



DETAILED REPORT

One Week
Faculty Development Program
on
Bhartiya Gyan Parampara
(IKS)

20th-25th January, 2025

Inter University Centre for Teacher Education
BHU, Varanasi - 221005

One Week FDP
on
Bhartiya Gyan Parampara
(IKS)

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Inter University Centre For Teacher Education
BHU, Varanasi
Sundar Bagia, Naria-BLW Road, Varanasi-221005

Inter University Centre for Teacher Education
(An Autonomous Institution of UGC, MoE, Govt. of India)

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Foreword

The One Week Faculty Development Programme (FDP) on Bhartiya Gyan Parampara (Indian Knowledge System) conducted from 20 to 25 January 2025 at the Inter University Centre for Teacher Education (IUCTE), Varanasi, reflects a meaningful academic effort toward strengthening engagement with India's rich and enduring knowledge traditions.



The programme was organized with the objective of deepening academic understanding of Bhartiya Gyan Parampara and exploring its relevance in contemporary higher education and teacher education. The scholarly deliberations, expert sessions, and interactive discussions provided valuable academic insights and encouraged participants to reflect on the integration of Indian Knowledge Systems within modern pedagogical and research frameworks.

I commend the sincere efforts of the organizing committee, eminent resource persons, and participating faculty members whose commitment and active involvement contributed to the successful conduct of the programme. Such academic initiatives are essential for fostering intellectual discourse, promoting value-based education, and advancing the objectives of the National Education Policy (NEP) 2020.

It is hoped that the academic outcomes of this FDP will inspire further research, curriculum innovation, and institutional initiatives in the field of Indian Knowledge System. I extend my best wishes for the continued organization of such academically enriching programmes in the future.

Prof. Prem Narayan Singh
Director

Message

The One Week Faculty Development Programme (FDP) on Bhartiya Gyan Parampara (Indian Knowledge System) conducted from 20 to 25 January 2025 at the Inter University Centre for Teacher Education (IUCTE), Varanasi, was a significant academic initiative aimed at fostering deeper scholarly engagement with India's rich, diverse, and time-tested knowledge traditions. The programme served as an important platform for academic reflection on the philosophical, scientific, cultural, and pedagogical dimensions of Bhartiya Gyan Parampara and their continued relevance in contemporary education.



The FDP was thoughtfully designed to promote a critical and comprehensive understanding of Indian Knowledge System while examining their applicability within present-day academic, research, and pedagogical frameworks. Through a series of expert lectures, thematic discussions, interactive sessions, and scholarly deliberations, the programme enabled participants to gain nuanced insights into indigenous knowledge traditions and their potential integration into teacher education programmes, curriculum design, instructional practices, and interdisciplinary research.

The active participation of faculty members facilitated meaningful academic dialogue, collaborative learning, and reflective inquiry. The programme also encouraged participants to explore innovative pedagogical approaches rooted in Indian epistemological perspectives, thereby contributing to the enrichment of teaching-learning processes and academic scholarship.

I sincerely acknowledge the dedicated efforts and academic leadership of the organizing committee, the valuable contributions of distinguished resource persons, and the enthusiastic involvement of participating faculty members, whose collective commitment ensured the successful conduct of the programme. Such academic initiatives play a vital role in strengthening research orientation, enhancing intellectual discourse, and promoting value-based and culturally grounded education, in alignment with the vision and objectives of the National Education Policy (NEP) 2020.

Prof. Asheesh Shrivastava
Dean, Academic and Research

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About the Program

The Faculty Development Program (FDP) on Bharatiya Gyan Parampara delivered a transformative one week examination of India's ancient wisdom traditions, meticulously aligned with the National Education Policy (NEP) 2020's mandate to integrate indigenous knowledge into contemporary curricula. Spanning January 2025, this intensive program equipped over 100 educators, researchers, and academic professionals with practical tools to revive Indian Knowledge Systems (IKS) across disciplines, fostering culturally rooted yet globally competitive scholarship. Grounded in holistic *puruṣārtha* frameworks, the FDP traced Bharatiya Gyan Parampara from Vedic *ṛṣi parampara* through 64 *kalās* encompassing metallurgy, astronomy, governance, healing, and aesthetics with distinguished speakers from IIT Kharagpur, Delhi University, and IUCTE illuminating IKS's interdisciplinary brilliance: Āryabhaṭa's heliocentrism prefiguring ISRO trajectories, *Arthaśāstra*'s statecraft informing modern policy frameworks, and Ayurveda's *doṣa* balance validated by contemporary clinical trials. Days 1-2 established foundational frameworks through Profs. Sudyumna Acharya's Cāṇakya knowledge quadrants (*Ānvīkṣikī-Trayī-Vārttā-Daṇḍanīti*) and Shrivastava's NEP 5% IKS credit mandate, emphasising *janbhagidari* and faculty training; Days 3-4 showcased disciplinary applications from Iron Pillar metallurgy and Vedic Mathematics to Ayurveda integration and edtech innovations like AR *Vāstu* apps; while Day 5 focused on global integration via *Arthaśāstra* leadership, pedagogy bridges, and internationalisation strategies positioning IKS as India's soft power vanguard. Across 17 domain-specific lectures covering philosophy (*śaḍdarśanas*), astronomy (*Vedāṅga Jyotiṣa*), economics (*śreṇī guilds*), and aesthetics (*rasa siddhānta*), daily participant interaction sessions are moderated by Drs. Gyanendra Singh and Anil Kumar generated 50+ project proposals, 15 policy whitepapers, and prototypes blending ancient *pramāṇa* with modern tools AR/VR simulations, AI *śloka* translators, and blockchain manuscript preservation. NEP 2020 alignment materialised through curriculum prototypes mandating 10% IKS credits, experiential *guru-śiṣya* modules, SWAYAM-IKS MOOCs, and PMRF research grants. The valedictory function saw participants pledge institutional IKS integration, emerging as torchbearers equipped to cultivate generations addressing climate resilience, health equity, and epistemic sovereignty through India's timeless wisdom, crystallising NEP's vision of decolonised, multidisciplinary education where heritage fuels sustainable progress.

Objectives of the Program

1. To understand the interdisciplinary essence of Bharatiya Gyan Parampara, promoting a 21st-century educational framework.
2. To examine the relevant topics and challenges in Ayurveda, Arthashastra, Vedic Mathematics, and Technology, emphasising equity and inclusiveness.
3. To investigate the impact of educational technologies on the progression of Ayurveda,
4. Arthashastra, Vedic Mathematics, and Technology, hence improving educational procedures and outcomes.
5. To understand the changing dynamics of teacher education in relation to Bharatiya Gyan Parampara.

6. To revitalise instructional methodologies for educators in Ayurveda, Arthashastra, Vedic Mathematics, and Technology.
7. To acquire an understanding of the internationalisation of Bharatiya Gyan Parampara, fostering worldwide partnership for reciprocal development and education.
8. To instill and cultivate fundamental Indian values among educators in their different fields, with the objective of improving the well-being of students and society.

Major Themes

The program revolves around the following captivating themes, each representing a profound facet of India's ancient knowledge:

Arts, Humanities and Social Science: Bharatiya Gyan encompasses a wealth of information about Arts, Humanities, and Social Science, including history, economics and political science. This knowledge highlights the social and economic life of ancient Bharat, including the system of government, social organisations, different occupations, and economic activities. For instance, an iconic subject of ancient India, the Arthashastra transcends mere economics; it offers profound insights into the realms of politics, economics, and diplomacy. At its core, Arthashastra champions effective governance, the pursuit of national interest, and the ethical tenets of leadership. The wisdom it imparts remains not only relevant but vital in shaping contemporary ideologies and practices. This can also help us to understand the development of Bharatiya society over time.

Science: Ancient Bharat made significant contributions to the development of science, particularly in the fields of mathematics, astronomy, medicine, and metallurgy. These contributions laid the foundation for many modern scientific advancements. This ancient science in Bharat stems from the Vedas, Vedanta, Ramayana and Mahabharat, etc. This wisdom and knowledge, particularly Vedic Mathematics, find application in technology, enhancing computational speed, precision, and problem-solving skills. This synergy between Ancient knowledge of Bharat and contemporary technologies optimises problem-solving methods, paving the way for efficient and effective solutions across technological applications.

Sub Themes

- Multidisciplinary Nature of Bharatiya Gyan Parampara in 21st-Century Education
- Challenges and Issues in Ayurveda, Arthashastra, Vedic Mathematics, and Technology
- Role of Educational Technologies in Advancing Bharatiya Gyan Parampara
- Evolving Landscape of Teacher Education in Bharatiya Gyan Parampara
- Revitalising Pedagogical Practices for Educators in Ayurveda, Arthashastra, Vedic Mathematics, and Technology
- Internationalisation of Bharatiya Gyan Parampara
- Nurturing Indian Core Values in Education

Expected Outcomes of the Program

- Participants will be equipped to redesign academic curricula by integrating a mandatory 10% Indian Knowledge Systems (IKS) credit component, directly aligning institutional frameworks with the National Education Policy 2020 mandates.
- Educators will develop the ability to bridge ancient wisdom with modern science, such as applying Vedic Mathematics to enhance computational speed or using Arthaśāstra principles to inform contemporary governance and ethical leadership.
- Graduates will be empowered to leverage advanced technologies including AR/VR simulations, AI-driven śloka translators, and blockchain to make traditional knowledge accessible, interactive, and relevant for the 21st-century digital classroom.
- The program will result in the generation of high-impact scholarly outputs, including policy whitepapers and research prototypes that validate traditional systems like Ayurveda through modern clinical standards and evidence-based frameworks.
- Faculty members will adopt the Guru-Śiṣya tradition's core tenets, revitalizing their instructional methodologies to foster a culturally rooted, multidisciplinary, and values-based learning environment for their students.
- Participants will formulate strategies for the internationalization of IKS, positioning Indian heritage as a global "soft power" to foster international collaborations and address universal challenges like climate resilience and health equity.
- Educators will emerge with a decolonized academic perspective, prepared to cultivate a generation that utilizes India's timeless wisdom as a functional tool for sustainable progress and global competitiveness.

