting of erroneous patents on products derived from traditional practices without proper acknowledgment or compensation to indigenous communities.
- 2. Documentation: The library systematically documents traditional medicinal knowledge from various Indian systems, including Ayurveda, Unani, Siddha, Sowa Rigpa, and Yoga. This documentation is crucial for preserving ancient wisdom and practices.
- 3. Facilitation of Research: By providing access to traditional knowledge in a digitized format, TKDL encourages modern research and innovation based on these age-old practices.
- 4. Promotion of Biodiversity Conservation: The documentation of traditional knowledge contributes to the conservation of biodiversity by emphasizing the sustainable use of natural resources inherent in these practices.

Structure and Content

TKDL encompasses an extensive database containing over 34 million pages of information related to traditional knowledge.

Key features include:

- 1. Multilingual Access: The database is available in five international languages— English, German, French, Japanese, and Spanish—making it accessible to a global audience.
- 2. Traditional Knowledge Resource Classification (TKRC): This innovative classification system organizes the content in a manner that is understandable to patent examiners worldwide, bridging the gap between traditional practices and modern patent laws.
- 3. Diverse Content: The library includes approximately 1 million Unani formulations, 12,000 Siddha formulations, and 80,000 Ayurvedic formulations. This diversity reflects India's vast repository of herbal and medicinal knowledge.

Impact on Patent Law

TKDL has significantly influenced patent law both in India and internationally by:

- 1. Prior Art Database: It acts as a prior art database that patent examiners can consult to verify claims related to traditional knowledge. This helps prevent the misappropriation of indigenous knowledge by ensuring that prior art is considered during patent examinations.
- 2. Collaborations with Patent Offices: Various international patent offices, including those in Europe and the United States, have been granted access to TKDL for prior art searches. This collaboration has led to several patents being withdrawn or modified based on evidence from TKDL.

IP Office collaboration

Certain patents offices have been granted access to the TKDL for carrying out prior art searches and patent examination:

European Patent Office (February 2009)

Indian Patent Office (July 2009)

German Patent Office (October 2009)

United States Patent and Trademark Office (November 2009)

United Kingdom Intellectual Property Office (February 2010)

Canadian Intellectual Property Office (September 2010)

IP Australia (January 2011)

Traditional Knowledge Digital Library has overcome the language and format barrier by systematically and scientifically converting and structuring the available contents of the ancient texts on Indian Systems of Medicines i.e. Ayurveda, Siddha, Unani and Sowa Rigpa as well as Yoga, into five international languages, namely, English, Japanese, French, German and Spanish, with the help of information technology tools and an innovative classification system - Traditional Knowledge Resource Classification (TKRC). A total of 418885 formulations including 119269 in Ayurveda, 236399 in Unani, 54689 in Siddha, 4151 in Yoga and 4377 in Sowa Rigpa have been transcribed so far into the TKDL database.

The Traditional Knowledge Digital Library (TKDL) employs a sophisticated classification system known as the Traditional Knowledge Resource Classification (TKRC), which is designed to organize and categorize India's vast repository of traditional knowledge, particularly in the fields of Ayurveda, Unani, Siddha, and Yoga. This system is crucial for ensuring that traditional knowledge is

documented in a manner that is accessible and comprehensible to patent examiners globally.

Overview of the TKRC Classification System

1. Modeling on International Standards

- The TKRC is modeled after the International Patent Classification (IPC) system, which categorizes inventions into various sections and subgroups using a hierarchical structure. This alignment allows for consistency in how traditional knowledge is presented alongside modern patent applications.

2. Structure and Subgroups:

- The TKRC organizes traditional knowledge into approximately 25,000 subgroups tailored specifically for traditional Indian medicine. This includes detailed classifications for various formulations and practices derived from ancient texts.
- Each subgroup is defined by specific attributes such as title, knowledge resource, date since known, country of origin, and keywords. This structured approach facilitates easy retrieval and examination by patent offices.

3. Language Accessibility

- One of the key features of the TKRC is its multilingual capability. Traditional knowledge documented in local languages such as Sanskrit, Urdu, and Tamil is translated into five international languages: English, German, French, Japanese, and Spanish. This ensures that the information is accessible to a global audience of patent examiners.

4. Integration with Patent Examination

- The TKRC's classification system mimics the format of patent applications, making it readily understandable to patent examiners. By presenting traditional knowledge in a familiar

format, it enhances the likelihood that prior art will be recognized during patent evaluations.

