

Indian Knowledge System (BIKS609)

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Unit 1

Syllabus

Unit-I

Introduction to Indian Knowledge Systems (IKS):

Overview, Vedic Corpus, Philosophy, Character scope and importance, traditional knowledge vis-a-vis indigenous knowledge, traditional knowledge vs. western knowledge.

Unit - II

Traditional Knowledge in Humanities and Sciences:

Lingistics, Number and measurements- Mathematics, Chemistry, Physics, Art, Astronomy, Astrology, Crafts and Trade in India and Engineering and Technology.

Unit - III

Traditional Knowledge in Professional domain:

Town planning and architecture- Construction, Health, wellness and Psychology
Medicine, Agriculture, Governance and public administration, United Nations Sustainable development goals.



Introduction to Indian Knowledge Systems

An Overview

• LEARNING OUTCOMES

- Understand and appreciate the importance of ancient knowledge to a society
- Understand the term 'Indian Knowledge System' (IKS)
- Familiarise with the key components of the IKS
- Develop some appreciation of IKS historicity

Introduction to IKS



- Systematic transfer of knowledge from generation to generation .
- It is not just a traditional but a systematic well structured system and process of knowledge transfer.
- The Indian knowledge system, rooted in ancient texts like the Vedas, encompasses a vast array of disciplines such as philosophy, science, mathematics, astronomy, medicine, and spirituality.
- Indian Knowledge System (IKS) suggests a number of thematic areas of IKS, where lot of research and studies are needed. This includes study of health and wellbeing, and consciousness; art and culture; mathematics and astronomy etc.

Introduction to IKS



- India's sciences are based on fundamental principles, axioms, logical inference, and empirical observations and were generally written down in texts called *śāstras* and *sūtras*.
- Introduction to Indian Knowledge System – Concepts and Applications provides a grand view of the Indian knowledge tradition, and it goes back to the Vedic texts for its overarching unity.
- The phenomenon of consciousness is the frontier from the perspectives of biology and physics; it is also central to answering whether machines will become conscious.
- The Upanishads speak of two kinds of science: one about things and concepts and their mutual relationships (**aparā vidyā**); the other about consciousness (**parā vidyā**).

Action 1.1

- The **US patent on neem** was **revoked** after a significant legal battle. This was a major victory for **traditional knowledge** and **biopiracy prevention**.
- **Background:**
 - Neem (*Azadirachta indica*) has been used in **Indian traditional medicine, agriculture, and skincare** for centuries.
 - In **1995**, the **European Patent Office (EPO)** granted a **patent to W.R. Grace & Co. (a US company) and the Department of Agriculture, USA** for a **fungicidal product derived from neem**.
 - This was seen as **biopiracy**, meaning a private company was trying to claim rights over **traditional Indian knowledge**.



Action 1.1

• Legal Battle & Cancellation

- In 1999, a group of Indian activists and organizations (including Vandana Shiva, the Indian government, and the International Federation of Organic Agriculture Movements) challenged the patent.
- They argued that neem's fungicidal properties were already well-known in India and documented in ancient texts.
- In 2000, the European Patent Office (EPO) revoked the patent on the grounds of "lack of novelty and prior public knowledge".
- In 2005, after an appeal by W.R. Grace, the EPO upheld the revocation, marking a final victory.

The victory led to stronger international policies, such as in the Convention on Biological Diversity (CBD) and Traditional Knowledge Digital Library (TKDL) in India.



Built by Raja Raja Chola I. The construction was completed in 1010. This is one of the earliest granite temples in the world. Around 60,000 tons of granite is said to be used to build the temple. It has one of the tallest vimānam (temple tower) and its kumbham (the structure on the top) weighs approximately 80 tons.



Tamil Nadu's Tanjavur, the Brihadeshwara temple approx. 1,000 years old and dedicated to Lord Shiva



It is said that the temple was built with 1,30,000 tons of granite.



World's First Granite Temple In Tamil Nadu Is A True Architectural Marvel

**How is it possible to
place this 80 tones
stone above 66
metres of a 1000
years old temple**



Video Link:
<https://www.youtube.com/watch?v=61eBrfficDo>

Do We Need Indian Knowledge System?

- There is a question ruminating over our minds, “Why should we bother so much about Indian Knowledge System (IKS)?”

The Indian Knowledge System (IKS) is important for several reasons, as it offers a **unique and holistic approach** to knowledge, covering diverse fields such as science, mathematics, medicine, philosophy, arts, and linguistics.