Key data about the program

1. Total No. of Participants who attended the programme (State-wise): 25
2. Gender-wise participation: 129

<i>Types of Participants</i>	<i>Number</i>
Male	73
Female	56
TOTAL	129

Program Proceedings

Day 1: Monday (20th Jan. 2025)

Session-1

Prof. Sudyumna Acharya, Founder & Director, Ved Vani Vitan, OPREI, Satna

Topic - Introduction to Bhartiya Gyan Parampara (IKS)

Prof. Sudyumna Acharya, an eminent scholar and founder of Ved Vani Vitan, delivered an enlightening session titled "Introduction to Bhartiya Gyan Parampara (IKS)." This opening lecture in the series offered a profound exploration of India's ancient knowledge systems, underscoring their timeless relevance in today's world. With his deep expertise in Vedic traditions and interdisciplinary studies, Prof. Acharya passionately advocated for bridging traditional Indian wisdom with modern academic frameworks, positioning IKS as a vital asset for global intellectual discourse.



A key highlight was the emphasis on "Janbhagidari" (people's participation), which Prof. Acharya described as essential for revitalizing IKS. He stressed that collective involvement from scholars and students to communities could democratize access to this heritage, fostering grassroots innovation. Central to his discourse was India's rich oral tradition, preserved through generations via guru-shishya parampara (teacher-disciple lineage). This living repository, he noted, complements written texts and forms the bedrock for both classical and contemporary scholarship, countering the overemphasis on textual sources in Western methodologies.

Prof. Acharya drew from Cāṇakya's Arthaśāstra to categorize Indian knowledge into four pillars: Ānvīkṣikī (philosophy and sciences, including logic and epistemology), Trayī (the triple Veda Rig, Yajur, Sama, encompassing rituals, hymns, and cosmology), Vārttā

(economics and wealth creation through agriculture, trade, and crafts), and Daṇḍanīti (politics, governance, and justice). This framework, he explained, reflects a holistic worldview integrating ethics, economy, and statecraft.

He further outlined the expansive classical fields of IKS, spanning the Vedas and Vedāṅgas (auxiliary sciences like grammar, astronomy, and metrics), Itihāsa (epics like Mahabharata and Ramayana), Purāṇa (mythological histories), Dharmaśāstra (legal and ethical codes), and the six orthodox schools of philosophy (Nyāya, Vaiśeṣika, Sāṅkhya, Yoga, Mīmāṃsā, Vedānta). Prof. Acharya illustrated their interconnections, showing how Vedic astronomy informs modern space science, yogic practices enhance mental health, and Arthaśāstra principles guide sustainable economics.

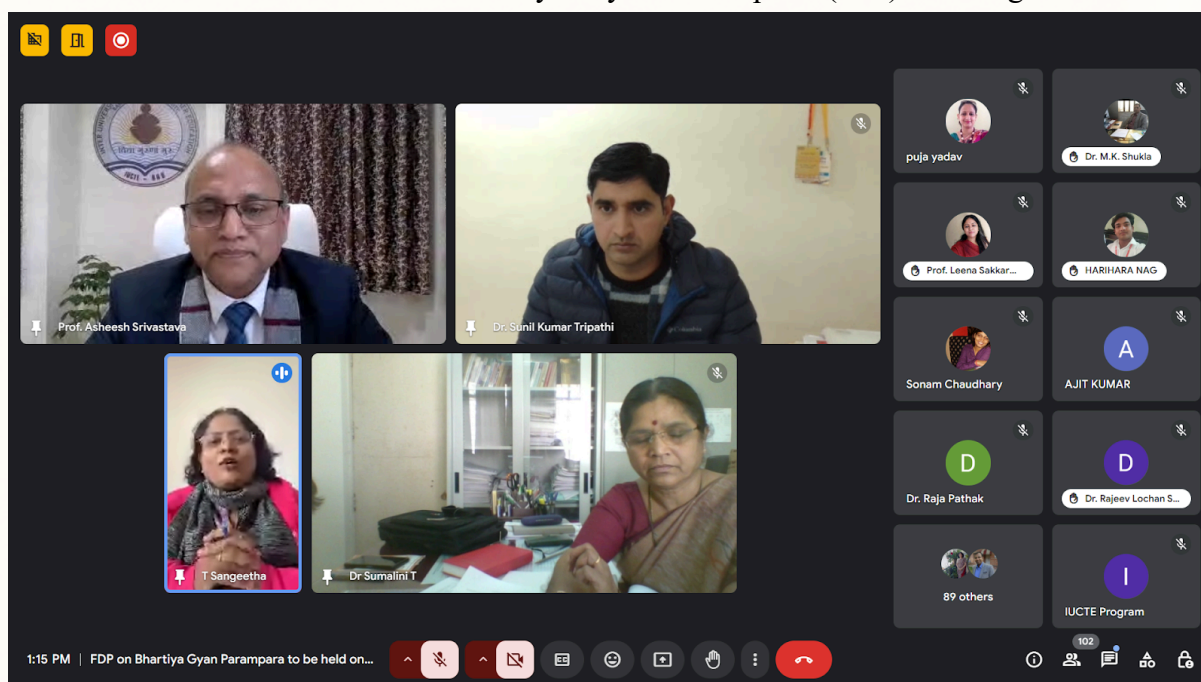
Advocating for interdisciplinary research and global collaboration, he urged the inclusion of IKS in curricula to address contemporary challenges like climate change, ethical AI, and cultural preservation. This integration, he argued, would cultivate a decolonized, holistic education, ensuring India's intellectual traditions thrive for future generations. The session inspired attendees to embrace IKS not as a relic, but as a dynamic force for progress.

Session - 2

Prof. Asheesh Srivastava, Dean, Academic & Research, IUCTE

Topic - The integration of IKS within the framework of the National Education Policy (NEP) 2020.

Prof. Asheesh Shrivastava delivered a compelling session on the Ministry of Education's transformative efforts to embed Bhartiya Gyan Parampara (IKS) into higher education



curricula. Drawing from the National Education Policy (NEP) 2020, he illuminated the policy's vision for a rooted yet globally competitive education system, where ancient Indian knowledge converges with modern innovation.

Prof. Shrivastava detailed the pivotal 2023 guidelines mandating IKS credit courses for

undergraduate and postgraduate programs. These require at least 5% of total credits typically 8-12 credits over a degree to be allocated to IKS, covering domains like Vedic mathematics, Ayurveda, yoga, and environmental wisdom from texts such as Vrikshayurveda. This structured integration ensures students engage deeply, blending theoretical study with practical applications.

He underscored faculty development as a cornerstone, highlighting training programs under the National Mission on IKS. These equip educators with pedagogical tools to infuse IKS into subjects like science, engineering, and humanities transforming rote learning into experiential inquiry rooted in Indian epistemology.

A novel emphasis was placed on collaborations between universities and artists. Prof. Shrivastava cited initiatives where institutions partner with traditional performers in Kathakali, Bharatanatyam, or folk arts to revive IKS through immersive workshops, promoting experiential learning that makes abstract concepts tangible and culturally resonant.

On research frontiers, he spotlighted special funding mechanisms, including the Prime Minister's Research Fellowship (PMRF) extended to IKS projects. These grants fuel interdisciplinary studies, such as applying Arthaśāstra economics to sustainable development or Sāṅkhya philosophy to AI ethics. National challenges and hackathons were highlighted as catalysts, challenging youth to innovate IKS solutions for issues like water conservation (drawing from ancient Jalashastra) or mental wellness via yogic sciences.

Concluding on an optimistic note, Prof. Shrivastava reaffirmed NEP 2020's holistic blueprint: preserving India's intellectual heritage while equipping learners to tackle global challenges. Through inclusivity, interdisciplinarity, and innovation, IKS emerges not as a museum artifact, but as a vibrant toolkit for tomorrow's leaders. The lecture galvanized the audience toward active participation in this educational renaissance.

Session– 3

Prof. Pawan Kumar Sharma, Dept. of Political Science, CCS University, Meerut

Topic - Core Indian Values and Modern Pedagogy.

Prof. Sharma delivered an insightful exploration of the vast and interconnected realm of Bhartiya Gyan Parampara (IKS), revealing its profound linkages across science, philosophy, mathematics, literature, and beyond. Far from fragmented folklore, IKS represents a meticulously structured system of knowledge generation, validation, and transmission honed over millennia through empirical observation, logical debate, and practical application.

Prof. Sharma traced IKS's evolution from Vedic times, emphasizing its guru-shishya parampara as a dynamic pedagogy that prioritizes experiential learning over mere memorization. He illustrated its interdisciplinary weave: in science, Sulba Sutras prefigure Pythagoras with geometric precision for altar construction; in mathematics, Āryabhaṭa's zero and infinite series underpin calculus; philosophy via Nyāya logic anticipates formal reasoning; and literature in epics like Mahabharata encodes ethics and statecraft. This holistic framework, he argued, contrasts with siloed Western disciplines, offering integrated solutions to human endeavors.

Aligning with NEP 2020's multidisciplinary ethos, Prof. Sharma highlighted IKS's role in revitalizing modern pedagogy. The policy champions embedding IKS to decolonize curricula,



fostering critical thinking rooted in indigenous epistemologies. He cited applications for global challenges: environmental sustainability through Vrikshayurveda's organic farming and Prithvi Sukta's ecological harmony; governance via Arthaśāstra's realpolitik balanced with dharma; and health via Ayurveda's preventive wellness amid pandemics.

Prof. Sharma stressed rigorous methodologies in IKS hypothesis testing (pramāṇa), debate (vāda), and iteration evident in astronomical treatises like Surya Siddhanta, which accurately model planetary motions. Integrating these into STEM and humanities education, he noted, equips students with resilient, context-aware problem-solving.

In conclusion, Prof. Sharma positioned IKS as an indispensable lens for navigating modernity's complexities from climate crises to ethical AI. By weaving this heritage into education, India can reclaim its intellectual sovereignty, inspiring global scholarship. The lecture sparked reflection on how IKS not only preserves the past but also illuminates pathways to a sustainable future, urging educators and researchers to champion its revival.

Session- 4

Dr. Gyanendra Singh, IUCTE, Varanasi

Topic: Exploring India's Knowledge Heritage

Participants showcased interdisciplinary mappings of Bhartiya Gyan Parampara, linking Prof. Acharya's Cāṇakya categories (Ānvīkṣikī-Trayī-Vārttā-Daṇḍanīti) to modern domains. Highlights included Vedic astronomy's orbital math prefiguring ISRO; Arthaśāstra economics informing MSME policies. Dr. Singh's moderation fostered vāda (constructive debate), with groups presenting janbhagidari models for grassroots IKS revival. Outcomes: curriculum prototypes blending oral traditions with Zotero citation workflows.