- The information within TKDL serves as prior art that can prevent the granting of patents on traditional knowledge that has not been adequately disclosed or acknowledged by applicants.

5. Search Capabilities

- The TKDL database offers advanced search functionalities that allow users to perform searches based on IPC codes, keywords, and Boolean expressions. These features enable comprehensive searches for specific formulations or practices within the vast database.

Conclusion

The TKDL's Traditional Knowledge Resource Classification system plays a vital role in preserving India's traditional knowledge while protecting it from misappropriation through effective documentation and classification. By aligning with international standards and enhancing accessibility through multilingual support, TKRC not only safeguards indigenous knowledge but also facilitates its integration into modern research and patent systems worldwide. This innovative approach ensures that traditional practices are recognized and respected within the global intellectual property framework.

Recent Developments

In September 2022, the Indian government announced plans to widen access to the TKDL database beyond patent offices. This initiative aims to integrate traditional knowledge with contemporary practices, fostering innovation and entrepreneurship based on India's rich heritage. The move is expected to benefit various stakeholders including businesses, research institutions, educational

organizations, and practitioners of Indian Systems of Medicine (ISM).

Link for TKDL

https://www.tkdl.res.in/tkdl/langdefault/common/Home.asp?GL=Eng

Note: Compilation of data done with AI tools

- Vrushali Keer, Assistant Professor

CHAKRA DHYAAN: A WAY TO ALIGN THE ENERGY CENTERS

What are Chakras?

Chakra dhyaan, or chakra meditation, is an important aspect of the Indian knowledge system, rooted in ancient spiritual philosophies. Energy flows through the body through channels known as 'Nadis'. Chakras

are described as "wheels" of energy that align along the spine where the nadis converge. There are seven primary chakras or energy centers within the human body. The balance and alignment of these chakras influence our physical, emotional, and spiritual well-being.

Table 1: Location, function and influence of the seven primary chakras

Chakra	Location	Function	Impact on Well-Being
Root Chakra (Muladhara)	Base of the spine	Governs survival needs, security, stability	Fosters feelings of safety and confidence; imbalance can lead to anxiety and fear.
Sacral Chakra (Swadhistana)	Lower abdomen	Associated with emotions, creativity	Enhances emotional stability and creativity; imbalance may cause emotional instability or relationship issues.
Solar plexus Chakra (<mark>Manipura</mark>)	Upper abdomen	Represents personal power, self-esteem	Promotes assertiveness and self-worth; imbalance can result in low self-esteem or feelings of powerlessness.
Heart Chakra (Anahata)	Center of the chest	Central to love, compassion, emotional connections	Fosters deep relationships and emotional healing; imbalance may lead to feelings of isolation or difficulty in giving/receiving love.
Throat Chakra (Vishuddhi)	Throat area	Governs communication and self-expression	Enables clear communication when balanced; imbalances can result in difficulties expressing thoughts or feelings.
Third Eye Chakra (Ajna)	Between the eyebrows	Associated with intuition, insight, mental clarity	Enhances intuition and wisdom; imbalances may lead to confusion or lack of direction.
Crown Chakra (Sahastrahara)	Top of the head	Represents spiritual connection and enlightenment	Fosters a sense of spiritual fulfillment; imbalances can lead to feelings of disconnection from oneself or the universe.

Balancing the chakras through Chakra Dhyaan/ Chakra Meditation:

When all these seven chakras are balanced, energy can flow freely through the body, thus promoting optimal physical, emotional and spiritual health. Conversely, blockages or imbalances in any chakra can lead to various physical ailments and psychological issues, affecting overall quality of life. By working to achieve a state of balance in our chakras, we can enhance our overall well-being in all aspects of our life.

Benefits of Chakra Dhyaan/ Chakra Meditation

The chakra meditation serves multiple purposes:

Emotional Healing: Each chakra corresponds to specific emotions and balancing them helps us to express our true feelings.

Spiritual Growth: Chakra Dhyaan/ Chakra Meditation helps us connect to our higher consciousness.

Physical Health: The chakras influence bodily functions through their connection to the endocrine system. Alignment of the chakras helps to balance hormone levels and emotional states.

Practices for Chakra Meditation

Chakra Dhyaan/ Chakra Meditation involves various techniques aimed at activating as well as balancing the chakras

Bija Mantra Meditation: Asivana Yoga defines specific Bija Mantras for each Chakra. Chanting these bija mantras along with focus on the

colour of light associated with each chakra can help clear blockages and activate the chakra.

Breathwork: Pranayama techniques can facilitate energy movement through nadis, promoting chakra balance.

Physical Postures (Asanas): Specific yoga poses target particular chakras to strengthen their energy flow and balance.



Figure 1: Number of petals in each chakra, colour and Bija Mantras

Conclusion

Chakra dhyaan/ Chakra Meditation is an integral part of the Indian knowledge system that combines ancient wisdom with practical applications for enhancing personal well-being. By understanding and working with these energy centers through meditation and yoga practices, individuals can achieve greater harmony within themselves and connect more deeply with their spiritual essence. This holistic approach underscores the interconnectedness of mind, body, and spirit in achieving overall health and enlightenment.

- Dr. Poonam Advani, Professor

INDIAN KNOWLEDGE SYSTEM AND MODERN DRUG DELIVERY SYSTEMS

The integration of the Indian knowledge system with modern drug delivery approaches represents a promising fusion of ancient wisdom and advanced science, delivering holistic and effective healthcare solutions. Indian medical traditions such as Ayurveda, Siddha, and Unani offer unique insights into health, with a focus on personalized care and natural remedies. When combined with innovations in drug delivery, such as nanotechnology and targeted therapies, these systems provide new opportunities for sustainable and effective treatment approaches.

Personalized Medicine: Dosha-Based Approach and Modern Personalization

Personalized medicine seeks to tailor treatments based on an individual's genetic, environmental, and lifestyle factors, a concept that strongly resonates with Ayurveda's "dosha" theory. In Ayurveda, people are categorized into body-mind constitutions or doshas (Vata, Pitta, and Kapha), and treatment personalized accordingly. Modern pharmaceutical science is now exploring genetic markers associated with these doshas, providing a scientific basis for Ayurveda's individualized approach.

In modern drug delivery, this dosha-based personalization could guide dosage, formulation, and release mechanisms. For instance, people with a Pitta constitution, who are prone to inflammation, might benefit from anti-inflammatory drug delivery systems optimized for controlled release. approach aligns with advanced drug delivery technologies, such as nanocarriers, which enable precise targeting of cells or tissues based on individual patient profiles,

maximizing therapeutic benefits while reducing adverse effects.

Bioactive Compounds and Herbal Medicines for Enhanced Delivery

Indian traditional medicine systems are rich in natural compounds known for their therapeutic effects, including herbs like turmeric, ashwagandha, neem, and tulsi. However, many of these compounds face bioavailability challenges, as they are often poorly soluble in water or degrade before reaching their targets. Modern drug delivery technologies, such as nanoencapsulation and liposomal systems, address these challenges by enhancing the stability, absorption, and controlled release of these compounds.

For example, curcumin from turmeric has powerful anti-inflammatory and antioxidant properties, but low bioavailability limits its Encapsulating curcumin within efficacy. nanoparticles or liposomes protects it from rapid degradation and facilitates better absorption, allowing it to reach its therapeutic more effectively. Furthermore, Ayurvedic polyherbal formulations can benefit from modern drug delivery, as these systems allow multiple herbs to be delivered simultaneously, ensuring synergistic effects and a more comprehensive therapeutic impact.

Nanotechnology and Targeted Drug Delivery

Nanotechnology has revolutionized drug delivery by enabling targeted, controlled release systems that deliver drugs to specific cells or tissues. This precision aligns with the Ayurvedic focus on treating specific imbalances, making nanotechnology an ideal tool for enhancing the efficacy of traditional remedies. Nanocarriers such as liposomes,

micelles, and dendrimers protect bioactive compounds from degradation and enable precise delivery to target areas.

For instance, nanoparticles loaded with boswellic acid (derived from Boswellia serrata, used in Ayurveda for inflammation) can be directed to inflamed tissues, reducing the required dose and minimizing systemic side effects. Additionally, nanotechnology can improve the solubility of hydrophobic herbal compounds, expanding their therapeutic potential by overcoming the solubility limitations that traditionally restricted their use.