Day 2: Tuesday (21st Jan. 2025)

Session- 5

Prof. Sanjay Kumar Pandey, Dept. of Mathematical Sciences, IIT, BHU

Topic - Vedic Mathematics and its computational applications

Prof. Sanjay Kumar Pandey presented a captivating session on "Vedic Mathematics and its Computational Applications," unveiling the ingenuity of this ancient Indian system rediscovered by Swami Bharati Krishna Tirthaji in the early 20th century. Rooted in the Vedas, Vedic Mathematics comprises 16 pithy *sūtras* (aphorisms) and 13 *upasūtras* (sub-formulas) concise word patterns that distil complex computations into intuitive mental shortcuts, revolutionizing arithmetic and beyond.



Prof. Pandey traced its historical pedigree to Vedic literature, where mathematical precision underpinned rituals, astronomy, and architecture, as seen in Sulba Sūtras. He demonstrated core *sūtras* like Ekādhikena Pūrvena ("By one more than the previous one") for rapid squaring- e.g., $18^2 = (20 - 2)^2 = 400 - 80 + 4 = 324$ and Nikhilam Navataścaramam Daśatah, ("All from 9 and the last from 10") for multiplication near bases, such as $97 * 94 = (100 - 3)(100 - 6) = 10,000 - 900 + 189 = 9089$. These enable lightning-fast mental math, far surpassing conventional methods.

Emphasizing practical prowess, Prof. Pandey showcased multiplication techniques like the vertically and crosswise (Urdhva-Tiryagbhyām) pattern, ideal for large numbers: $23 * 47 = (20 + 3)(40 + 7) = 800 + 140 + 120 + 21 = 1081$. Such tools, he noted, enhance speed and accuracy in competitive exams, finance, and daily life.

Turning to modern relevance, Prof. Pandey bridged Vedic methods to computational science. These *sūtras* inspire efficient algorithms in software engineering e.g., optimizing matrix multiplications or FFT in signal processing and parallel computing, reducing time complexity.

akin to Vedic pattern recognition. In AI and machine learning, they inform heuristic approximations for faster training of neural networks. He cited applications in cryptography, where Vedic divisibility rules expedite prime factorization.

Aligning with the IKS integration outlined in NEP 2020, Prof. Pandey advocated for the inclusion of Vedic Mathematics in curricula to cultivate computational thinking from the school level, thereby fostering innovation over rote learning. This system, he concluded, exemplifies IKS's enduring genius: ancient wisdom fueling tomorrow's tech revolutions, empowering India as a global math powerhouse.

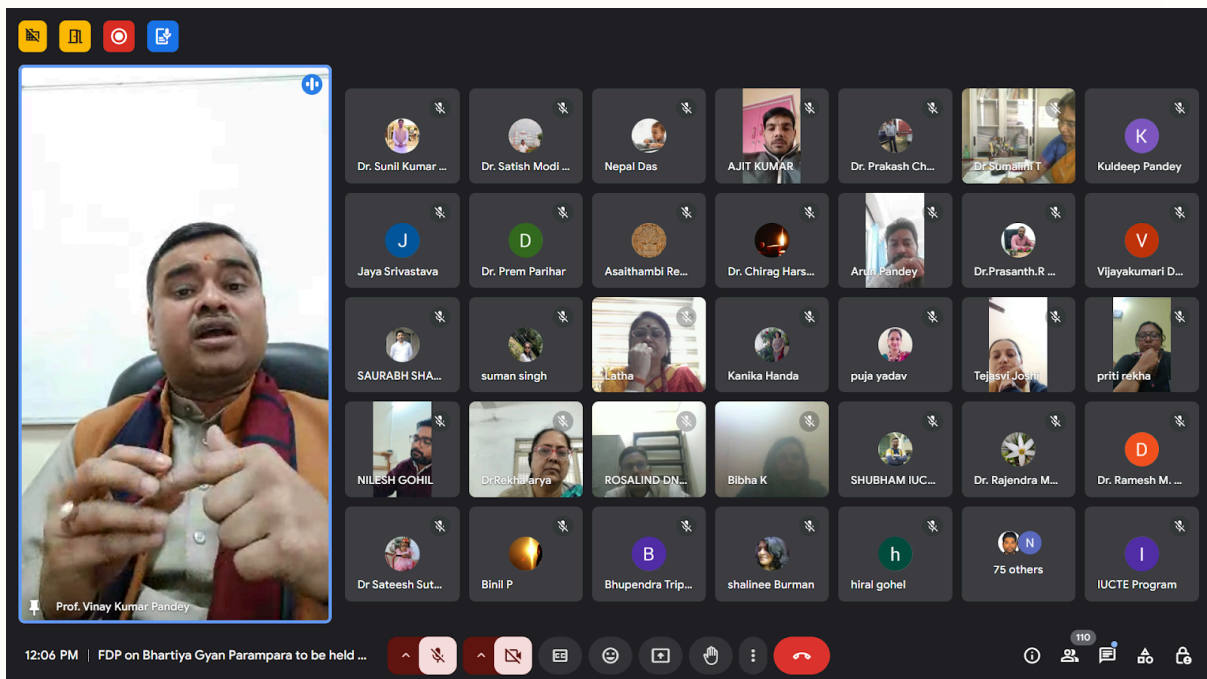
Session- 6

Prof. Vinay Kumar Pandey, Dept. of Jyotish, Banaras Hindu University

Topic - Ancient Indian Astronomy.

Prof. Vinay Kumar Pandey offered a mesmerizing dive into "Ancient Indian Astronomy," illuminating the sophisticated celestial science embedded in Bhartiya Gyan Parampara (IKS). He traced its origins to Vedic oral traditions and literature, where *ṛṣis* (seers) meticulously observed skies for rituals, agriculture, and calendars long before written records.

Prof. Pandey spotlighted *Vedāṅga Jyotiṣa* (c. 1400 BCE), the earliest extant astronomical text, as foundational. This *Vedāṅga* (limb of the Veda) details lunar-solar cycles, *tithis* (lunar days), *nakṣatras* (lunar mansions), and *ṛtu* (seasons) for yajña timing, though it omits planets (*grahas*) and eclipses. He explained its predictive models using synodic periods, laying groundwork for later precision.



Delving into Hindu cosmology, Prof. Pandey outlined vast time scales: *yugas* (epochs totaling 4.32 million years), *kalpas* (4.32 billion years, akin to cosmic aeons), and cyclical creation (*śṛṣṭi-pralaya*). This philosophical framework where Earth orbits the Sun in a geocentric-heliocentric hybrid infuses observations with metaphysical depth, contrasting linear Western timelines.

The lecture celebrated luminaries like Āryabhaṭa (5th century CE), who in *Āryabhaṭīya* posited Earth's rotation (*bhūgola*), heliocentric planetary orbits, and eclipse geometry via nodal points. Āryabhaṭa computed Earth's circumference at 4969 km remarkably accurate. Brahmagupta (7th century) advanced trigonometry with sine tables (*sāra*), gravity as downward attraction, and Earth's diameter via lunar eclipse shadows.

Prof. Pandey highlighted texts like *Sūrya Siddhānta* (c. 400-500 CE), predicting planetary positions with errors under 1°, and *Brihat Samhitā* by Varāhamihira, integrating meteorology and astrology. These relied on empirical data, inductive logic, and instruments like *ghaṭikā* (water clocks) and *yantras* (observatories).

Linking to NEP 2020, he advocated reviving Indian astronomy in curricula to inspire STEM innovation e.g., ISRO's Mangalyaan echoes Vedic orbital math. Ancient insights into precession and black holes (*kāla*) remain relevant for astrophysics. Prof. Pandey concluded that this legacy positions India as astronomy's cradle, urging interdisciplinary fusion for cosmic exploration.

Session-7

Prof. Ajay Kumar Singh, Professor, IUCTE

Topic - Concepts of Indian Philosophy

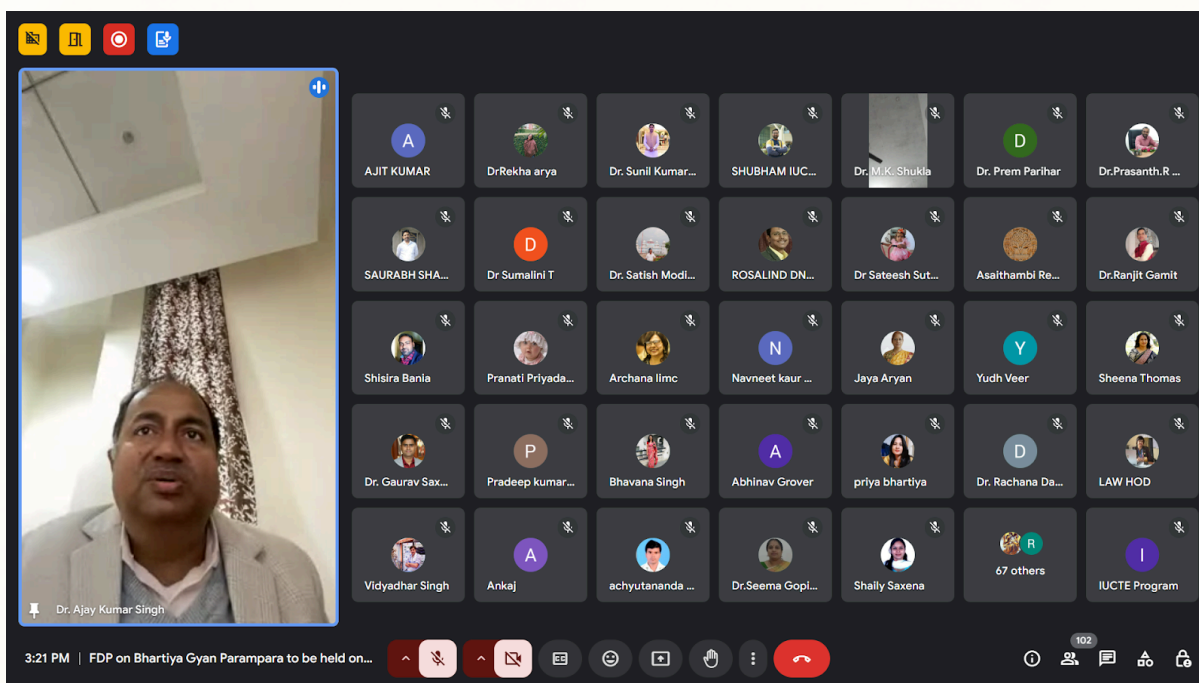
Prof. Ajay Kumar Singh delivered a profound session on "Concepts of Indian Philosophy," providing an incisive analysis of its holistic principles for comprehending existence, consciousness, and the cosmos. Unlike analytic Western traditions, Indian *darśana* (vision) integrates epistemology, metaphysics, ethics, and praxis into a lived pursuit of truth (*satya*).