Sustainable and Natural Excipients for Eco-Friendly Drug Formulations

Sustainability and biocompatibility essential elements of the Indian knowledge system, reflecting its commitment to using natural, eco-friendly materials. This principle aligns with current trends in drug formulation biodegradable that emphasize biocompatible excipients. Natural excipients such as chitosan (from shellfish) and Ayurvedic oils, including sesame and coconut oil, are increasingly popular in modern drug delivery for their biocompatibility and minimal toxicity. For example, chitosan, a biocompatible polymer, is widely used to enhance drug absorption through the skin and mucous membranes. Sesame and coconut oils, used traditionally in Ayurveda, are also effective carriers in transdermal and topical drug enhancing delivery, penetration supporting sustained release. These natural excipients not only improve drug delivery but also reduce reliance on synthetic additives, aligning with the sustainability principles upheld in Indian traditional medicine.

Adjunct Therapy: Enhancing Modern Medicine with Ayurveda

The Indian knowledge system emphasizes a holistic approach to health, advocating a balance between mind, body, and

environment. As an adjunct to modern pharmaceuticals, Ayurvedic principles offer potential for synergistic effects that can reduce drug dosages and side effects. For instance, Ayurvedic herbs like ashwagandha and turmeric have anti-inflammatory properties that can complement conventional drugs, allowing lower doses to be used and minimizing adverse effects.

Mind-body practices integral to Ayurveda, such as yoga and meditation, also enhance drug efficacy by reducing stress, improving metabolism, and optimizing blood flow. These practices help the body absorb medications more efficiently and can improve therapeutic outcomes. This synergy between traditional and modern treatments allows for a comprehensive, individualized approach, especially beneficial for managing chronic and lifestyle-related conditions.

Applications in Chronic Disease Management

The fusion of Indian traditional medicine and modern drug delivery holds significant promise for chronic disease management, particularly in diabetes and cancer treatment. In diabetes care, for instance, Ayurvedic herbs like bitter gourd, neem, and fenugreek are known for their blood-sugar-regulating properties. By formulating bioactives into sustained-release systems, natural treatments that help maintain stable blood glucose levels over time can be developed.

In oncology, bioactive compounds such as curcumin and withaferin (from ashwagandha) exhibit anticancer properties but face bioavailability challenges. Encapsulating these compounds within nanoparticles enhances their stability, absorption, and targeted delivery, making them more effective and safer alternatives to conventional chemotherapy. This approach reduces systemic toxicity, focusing the therapeutic effect on cancer cells while minimizing harm to healthy tissue.

Conclusion: Bridging Ancient Wisdom and Modern Science

The integration of the Indian knowledge system with modern drug delivery represents a promising approach to healthcare that respects cultural traditions while embracing scientific advancement. By combining personalized care principles with advanced technologies, this integration supports safer, more effective treatments that are customized to individual needs.

The convergence of these two systems has the potential to reshape the future of healthcare, offering comprehensive and sustainable solutions to global health challenges. The

holistic emphasis of Indian traditional medicine, combined with the precision of modern drug delivery systems, allows for the creation of a more balanced and effective healthcare approach, one that respects both ancient wisdom and modern innovation. This integration holds the key to achieving a global healthcare model that values both tradition and technology, delivering optimal health outcomes.

- Dr. Bhagyashri Ajit Joshi, Assistant Professor

Indian Festivals and Environmental Consciousness

The Indian Knowledge System (IKS) involves the systematic transfer of knowledge from one generation to the next, based on Vedic literature, the Upanishads, the Vedas, and the Upvedas. IKS compounds knowledge from ancient India, along with its triumphs and obstacles, providing a vision for India's future aspirations, particularly in the fields of education, health, environment, and all aspects of life.

The Upanishads talked about the fundamental ecology, environment, nature, the interrelationships and interdependence of all living beings on earth. It was believed that the universe is created for the well-being of all living beings. All living beings must live in harmony with the other species by forming a system of relationships for mutual benefits.

Many of the Indian festivals are a way to show respect to Gods associated with nature including mountains, rivers, trees, seasons etc. Such festivals are performed not only by praying individually or with family but are also celebrated in the form of socio-cultural events. Various gods and goddesses are linked with rivers, mountains, sun, moon, thunder, rain, trees etc.

The practice of worshipping the trees by decorating, organizing festivals linked with them, and protecting them has been an age-old culture in India. The Indian paintings, architecture, folklore, sculpture, ornaments, and handicrafts are often influenced by nature and wildlife reflecting the sense of love and appreciation for nature. A diverse range of forests, plants, and animals can be found in Indian sculptures, crafts, and miniature paintings.