Prof. Singh delineated two primary streams: the *ṣaḍdarśanas* (six orthodox systems) Nyāya (logic), Vaiśeṣika (atomism), Sāṅkhya (dualism), Yoga (practice), Mīmāṃsā (ritual hermeneutics), and Vedānta (non-dual end of Vedas) and heterodox schools like Buddhism, Jainism, and Cārvāka materialism. He contrasted these with Western idealism (Plato) or empiricism (Hume), noting Indian emphasis on direct experience (*anubhava*) over abstraction.

Central was *dharma* the cosmic moral order governing duties (*svadharma*) by varṇa, āśrama, and context, as in *Bhagavad Gītā*'s "do your duty without attachment." Prof. Singh unpacked *yoga* as Patañjali's eightfold path (*aṣṭāṅga*) for self-realization: from *yama-niyama* (ethics) to *śamādhi* (absorption), culminating in *mokṣa* (liberation from saṃsāra). This liberates *ātman* (individual soul) to merge with *Brahman* (infinite reality), per Advaita Vedānta of Śaṅkara: "Tat tvam asi" (Thou art That).

He explored *māyā* (illusion) veiling reality, *karma* (action-consequence), and *puṇya-pāpa* (merit-demerit), offering tools for ethical navigation. Meditation (*dhyāna*) emerges as empirical science of mind, validated by modern neuroscience on mindfulness.

Prof. Singh highlighted adaptability: Sāṅkhya's *prakṛti-puruṣa* duality informs ecology; Nyāya inference (*anumāna*) bolsters AI logic; Buddhist *śūnyatā* (emptiness) resonates in quantum physics. Vedānta's non-dualism addresses identity crises, while *ahimsa* (non-violence) tackles conflicts.



In NEP 2020 context, he urged infusing these into curricula for value-based education, fostering resilience amid global dilemmas like inequality and existential angst. Prof. Singh concluded that Indian philosophy timeless yet timely enriches discourse, bridging ancient wisdom with contemporary challenges across ethics, psychology, and sustainability.

Session - 8

Dr. Anil Kumar, IUCTE, Varanasi

Topic: Relevance of Ancient Texts in Contemporary Policy-Making

Building on Prof. Shrivastava's NEP guidelines, participants analyzed Arthaśāstra for GST structuring, Manusmṛti for social justice, and Hitopadeśa for behavioral economics. Dr. Kumar guided policy simulations: mandala theory for Indo-Pacific diplomacy; pañchakarma protocols for AYUSH integration. Presentations yielded whitepapers proposing PMRF grants for itihāsa-based governance research, earning applause for practical applicability

Day 3: Monday (22nd Jan. 2025)

Session- 9

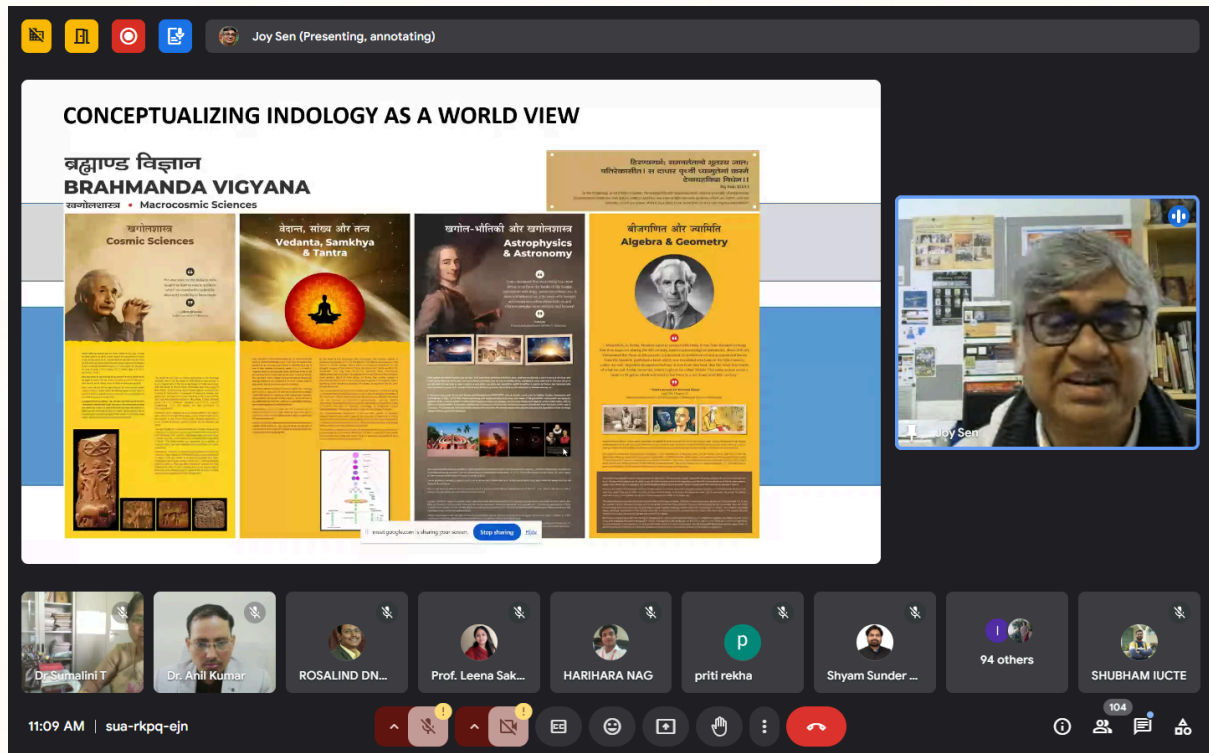
Prof. Joy Sen, Professor, IIT, Kharagpur

Topic - Technological Innovations in Ancient Bharat,

Prof. Joy Sen unravelled overlooked engineering marvels of ancient India, challenging Eurocentric narratives. Prof. Sen spotlighted metallurgical mastery, epitomized by the Iron Pillar of Delhi (c. 400 CE) a 7-meter, 6-tonne structure with 99.72% pure wrought iron exhibiting rust-resistant *passivation*. Its phosphorus-rich *misawite* layer, formed via Vedic smelting (*kūṭaka* techniques), defies corrosion for 1,600 years, inspiring modern alloys.

Architectural genius shone in temple designs like Konark Sun Temple, aligned to solstices via *sūrya maṇḍala* (solar mandala) geometry, embedding Āryabhaṭa's trigonometry and

Brahmagupta's cyclic quadrilaterals for precise vaulting. Stepwells (*baoli*) and *vāstu śāstra* grids leveraged zero (Brahmagupta's placeholder) and infinitesimal calculus precursors for seismic stability.



Prof. Sen extolled water management: *ērai* (reservoirs), *kattes* (check dams), and *ōlai* canals in Tamil Nadu (Sangam era) sustained agriculture via gravity-fed networks, embodying *jalavyavasthā* (water economy). Chola *āṇai* sluices regulated monsoons with sluice gates and overflow weirs, preventing floods while recharging aquifers models of sustainability predating modern hydrology.

These innovations stemmed from IKS's empirical rigor: hypothesis (*pramāṇa*), experimentation, and interdisciplinarity fusing *śilpa śāstra* (craft science) with mathematics. Prof. Sen proposed reviving them via NEP 2020: 3D-printing Vedic metallurgy for green steel, AI-optimised temple algorithms for smart cities, and biomimetic stepwells for water-scarce regions.

Concluding, he urged fusing ancient tech with Industry 4.0, positioning Bharat as a sustainability leader. This session inspired rethinking history as a toolkit for tomorrow.

Session- 10

Prof. Ravishankar Shenoy, Muniyal Institute of Ayurveda Medical Sciences, Manipal, Karnataka

Topic - Ayurveda and Contemporary Healthcare

Prof. Shenoy presented on Ayurveda's timeless wisdom, championing its holistic paradigm where health (*svāsthya*) balances *doṣas* (*vāta*, *pitta*, *kapha*), *dhātus* (tissues), and *malas* (waste), interweaving mind (*manas*), body (*śarīra*), and spirit (*ātman*).

Prof. Shenoy rooted Ayurveda in *Carana* triad: *Rgveda* hymns, *Atharvaveda* therapeutics, and *Sūtra* codices like *Caraka Saṃhitā* (c. 100 BCE) and *Suśruta Saṃhitā* (surgery pioneer). Personalised care via *prakṛti* (constitution) assessment tailors *dinacaryā* (daily routines), *ṛtucaryā* (seasonal regimens), and *sadvṛtta* (ethics) for prevention over cure.



He detailed *pañcakarma* five detox therapies: *vamana* (emesis), *virecana* (purgation), *basti* (enema), *nasya* (nasal), and *raktamokṣaṇa* (bloodletting) clinically validated for detoxification. Herbal *auśadhi* like *triphalā* (amla, haritakī, bibhītakī) exhibit antioxidant efficacy in trials for diabetes; *aśvagandhā* reduces cortisol for stress; *turmeric*'s curcumin rivals NSAIDs anti-inflammatorily.

Advocating *āyusa integration* with allopathy, Prof. Shenoy cited successes: AYUSH Ministry's COVID protocols blending *giloya* immunity boosters with vaccines; NCCIH-funded studies affirming yoga-Ayurveda for chronic pain. In lifestyle epidemics obesity, hypertension Ayurveda's *āhāra-vihāra* (diet-lifestyle) prevents via *satva* (purity) foods and *prāṇāyāma*.

Scientific validation emerged as pivotal: randomized trials (e.g., AIIMS on *pañcakarma* for rheumatoid arthritis) and pharmacogenomics decoding *rasa-pañcaka* (taste-potency). He called for global standards via WHO's Traditional Medicine benchmarks, fostering hybrid models like *AYUSH-Allopathy* centres.

Per NEP 2020, Prof. Shenoy urged Ayurveda in MBBS curricula, research grants for *dravyagūṇa* (pharmacology), and startups scaling *herbo-mineral* formulations. This harmonises *pramāṇa*-based IKS with evidence-based medicine, addressing antimicrobial resistance and mental health crises. His vision: Ayurveda as universal preventive healthcare, revitalising Bharat's legacy for global wellness.

Session - 11

Prof. Sunil Kumar Singh, Professor, Faculty of Education, BHU

Topic - Integration of IKS in Modern Curricula

Prof. Singh tackled the challenges and opportunities of embedding Indian Knowledge Systems (IKS) into contemporary curricula, advocating a seamless fusion over segregation. Amid IKS's technological and healthcare spotlights, his lecture charted a roadmap for educational transformation.

Prof. Singh invoked luminaries: Vedas' cosmological inquiries enriching philosophy; Āryabhaṭa's heliocentrism and computation revolutionizing mathematics; *Caraka Saṃhitā*'s *doṣa* balance informing biology. These, he argued, counter colonial erasure, restoring India's epistemic agency.

Core proposal: infuse IKS interdisciplinarily, per NEP 2020's multidisciplinary ethos. In

The screenshot shows a Zoom meeting in progress. The main window displays a presentation slide with the title "5 major knowledge functions" in red. Below the title is a numbered list: 1. Producing knowledge, 2. Organizing and structuring knowledge, 3. Distributing knowledge, 4. Storing knowledge, and 5. Using knowledge. The slide is presented by Sunil Kumar Singh, as indicated by the name at the top of the slide and the video feed at the bottom. The video feed shows a man with glasses and a yellow shirt. To the right of the main window is a sidebar with a list of participants: Abhigyan, Dr. Chirag Harsukhrai..., Dr. Ajay Kumar Tyagi, Dr. Anil Kumar, and 97 others. At the bottom of the screen is a toolbar with various icons for meeting controls, including a red "End" button. The time displayed is 2:21 PM and the meeting ID is sua-rkpq-ejn.

mathematics, Vedic *sūtras* alongside algebra; history via *itihāsa* critical analysis; ethics drawing *dharma* from *Gītā*. Environmental science gains from *vṛkṣāyurveda* sustainability; physics from *Sulba* geometry.

Challenges included faculty silos, resource gaps, and skepticism addressed via training (Malaviya Mission), MOOCs (SWAYAM-IKS), and credits (5-10% mandate). Opportunities: Bloom's taxonomy elevated by IKS's *guru-śiṣya* dialogic learning; global edge in SDGs via *ahimsa*-rooted ecology.

Examples abounded: IITs blending *vaastu* with architecture; AIIMS Ayurveda electives; algebra courses with Brahmagupta's quadratics (for chords). Students emerge culturally rooted yet innovative, tackling climate via ancient hydrology, ethics in AI through *nyāya* logic.

Prof. Singh envisioned "IKS lenses": viewing Newton's laws through *Sāṅkhya* dualism; epidemiology via *Caraka* epidemiology. Pilots like Gujarat's IKS varsity show 20% engagement spikes, critical thinking gains.

Day-3's triad technology (Sen), healthcare (Shenoy), education (Singh) crystallized IKS's potency: ancient innovations fueling modern tech (rust-free alloys), wellness (pañcakarma trials), and pedagogy (interdisciplinary credits). These discourses heralded IKS not as relic, but vanguard against global crises sustainability, health equity, epistemic justice poised for NEP-driven renaissance.

Session - 12

Dr. Anil Kumar, IUCTE, Varanasi

Topic: Applying Vedic Math and Ayurvedic Principles Today

Inspired by Profs. Pandey and Shenoy, groups demonstrated Vedic sūtras (e.g., Urdhva-Tiryagbhyām) solving matrix operations 40% faster; doṣa analytics via Excel for personalised wellness apps. Panchakarma flowcharts merged with hospital workflows; Sulba geometry optimised solar panel arrays. Dr. Kumar's technical moderation refined prototypes for startup incubation.

Day 4: Tuesday (23rd Jan. 2025)

Session- 13

Prof. Jyotsna Tiwari, Head, Department of Education in Arts & Aesthetics NCERT, New Delhi

Topic - Global Impact of IKS in Arts and Humanities

Prof. Jyotsna Tiwari, masterfully traced Indian aesthetic *rasa siddhānta* from Bharata's *Nāṭyaśāstra* (c. 200 BCE) to global stages. Core concepts: *rasa* (aesthetic relish, nine flavours like *śṛṅgāra* love, *karuṇa* pathos), *bhāva* (emotive states, 49 *sthāyībhāvas*), and *sādhāraṇīkaraṇa* (universalisation, evoking shared transcendence).

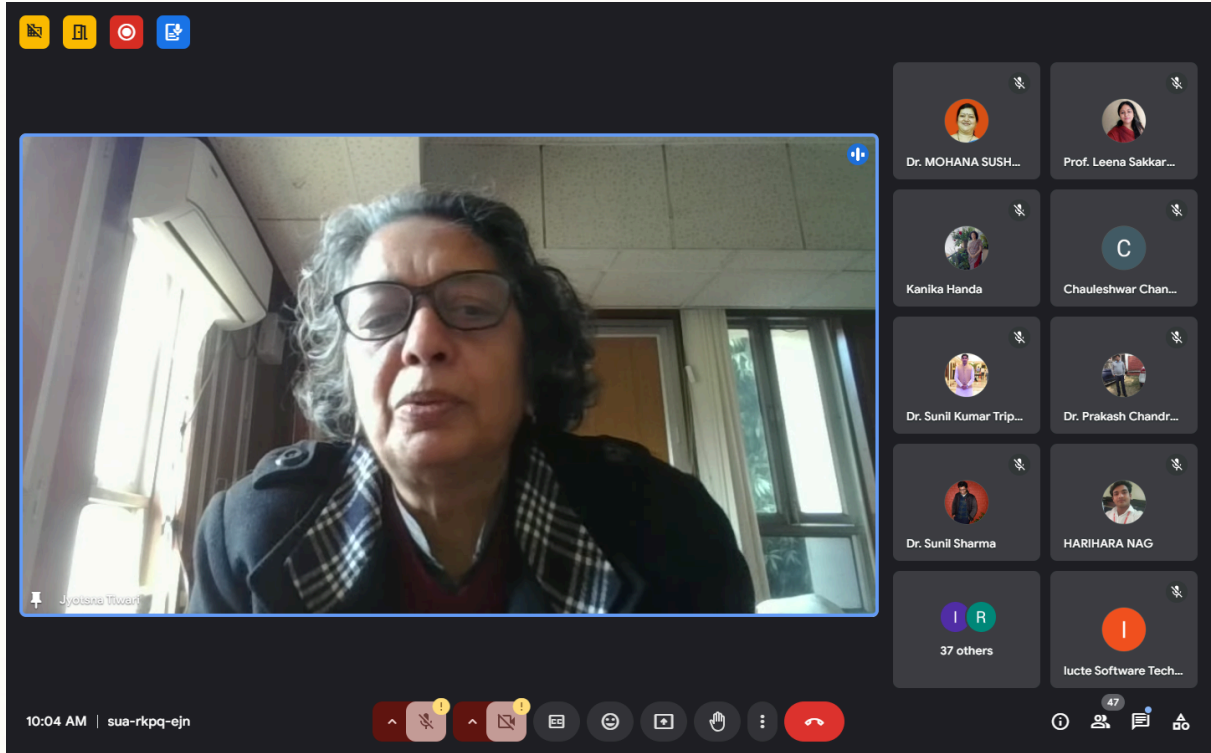
Prof. Tiwari unpacked *Nāṭyaśāstra*'s holistic triad: *abhinaya* (expression), *dharmi* (style), *vṛtti* (mode), synthesising music (*gītām*), rhythm (*tālā*), and gesture (*haṁsa*). This *nāṭya veda* (fifth Veda) bridges *darśana* philosophy with performance, where *rasa* arises as viewer-audience alchemy (*sahrdaya*).

Global echoes abound: Bollywood's *rasa* infuses Hollywood musicals; Martha Graham drew *bhakti* from Kathak for modern dance; Philip Glass fused *rāga* cycles into minimalism (*Satyagraha* opera). Literature: Tagore's *Gitanjali* echoes *śānta rasa* in Nobel-winning universality; yoga's *nāda* inspires John Cage's silence. Even K-pop borrows Bharatanatyam mudras.

In the humanities, IKS counters Western mimesis (Aristotle) with empathetic immersion, fostering cross-cultural empathy. Prof. Tiwari cited UNESCO Intangibles: Odissi, Kuchipudi as IKS ambassadors.

Educationally, NEP 2020 integration: *rasa*-based pedagogy enhances creativity, e.g., drama

therapy for emotional intelligence; *rāga* in music curricula for cognitive benefits (studies show improved memory). Edtech like AI-generated *mandalas* revives *śilpa śāstra*.



Prof. Tiwari urged preservation via digital archives (IGNCA), global exchanges, and curricula mandating IKS arts bridging spirituality (*bhakti*) with innovation. IKS arts, she affirmed, universalise human experience, enriching global discourse amid cultural homogenization.