The presence of sacred groves across India such as Devrai (Maharashtra), Orans (Rajasthan), Sama (Bihar), Devban (Himachal Pradesh), and Kavu (Kerala) helps in maintaining intact ecosystems crucial for carbon sequestration, nutrient recycling, topsoil preservation and biodiversity conservation that are essential for climate resilience.

Traditional Festivals as Sustainable Practice in India:

In India, one can often come across people worshipping some specific trees and plants which have religious and scientific importance. For instance, Vat Vriksha Puja (a prayer ritual performed by Hindus) is an Indian festival in which devotees walk around a Banyan tree while offering water and other offerings. The puja is performed because of age-old traditions, but at the same time Banyan trees also have scientific importance and hence are valued by people.

Similarly, Kua Pujan is another custom of worshipping well, which are water bodies used by people in rural areas for drinking water. The Hornbill Festival, organized at Naga Heritage Village in Nagaland, is celebrated in the month of December and is named after the Hornbill bird which has lots of relevance and importance in the cultural and folklore of the Naga tribes. Sarhul is one of the most significant tribal festivals of Jharkhand, where the tribals express reverence to the Sal tree, acknowledging its role in providing water, shade, housing, livelihood, forecasting and weather harvests patterns safeguarding against malevolent influences throughout the year. Baha is the second largest festival of the Santals after Sohrai, the harvest festival. Revered as their holiest celebration, it is annually observed during the Bengali month of Falgun (February-March) when common trees like Mohuwa, Peepal,

Mango, Polash, Neem, Sal, and Muringa bear new leaves, flowers or fruits.

Such festivals aim at sensitising people about protection of nature and also showcasing the local indigenous dances, martial arts, crafts and culture. The belief behind these customs of Indian people is that 'we don't destroy that which we worship'. Integrating these insights and resources can notably enhance the effectiveness of global-level interventions.

Ganesh Chaturthi: Bridging Spirituality and Sustainability

Ganesh Chaturthi, a celebration deeply rooted in spirituality and tradition, is not just a festival for the eyes and soul; it's a boon for our health too.

Use of leaves in Ganesh Chaturthi Rituals:

Durva Grass (Cynodon dactylon): has several health benefits: Digestive Aid, Antioxidant, Anti-Inflammatory

Arka Leaves (Calotropis procera): Spiritual Purity, Antibacterial, Respiratory Health Turmeric Leaves (Curcuma longa): Anti-Inflammatory, Antiseptic, Aromatic Therapy Mango Leaves (Mangifera indica): Antioxidants, Stress Reduction

The Science Behind the Immersion of Leaves and the idol made of soil in rivers after Ganesh Chaturthi is known as "Visarjan," which means Back to Nature.

While the tradition holds deep spiritual significance, there are scientific reasons

behind this eco-friendly practice: Biodegradability, Nutrient Recycling, Water Purification, Symbolism of the Water Element

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 - Dr. Madhura Vaidya, Associate Professor

Physical Activities and Sports in Ancient India

Overview of Ancient Sports

Physical activities have been integral to Indian culture since ancient times. The archaeological evidence and historical texts reveal a rich tradition of games played for leisure, skill development, and physical fitness. In ancient India, physical education was not merely a pastime but a vital aspect of daily life, deeply embedded in the spiritual and cultural ethos. The Upanishads suggest that a strong body is essential for achieving spiritual indicating that physical strength was considered critical for self-realization.

Origins of Sports in Ancient India

Sports in India can be traced back to the Indus Valley Civilization (circa 3300–1300 BCE), where evidence suggests that physical activities were part of daily life. Archaeological findings from sites like Dholavira indicate the existence of structured arenas that could have hosted athletic events. Ancient texts, including the Mahabharata and Ramayana, mention various forms of martial arts and physical competitions, highlighting their importance in society.

Indus Valley Civilization

The Indus Valley Civilization (circa 2500–1550 BCE) is one of the earliest examples of organized physical activities. Evidence from archaeological sites like Mohenjo-Daro reveals that people engaged in various games, including dancing, swimming in large baths and using dice for games. These activities were part of daily routines and community life. The presence of toys and artifacts suggests that children participated in play, indicating an early understanding of the importance of physical activity for development.