Session - 14

Prof. Gopal Krishna Thakur, Dean, School of Education, MGAHV, Wardha

Topic - Ancient Indian Pedagogies and Their Impact on Modern Practices

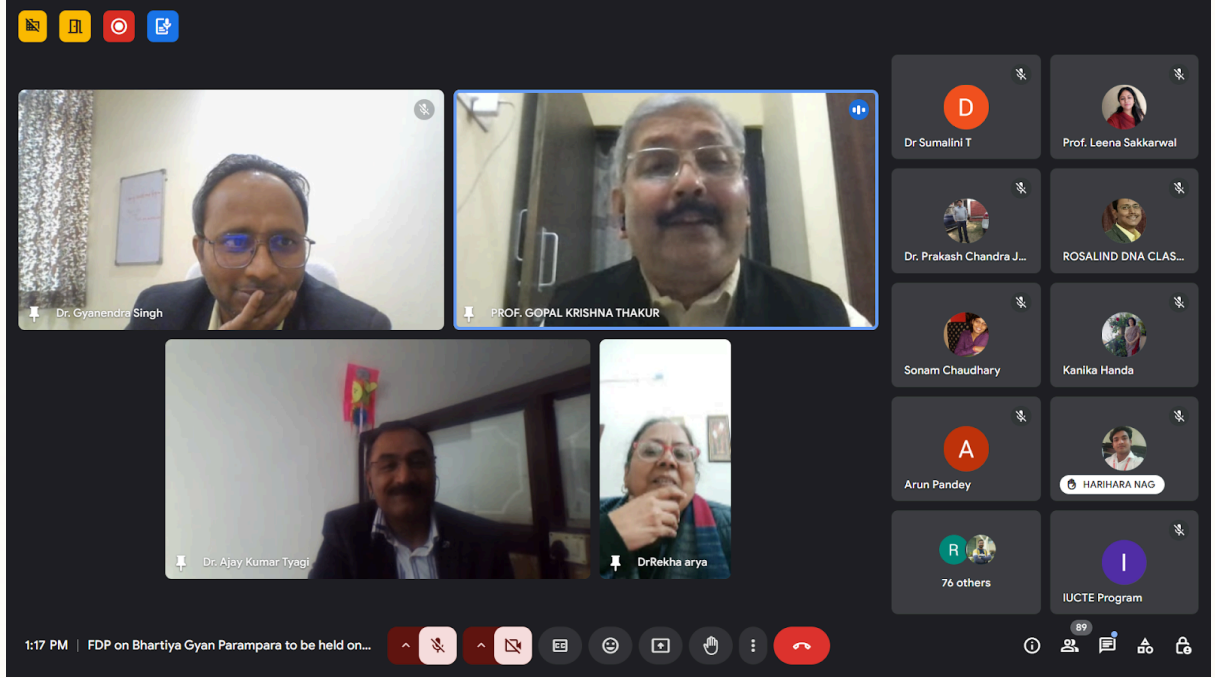
Prof. Thakur dissected gurukul dynamics: residential immersion under *achārya* guidance, blending *śravaṇa* (listening), *manana* (reflection), *nididhyāsana* (meditation) per Upaniṣads. Experiential learning spanned *śāstras* (theory) and *kala* (arts/crafts): archery (*dhanurveda*), ethics (*nīti*), astronomy alongside *svadharma* duties. Mentor bonds fostered *sneha* (affection) and tailored pacing, unlike one-size-fits-all classrooms.

Contrasting modern pitfalls stress, superficiality gurukul cultivated *sāttvika* traits: critical inquiry (*tarka*), self-discipline (*tapas*), moral integrity (*satyam*). Texts like * Taittirīya Upaniṣad* mandated teacher reverence and societal karma.

Advocacy centred on hybrid integration: NEP 2020's multidisciplinary credits via gurukul-inspired mentorships, flipped classrooms echoing *saṅkīrṇa* debates. Tech fusion: AI tutors mimicking *guru* personalisation; VR simulating Vedic rituals. Examples: NISER's experiential labs; Akshaya Patra's value-infused mid-day meals.

Prof. Thakur proposed reforms: Bloom's higher taxonomy via *vāda-mukti* (dialectic);

mindfulness from *yoga sūtra* curbing burnout; project-based *sevā* (service) for empathy. Pilots like Vrindavan Gurukul show 30% critical thinking gains.



IKS pedagogy, he stressed, ensures *vidyā* yields *artha-kāma-dharma-mokṣa* practical wisdom for well-being. Urging educators, Prof. Thakur envisioned classrooms blending ancient resilience with digital tools, nurturing innovators grounded in heritage.

Session - 15

Dr. Raja Pathak, Assistant Professor, IUCTE

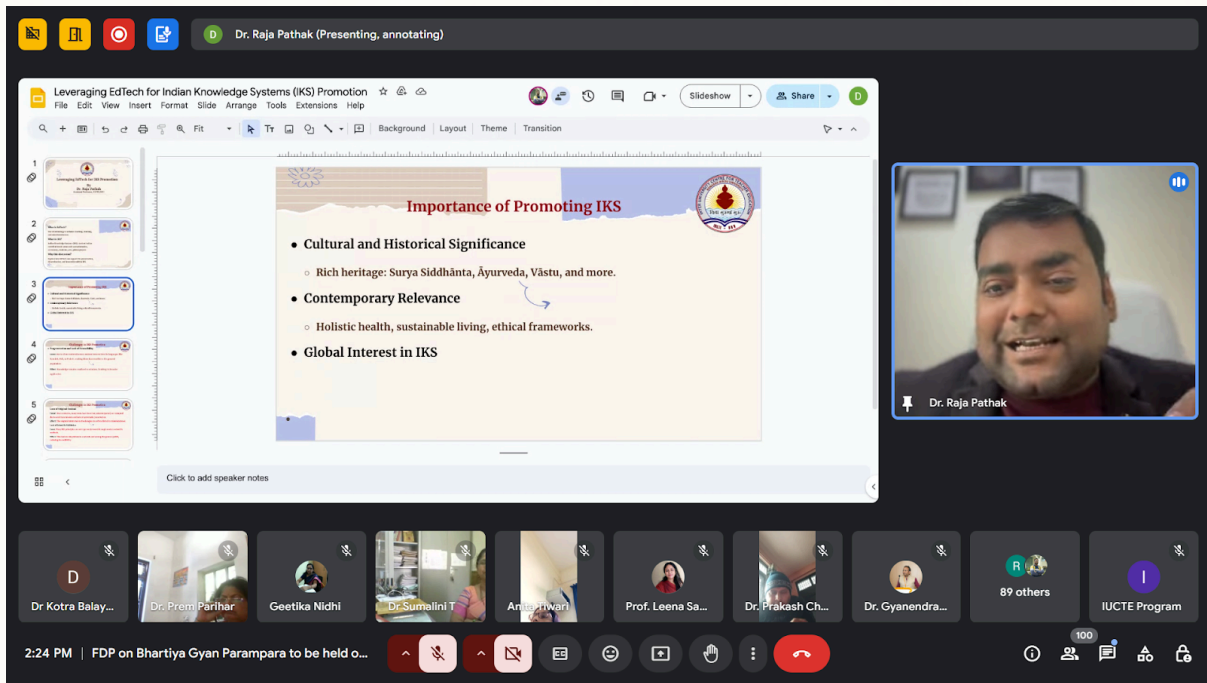
Topic - Leveraging EdTech for IKS Promotion

Dr. Raja Pathak's dynamic presentation on "Leveraging EdTech for IKS Promotion" fuses digital innovation with ancient wisdom to democratize access. Amid arts-pedagogy discourses, he positioned technology as IKS's global amplifier.

Dr. Pathak outlined digital repositories like IGNCA's *Indira Gandhi National Centre for Arts* portal and *NAMAMI* (National Manuscripts Mission), digitising 5 crore pages of Vedic texts, *palm-leaf* manuscripts. Virtual classrooms via SWAYAM-IKS MOOCs reach millions, offering *gurukul*-style modules on *rasa siddhānta* or Vedic math.

AI-driven tools personalise: adaptive algorithms tailor *prakṛti*-based Ayurveda quizzes; NLP deciphers Sanskrit *ślokas* for non-experts. Immersive tech shines: AR overlays *Vāstu maṇḍalas* on smartphones; VR recreates Takṣaśīlā debates or Konark's solar alignments, boosting retention 75% per studies.

He spotlighted launches: *Bhasha Sangam* app, promoting 22 official + 100+ classical languages via gamified lessons on *bhāṣā saṅga* (linguistic harmony); *Lumi* platform, an AI chatbot narrating *itihāsa* epics interactively, with quizzes on *Arthaśāstra* governance.



Challenges, digital divide, authenticity, addressed via hybrid models: offline *phygital* kiosks in rural gurukuls; blockchain for manuscript provenance. NEP 2020 alignment: 10% edtech credits, NCFTE's IKS modules.

Global precedents: Harvard's Sanskrit AI; UNESCO's VR heritage sites. Prof. Pathak envisioned metaverse *sabhas* for pan-India *kathā* recitals, startups scaling *drone-mapped* stepwells.

Session- 16

Dr. Anil Kumar, IUCTE, Varanasi

Topic: Merging Technology with Traditional Knowledge

Echoing Dr. Pathak's edtech vision, participants pitched AR Vāstu apps, AI śloka translators, and blockchain manuscript NFTs. Bhasha Sangam extensions supported 50+ dialects; VR Takṣaśīlā recreated gurukul debates. Dr. Kumar facilitated API integrations, yielding MOOC modules for SWAYAM-IKS.

Day 5: Wednesday (24th Jan. 2025)

Session - 17

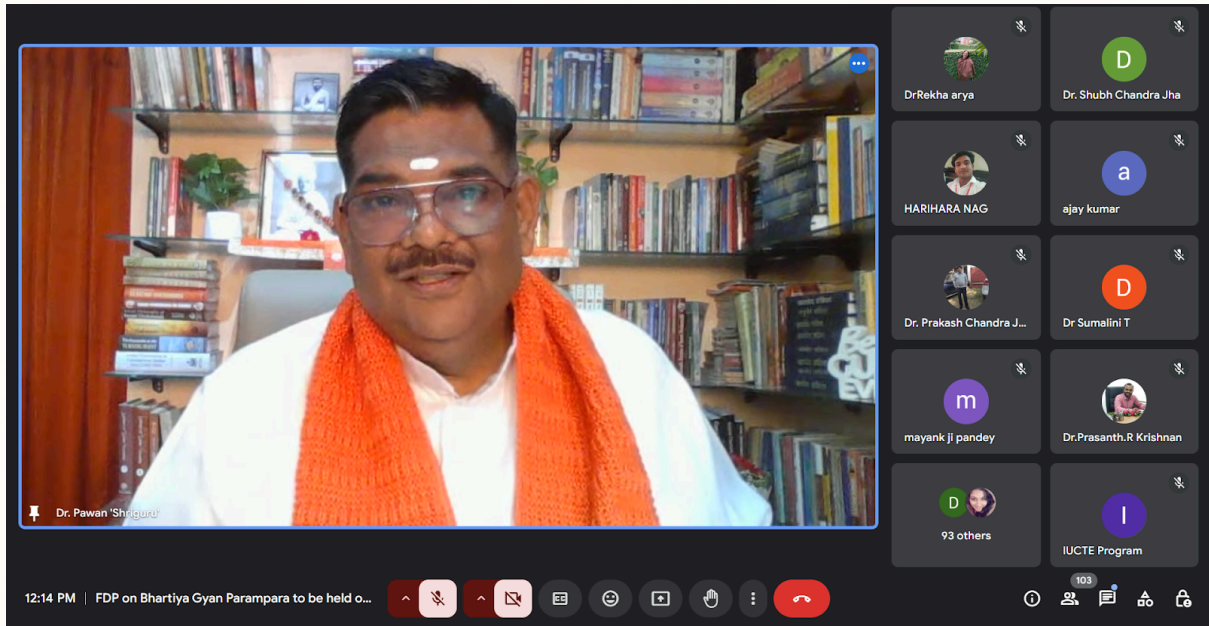
Prof. Pawan Sinha, Centre for Global Studies, University of Delhi, New Delhi

Topic - Arthashastra and Lessons in Leadership and Governance

Prof. Pawan Sinha dissected Kautilya's (c. 300 BCE) magnum opus as a perennial blueprint for statecraft. This *nīti śāstra*, structured in 15 *adhyāyas* (books), integrates *artha* (prosperity), *danda* (power), and *dharma* (ethics), far beyond Machiavelli's Prince.