Vedic Period

The Vedic period (1500–500 BCE) saw further evolution in sports and physical activities.

Activities such as horse riding, archery, wrestling, and various ball games became popular during this time. The practice of yoga also emerged as a significant aspect of physical culture, emphasizing physical strength and mental discipline.

Early Hindu and Epic Periods

In the subsequent Early Hindu period (800 BCE – 200 CE), sports continued to thrive with references to various games in epic literature. Hunting was considered a royal sport, while chariot racing and swimming were also popular. The text emphasizes that physical training was crucial for warriors who needed to master skills like archery and sword fighting. The emergence of games like Chaturanga during this period illustrates the blend of strategy and skill inherent in ancient Indian sports.

Cultural Significance

Throughout these periods, sports were not just for entertainment; they were deeply knotted with cultural identity and social structure. Physical activities were often associated with religious practices and societal values. For instance, the emphasis on non-violence in Vedic texts was balanced by the need for physical strength to protect one's community.

Some of the Prominent Ancient Sports are as follows:

Kushti (Pehalwani): This traditional form of wrestling has roots dating back to ancient times. It evolved significantly during the Mughal era by integrating techniques from Persian wrestling (koshti pahlevani) with native Indian styles (Malla-yuddha). Kushti remains a popular sport in rural India today.

Archery: Archery was a highly regarded skill among warriors in ancient India. The Mahabharata features legendary archers like

Arjuna, emphasizing the sport's military significance. Archery contests were common, often held during festivals and royal gatherings.

Chaturanga: This can be considered a precursor to modern chess, Chaturanga originated around the 6th century CE. It was played on an 8 x 8 board and involved a strategy similar to military tactics, symbolizing different branches of the army through its pieces.

Kabaddi: This traditional sport is believed to have originated as a form of military training. Kabaddi emphasizes speed and strength, with teams competing to tag opponents while holding their breath. Its roots can be traced back to prehistoric times.

Kho-Kho: Another indigenous sport, Kho-Kho is a tag game that dates back to at least the 4th century BCE. It involves two teams, where one team chases the other in a rectangular field marked by poles.

Pachisi: It is known as the royal game of India, Pachisi is a cross-and-circle board game that has been played for centuries. It involves moving pieces around a board based on the throw of cowrie shells and is considered a precursor to modern Ludo.

Kalaripayattu: This martial art form from Kerala combines strikes, kicks, grappling, and weaponry techniques. It is one of the oldest fighting systems in existence and emphasizes discipline and physical fitness.

Conclusion

Despite the historical challenges documenting India's sporting heritage due to a lack of written records compared to other civilizations like Greece or China, it is clear that ancient India had a well-developed system of physical culture. The legacy of these ancient practices continues to influence modern sports in India today. The revival of traditional games alongside contemporary sports reflects an ongoing appreciation for this rich heritage. Thus, it is important to understand ancient Indian sports within their historical context and recognize their role in shaping not only individual identities but also societal structures throughout India's history.

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- Dr. Sindhu Menon, Assistant Professor

Music Therapy: Unlocking the Ancient Wisdom of India's Healing Sound Traditions

In the context of the Indian knowledge system, music therapy can be seen as an ancient and profound practice deeply rooted in both spiritual and therapeutic traditions. Scriptures and documents suggest that ancient civilizations such as Indians and Greeks were aware of healing properties of music and had been using music therapeutically.

The Vedas, the earliest Indian scriptures dating back to 1500 to 1700 B.C., contain many verses musicology and to Gandharvatattva, literature on science of music in India, dates back to the fourth century B.C. Brhaddesi, in 6th century a landmark work in Indian musicology by Sri Matanga Muni, and Sangitaratnakara, a 13th century treatise by Sarangadeva, are not only important for musicological aspects but also psychological, physiological, and metaphysical aspects.

Music is an age-old part of Ayurveda also, the holistic science which promotes a happy and healthy lifestyle. From time immemorial, music has been a part of Indian culture. In the Vedas too, music has an important place. The 'Samveda' is full of music. The doshas like Vata, Pitta and Kapha can be controlled effectively by Music Therapy.

Introduction of raga chikitsa/ music therapy Indian traditional systems of health and healing also include various musical treatment approaches" One of the most commonly known traditional Indian healing practices is Ayurveda. Swami explained that Ayurveda means "the science of life" (p. 76) and originated in India around 500 B.C. Its roots are in Hinduism, and its focus is on promoting healing by "balancing the doshas or elements that make up the body, known as vata (air),

pitta (fire), and kapha (water and earth)". Its practices are so integrated into everyday life that many are used without identifying them as such, for example using certain herbs or spices as home remedies. Ayurveda also includes the use of music to help balance the doshas. It is just one of the examples of the ways that sound and music have been used for thousands of years to promote healing in India Karnataka music and Hindustani music systems both systems are rich in numerous ragas (a raga is a specific and melodious structure of selected notes and microtones). kayachikitsa is a very popular term in Indian traditional music therapy, which literally means "treatment by raga". In the context of modern music therapy, raga chikitsa can be considered as a form of receptive music therapy in which a patient is made to listen to one or more specific raga/s to experience its/their therapeutic effects. Ragas can be used in the form of instrumental improvisations, vocal improvisations and/or pre-recorded music/performances. There is accumulating evidence showing effectiveness of specific ragas on specific medical conditions, including a few randomized controlled trials.

Principle of Music therapy:

It is believed that basic principle of music therapy is healing by restoring balance of vata pitta and kapha the tridoshas mentioned in age old traditional system of medicine that is ayurveda.

Twelve notes of music Sa re Re ga Ga Ma Ma# Pa dh Dh ni Ni Sa (shudh & komal) can be divided into 3 groups of four notes each.

Group 1 consisting of Sa re Re ga works on balancing kapha (ragas having these notes help in treating kapha doshas)

Group2 consisting of Ma Ma# Pa dh works on balancing pitta (ragas having these notes help in treating pitta doshas)

Group3 consisting of Dh ni Ni Sa works on balancing vata (ragas having these notes help in treating vata doshas).

Time Theory of Raga It is another interesting concept in Indian Classical music. As per this theory, a 24-hour-day is divided into eight praharas (3-hour-time periods) and each of the ragas is assigned a specific prahara. It is believed that effects of a raga are best produced when it is performed or listened to during the specific time period assigned to it. On similar lines if it is studied about the prabhava of tridoshas morning hours kapha Prakruti is at its maximum hence any ailment related this tridoshas can be treated with the help of morning ragas while pitta guna is maximum during dutiya prahara (that is afternoon). Pitta is responsible for all activity related to digestion hence any ailment related digestion can be treated listening to ragas that can be played and heard during this prahara. Vata dosha can be treated by ragas that are played after or during evening.

Example of use of music therapy

Most practiced and a good example of using music therapy is GarbhaSanskara (literally meaning "education in womb") is another Indian traditional practice where in low frequency chants are used as auditory stimulation to pregnant women from second trimester onwards. The pregnant women chant with the therapists. The ritual is an auditory stimulation provided to manipulate the micro environment in-utero during the prenatal period of pregnancy which aims to provide health benefits to both the woman and the developing foetus.

Current status of music therapy

Over the preceding years, music therapy has gained tremendous attention due to new findings of music in management of various conditions like Alzheimer's, depression, anxiety, insomnia, etc. Music is a non-invasive, patient-friendly and pleasant form of therapy with minimal or no side effects. It activates the reward pathway of brain by influencing several processes such as dopamine release, reduction in cortisol levels, increase in oestrogen and testosterone levels.

The Raga Research Centre in Chennai, India. is currently making a comprehensive study of Indian ragas and evaluating their therapeutic potential with the help of musicians, doctors and psychiatrists.

- Dr Rashmi Shukla Srivastava, Course Coordinator

РОЕМ ज़िद जीने की

तीखे कांटों के बीच से सुंदर गुलाब चुन लेना, घनघोर अंधेरों से टिमटिमाते तारे तोड़ लेना। रेगिस्तान में मीठे पानी की धार बहा लेना, समंदर के खारे पानी से अप्रतिम मोती निकाल लेना।।

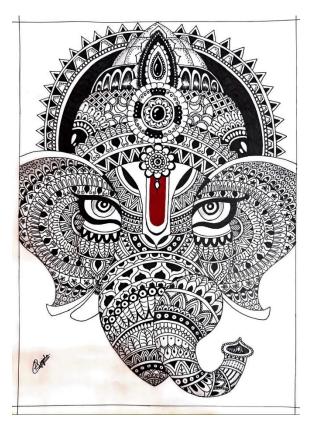
> जिंदगी तुमको हमेशा परखती रहेगी पर तुम हर परीक्षा में उत्तीर्ण होते रहना।