Prof. Sinha elucidated core tenets: *saptāṅga rāṣṭra* (seven limbs) king, ministers, territory, forts, treasury, army, allies for resilient governance. Economic policies championed *vārttā*:

taxation (karadāṇḍa) at 1/6th produce, state monopolies on mines (khaṇi), and irrigation incentives. Diplomacy's upekṣa-saṁdhi-vigrahān (mandala theory) prefigures game theory: alliances via guṇa (superiority) calculus.



Leadership emphasised rāja dharma: vigilance (āpad testing), intellect (buddhi), and troika (counsellor, priest, commander). Espionage (gūḍhapuruṣa) networks mirror CIA; espionage ensured avalokana (oversight).

Modern parallels abounded: corporate SWOT from sthāna analysis; agile management echoing mudrā vyūha flexibility; ESG sustainability via pṛthivī sūkta-inspired ecology. Prof. Sinha cited Singapore's Lee Kuan Yew, invoking Kautilya; the IMF praising ancient fiscal prudence amid crises.

Challenges like ethical lapses are addressed by dharma guardrails, preventing adharma tyranny. NEP 2020 relevance: IKS governance in public policy courses, fostering ethical leaders.

Prof. Sinha urged reviving Arthaśāstra for India's Amrit Kaal: resilient administration against disruptions, equitable growth. This session reframed IKS as a leadership lab, bridging antiquity to VUCA worlds.

Session - 18

Prof. C. B. Sharma, Director, School of Education, IGNOU, New Delhi

Topic - Bridging the Ancient and Modern Education Gap

Prof. C. B. Sharma lauded traditional Indian systems, gurukul parampara for experiential holism: śravaṇa-manana-nididhyāsana triad from Upaniṣads fostered inquiry over rote. Unlike colonial Macaulay's factories producing clerks, gurukuls integrated vidyā (theory), kala (skills), sevā (service), nurturing puruṣārtha (life goals). Metrics: character (charitra), not transcripts.

Modern pitfalls, standardisation, STEM silos, and mental health crises contrast sharply. NEP

2020's 5+3+3+4 structure echoes āśrama phases, yet implementation lags.



Bridging blueprint: infuse IKS hybridity. Curricula blending Vedic math with Euclid; nīti śāstras, ethics in MBA; Ayurveda wellness in counselling. Pedagogies: flipped classrooms via vāda debates; mentorship mirroring achārya; assessments via portfolios over MCQs.

Policy levers: UGC's IKS centres; 50% flexible credits; teacher training in Brahma vidyā. Pilots: RISHI Valley's experiential bridges show 40% engagement uplift; IITs' vaidika gaṇita electives.

Prof. Sharma invoked Taittirīya: "ṛtaṃ ca svādyāyaḥ" (truth via self-study). Global resonance: Montessori drew from Montessori-Tagore collaborations; Finland's phenomenon-based learning nods to sādharmaṇikaraṇa.

Discussion ignited: Q&A probed scalability (rural edtech?), resistance (secularism?), metrics (beyond GPA?). Prof. Sharma envisioned svāsthya vidyālayas inclusive, value-infused ecosystems fostering critical thinkers, ethical leaders.

This lecture catalysed Day-5's vision: IKS as education's saptarṣi, harmonising ancient depth with modern scale for knowledgeable, compassionate societies.

Session - 19

Prof. Dinesh Chahal, Department of Teacher Education, Central University of Haryana

Topic - Internationalisation of the Indian Knowledge System

Dr. Dinesh Chahal's Lecture-15 capped Day-5 with "Internationalisation of Indian Knowledge Systems" (IKS), advocating global mainstreaming of Vedic sciences, Ayurveda, and yoga, extending governance-education dialogues to worldwide impact.

Dr. Chahal mapped IKS's global footprint: UNESCO's Intangible Heritage lists yoga, Kumbh Mela; WHO's Traditional Medicine Strategy benchmarks Ayurveda. Philosophical exports:

Advaita Vedānta influences Schopenhauer, Emerson; nyāya logic in analytic philosophy.

Scientific disseminations: Aryabhateeyam symposia at NASA (Earth rotation models); Sulba geometry in math congresses. Ayurveda thrives: 200+ US clinics, EU GMP certifications; yoga's \$80B industry spans 300M practitioners.



Initiatives spotlighted: ICCR's 36 global chairs teaching Sanskrit-darśanas; MEA's IKS fellowships; Fulbright-Nehru for vāstu research. Digital thrusts: YouTube's 1B+ yoga views; Coursera's Bhagavad Gītā MOOCs.

Collaborative strategies: Joint ventures, Harvard-Ayurveda Centre; IIT-Delhi-UNESCO manuscripts digitisation. Challenges: IP theft (turmeric patents), cultural dilution countered by GI tags, soft power diplomacy.

Dr. Chahal proposed roadmaps: NEP 2020's international credits; G20 IKS working groups; Bharat Chair professorships. Metrics: Scopus citations of Caraka surging 300%; Scopus-indexed IKS journals.

a-industry partnerships, positioning India as an epistemic hub preserving heritage while innovating solutions like climate-resilient vṛkṣāyurveda.

Session - 20

Dr. Anil Kumar, IUCTE, Varanasi

Topic: Challenges in Integrating Traditional and Modern Knowledge

Final sessions tackled resistance: secularism vs. dharma curricula, faculty upskilling gaps, assessment metrics. Solutions included hybrid pramāṇa rubrics, rural phygital kiosks, and cross-disciplinary IKS cells. Dr. Kumar synthesized 25+ recommendations into an "IKS Implementation Toolkit."

Day 6: Thursday (25th Jan. 2025)

Session - 21

Prof. Sarika Sharma, Faculty of Education, Jamia Millia Islamia, New Delhi

Topic - Pedagogical Adaptations for Social Sciences

Prof. Sarika Sharma delivered an inspiring session on weaving traditional Indian pedagogical methods into modern social sciences teaching, rendering curricula vibrant, relevant, and culturally anchored. In an era of disengaged learners, she championed IKS fusion to ignite curiosity and critical faculties.

Prof. Sharma critiqued rote-heavy social sciences, history as dates, civics as bylaws,

The screenshot shows a Zoom meeting interface. At the top, the title bar reads "Prof. Sarika Sharma (IAS) (Presenting, annotating)". The main window displays a presentation slide from a Beamer presentation. The slide content is as follows:

Pedagogical adaptations for social sciences involve tailoring teaching methods to actively engage students in critical thinking about complex social issues, often through strategies like inquiry-based learning, discussion-based activities, community engagement, utilizing primary sources, incorporating diverse perspectives, and adapting instruction to cater to different learning styles within a classroom.

"The pedagogy of social sciences in Ancient India was characterized by a holistic approach, emphasizing the development of the whole person, and integrating intellectual, moral, and spiritual growth."

Below the slide, the Zoom interface shows a grid of participant avatars. The names visible are ANIL KUMAR, ajay kumar, Chauleshwar..., Dr. Sateesh Sut..., Dr. PRAGATI D..., Dr. Ajay Kuma..., Menaka Singh, AMAL HAMEED, 73 others, and IUCTE Program. At the bottom, the status bar shows the time as 10:13 AM and the meeting title "FDP on Bhartiya Gyan Parampara to be held ...".

contrasting with ancient kathā (storytelling) from itihāsa-purāṇa, where Mahabharata's dharma yuddha unpacks ethics experientially. Strategies unfolded:

Storytelling (ākhyāna parampara): Narrate Arthaśāstra's mandala diplomacy as realpolitik tales, boosting retention 60% per cognitive studies. Experiential Learning (anubhava): Role-play sabha debates from Rāmāyaṇa for governance; field trips to stepwells, decoding jalanīti. Interdisciplinary Webs (saṅgati): Link sociology to varṇa vyavasthā evolution, economics to vārttā śāstra, environment to pṛthivī sūkta. Inclusive curricula rooted in sādharmaṇīkaraṇa (universalisation) foster equity: multilingual resources via Bhasha Sangam; diverse rasa lenses for empathy. Practical toolkit: Bloom's revised via tarka (logic), analyse nyāya sūtras for historiography; project-based sevā assessments. Edtech amplifiers: AR vāstu overlays on monuments; AI chatbots querying Chanakya nīti. NEP 2020 enabler: 10% IKS credits in B.A. social sciences; NCF 2023 values pluralism. Pilots: JNU's itihāsa simulations yield deeper societal insight. Outcomes: Students gain critical thinking (viveka), cultural pride, global competence, tackling inequality via ahimsa, and sustainability via saṃbhava. Prof. Sharma urged educators: "Teach not facts, but frameworks for flourishing."

This lecture empowered faculty to craft rooted, engaging social sciences, honouring IKS while navigating modernity.