वक्त ने तुम्हारे पंख काट भी दिए तो क्या ग़म। तुम एक एक पायदान चलकर ही पार कर देना।।

कभी वक्त बहुत मुश्किल भी आन पड़ेगा, रास्ता अनजान और कठिनाइयों से भरा होगा। कोई अवसर या अपना खोना भी पड़ेगा, थोड़ा सा रोकर, आंखें पोंछकर, सर उठाकर फिर चल देना।।

डॉ आभा दोशी

ARTWORK



Apoorva Gajula S. Y. B. Pharm



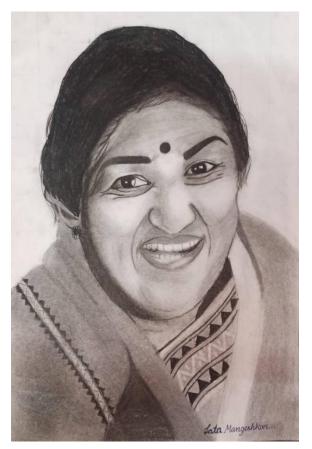
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Atharva Khapare S. Y. B. Pharm



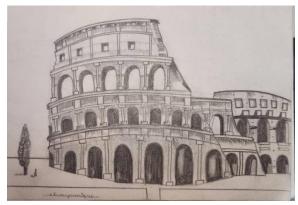
Gauri Chandak and Swatee Chindarkar S. Y. B. Pharm



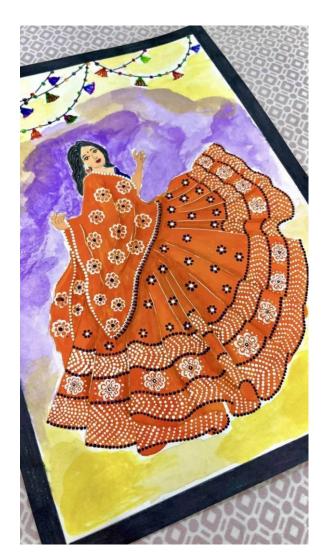
Swatee Chindarkar S. Y. B. Pharm



Riya Kadam S. Y. B. Pharm



Swatee Chindarkar S. Y. B. Pharm



Varsha Chaudhary Final Year B. Pharm



Varsha Chaudhary Final Year B. Pharm



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PHOTOGRAPHS



Gauri Chandak S. Y. B. Pharm





Gauri Chandak S. Y. B. Pharm



Gauri Chandak S. Y. B. Pharm



Karan Chaudhari S. Y. B. Pharm



Prathamesh Patil S. Y. B. Pharm



Karan Chaudhari S. Y. B. Pharm

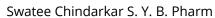


Prathamesh Patil S. Y. B.



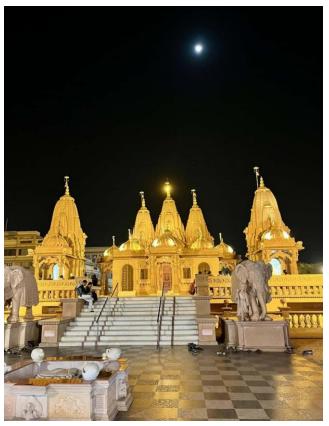


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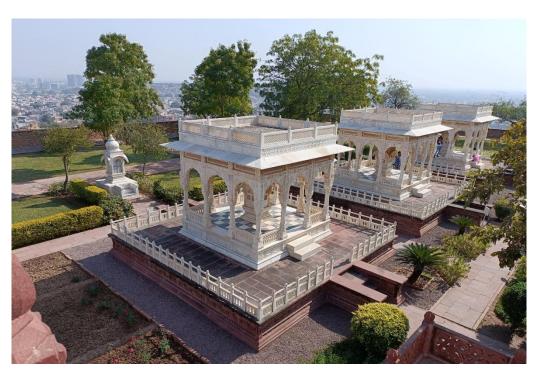
Vrushali Keer, Faculty



Vrushali Keer, Faculty



Dr. Abha Doshi, Principal



Dr. Abha Doshi, Principal

CLASS PHOTOS



Fourth Year B. Pharm



Third Year B. Pharm



Second Year B. Pharm



DLLE Committee



Green Club



IIC - Core committee

MEMORIES





