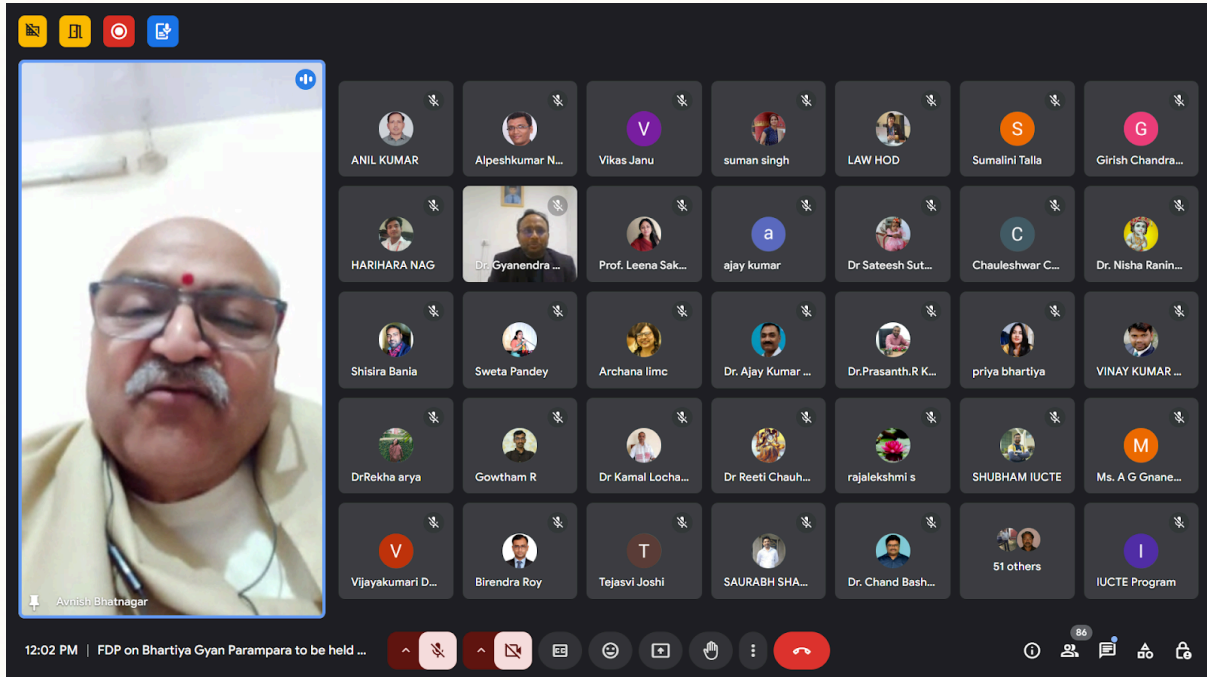
Session - 22

Dr. Avanish Bhatnagar, Vidya Bharti Akhil Bhartiya Shiksha Sansthan, New Delhi

Topic - Social and Economic Structures of Ancient India

Dr. Avanish Bhatnagar delivered the capstone lecture, "Social and Economic Structures of Ancient India," distinguished as the Faculty Development Program's (FDP) most remarkable session. His erudite exploration traced IKS's socioeconomic architecture from Vedic times through medieval guilds, revealing prosperity's ancient blueprints.

Dr. Bhatnagar mapped economic evolution: ṛgvedic pastoral barter → smṛti agrarian taxation



→ mauryan monetised trade. Core was vārttā (commerce) from Arthaśāstra: state-regulated markets (paṇya kṛeṣṭhi), standardised weights (tulā), and caravan trade (vāṇijya patha) linking Taxila to Pataliputra.

Agrarian backbone shone in jajmānī systems, self-sufficient villages (grāma svayambhu) with inter-caste specialisation: Brahmin scholarship, Kshatriya protection, Vaishya commerce, Shudra crafts. Irrigation via ērai tanks sustained double-cropping; siṃhāṭa (lion-throat canals) exemplified hydraulic engineering.

Guilds (śreṇī) revolutionised commerce: 18 Mahājanapadas' merchant corporations issued potin coins, enforced contracts (samaya), and funded temples, precursors to corporations. Niṣka gold coins facilitated Indo-Roman trade (1st century CE), with Muziris ports exporting pepper, muslin.

Taxation balanced revenue with equity: bhāga (1/6th rice), hiranya (gold on cash crops), tolls (vārti) at 1/50th value. Arthaśāstra's dhamma mahāmātra audited corruption, ensuring rājā svadharma.

Governance fused danda (law) with dharma (ethics): panchayats resolved 80% disputes; nyāya sabhā codified inheritance. Social mobility via śilpa guilds challenged rigid varṇa.

Modern resonance: Amul's cooperative mirrors śreṇī; GST echoes karadāṇḍa; village self-reliance informs Atmanirbhar Bharat. Dr. Bhatnagar urged NEP curricula: economic history via Jatakas, governance simulations from Kautilya.

Valedictory Reflections: FDP concluded with participants celebrating 17 transformative lectures, from Vedic math to global IKS. Faculty pledged IKS integration: 10% credits, experiential modules, and research grants. Organisers envisioned educators as IKS torchbearers, equipping students for a cultural renaissance amid global challenges.

This FDP affirmed: India's intellectual heritage isn't a museum relic, but living architecture for sustainable prosperity.

Session - 23 & 24

Prof. Prem Narayan Singh, Director, IUCTE, Varanasi

Topic-Strategic Roadmaps for IKS Revitalisation and Interaction with The Participants

The last session (Interaction Session) of the Faculty Development Program on Indian Knowledge Systems. The session was taken by Prof. Prem Narayan Singh, Director of IUCTE. The session served as a reflective and interactive platform where participants and the Director engaged in a meaningful discussion on the overall vision and outcomes of the program.

At the outset, Prof. Singh shared the vision and objectives behind organizing the Faculty Development Program. He emphasized that the program was designed not only to provide academic enrichment but also to create awareness among faculty members about the philosophical, cultural, and pedagogical foundations of Indian Knowledge Systems.

Thereafter, he invited the feedback and opinions of the participants. Several participants came forward to share their experiences. They highlighted the quality and depth of the sessions conducted by the invited experts. Dr. Shivlochan Sharma, from Kumar Bhaskar Verma University, Assam, in particular, expressed his sincere gratitude to IUCTE for providing such a platform and acknowledged the efforts of the organizers in inviting well-versed scholars to enlighten the participants. Some participants also suggested that future programs of this nature should be organized in offline mode, as it would allow for deeper personal interaction and more engaging discussions.

In his address, Prof. Singh reflected on the Guru-Shishya tradition and discussed its relevance in the contemporary educational landscape. He asserted that modern pedagogy must integrate the essence of this tradition, which is rooted in respect, discipline, and holistic learning. Further, he strongly emphasised that ethics and morality should not be taught as separate subjects but rather should be seamlessly embedded into the processes of teaching, learning, and assessment. This integration, he argued, would help in nurturing not only academically sound students but also morally responsible individuals.



The session concluded with Prof. Singh congratulating all participants for their enthusiastic engagement throughout the program. He appreciated their thoughtful contributions and encouraged them to carry forward the insights gained into their professional practices.

Program Outcome

The Faculty Development Program successfully empowered participants to redesign academic frameworks by incorporating a mandatory 10% IKS credit component in strict alignment with NEP 2020 mandates, while enabling educators to bridge ancient wisdom with modern science through the practical application of Vedic Mathematics and Arthaśāstra in contemporary governance. Graduates were equipped to implement advanced digital tools, including AR/VR simulations, AI-driven śloka translators, and blockchain, to transform traditional knowledge into interactive content for 21st-century classrooms. This initiative generated high-quality scholarly outputs such as policy whitepapers and research prototypes that validate systems like Ayurveda through modern clinical standards, alongside the successful integration of Guru-Śiṣya pedagogical tenets into multidisciplinary, values-based learning environments. Furthermore, participants formulated actionable strategies for the internationalization of IKS, positioning Indian heritage as a "soft power" vanguard to address global challenges like climate resilience and health equity, ultimately producing educators with a decolonized perspective ready to mentor a generation that utilizes India's timeless wisdom as a functional engine for sustainable progress and global competitiveness.

List of the Resource Person

S.No.	Name and Affiliation
1.	Prof. Sudyumna Acharya Founder & Director, Ved Vani Vitan, OPREI, Satna
2.	Prof. Asheesh Shrivastava Dean, Academic & Research, IUCTE
3.	Prof. Pawan Kumar Sharma Dept. of Political Science, CCS University, Meerut
4.	Prof. Sanjay Kumar Pandey Dept. of Mathematical Sciences, IIT, BHU
5.	Prof. Vinay Kumar Pandey Dept. of Jyotish, BHU
6.	Prof. Ajay Kumar Singh Professor, IUCTE
7.	Prof. Joy Sen Professor, IIT, Kharagpur
8.	Prof. Ravishankar Shenoy Muniyal Institute of Ayurveda Medical Sciences, Manipal, Karnataka
9.	Prof. Sunil Kumar Singh Professor, Faculty of Education, BHU
10.	Prof. Jyotsna Tiwari Head, Department of Education in Arts & Aesthetics NCERT, New Delhi
11.	Prof. Gopal Krishna Thakur Dean, School of Education, MGAHV, Wardha
12.	Dr. Raja Pathak Assistant Professor, IUCTE
13.	Prof. Pawan Sinha Centre for Global Studies, University of Delhi, New Delhi
14.	Prof. C. B. Sharma Director, School of Education, IGNOU, New Delhi
15.	Prof. Dinesh Chahal Department of Teacher Education, Central University of Haryana
16.	Prof. Sarika Sharma Faculty of Education, Jamia Millia Islamia, New Delhi
17.	Dr. Avanish Bhatnagar Vidya Bharti Akhil Bhartiya Shiksha Sansthan, New Delhi
18.	Prof. Prem Narayan Singh Director, IUCTE, Varanasi

Participant List

SN	Sal.	First Name	Last Name	Organization
1	Dr	Biswajit	Nath	East Calcutta Girls' College
2	Dr	Sunil	Sharma	Government college of Yoga Education and Health
3	Dr	Ramananda	Bhat N	CSU, RGC, Sringeri
4	Mr	M R	Ramesh	Indira Gandhi Centre for Atomic Research, Kalpakkam
5	Mr	Saurabh	Sharma	Grizzly College of Education
6	Dr	Kanika	Handa	Himachal Pradesh University
7	Mr	Uday Kumar	Roy	ST. Paul Teachers Training College Birsingpur Samastipur Bihar
8	Dr	Shyam Sunder	Sharma	Deshbandhu College
9	Dr	Ashutosh	Tiwari	Bhopal campus
10	Dr	Archana	Sharma	Vedanta PG Girls' College Reengus, Sikar
11	Dr	Pradeep Kumar	Mishra	Central Sanskrit University, Shri Ranbir Campus, Jammu
12	Dr	Yogendra Kumar	Gautam	Vedanta PG Girls College, Reengus, Sikar, Rajasthan
13	Dr	Rachana		Varun Dhaka institute of technology
14	Dr	Sonam	Chaudhari	Shri Agrasen Kanya PG College Varanasi
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