We should care about it:

1. Rich Heritage & Timeless Wisdom:

- India has a **vast and ancient knowledge tradition** spanning **thousands of years**, including contributions from texts like the **Vedas, Upanishads, Ayurveda, Yoga, and Arthashastra**. This knowledge is **still relevant** in various domains today.

2. Contributions to Science & Technology:

- **Mathematics:** Concepts like zero (0), decimal system, algebra, trigonometry, and even early calculus were pioneered in India (e.g., Aryabhata, Brahmagupta).
- **Medicine:** Ayurveda and Siddha offer natural healing approaches that complement modern medicine.
- **Astronomy:** Indian astronomers like Varāhamihira and Bhaskara made significant contributions.

We should care about it:



3. Holistic & Sustainable Approach

- Indian knowledge systems **emphasize harmony with nature**, sustainability, and ethical living—principles crucial for addressing **climate change** and promoting **eco-friendly solutions**.

4. Cultural & Philosophical Depth

- IKS offers insights into **spirituality, consciousness, and holistic well-being**, influencing modern psychology, leadership, and personal development. **Yoga and meditation** are widely accepted worldwide for their mental and physical benefits.

5. Relevance to Modern Education & Innovation

- IKS fosters **critical thinking, interdisciplinary learning, and practical wisdom**. Integrating **ancient wisdom with modern science** can lead to innovative solutions in AI, bioengineering, and sustainable living.

6. Global Recognition & Soft Power

- IKS has gained global acceptance through **Yoga, Ayurveda, meditation, and Sanskrit studies**. Understanding and promoting it can boost India's **cultural diplomacy** and intellectual leadership.

Introduction

- India is a country with a **long-surviving civilisation** history and practice known to mankind. While the modern western scholars date the civilisation to at least **5000-8000 years**, the indigenous sources and belief systems in India date the civilisation to a very ancient period. almost time immemorial.
- As many of us are aware, the ancient knowledge in India was preserved and transmitted 'orally' until a few centuries back.
- There was an uninterrupted lineage of 'Guru-Sisya' that took responsibility for the preservation and transmission of knowledge down the generations.
- Quite often, the teacher-student was a father-son combination and a group of related family members.
- These people formed a clan, who preserved the knowledge, practiced it by making a living, and transmitted it to their offspring's.





“For about 2000 years' foreign invaders came to this country — first Persians, Greeks, Shaks, Huns, Scythians, Pathans, Mongols, Turks, Mughals, and Nadir Shahs etc. Then came the European invaders by sea. Finally, the British colonised India.

Introduction



- Unfortunately, due to major changes in the educational system introduced in India about 200 years back, there was an abrupt end to this process of knowledge transmission and the continuity is mostly lost.
- The newly introduced educational system demanded the society acquire only such knowledge as made available through the educational system.
- Those who aligned themselves to the new educational system were assured of jobs and salaries by the ruling class.
- We have continued with the British system of education in independent India, by keeping the ancient knowledge repository out of consideration.
- The erstwhile British policies on education excluded the ancient Indian knowledge citing reasons of lack of rigour and scientific values.

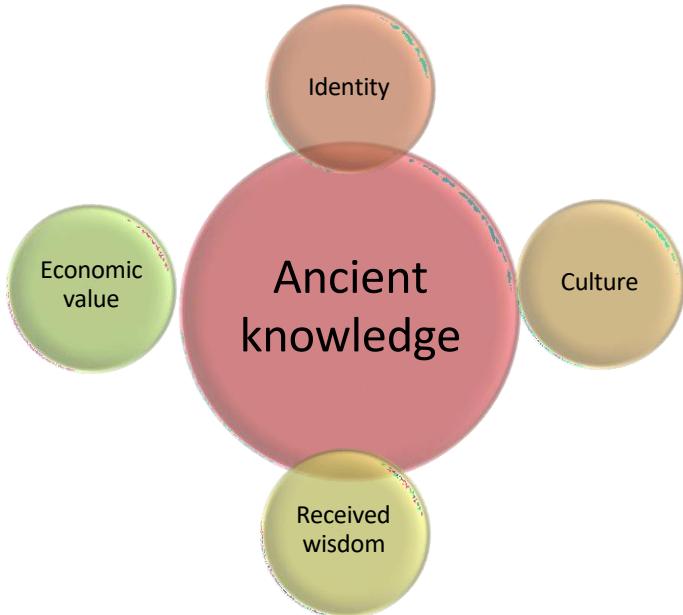
Education System In British India

<https://www.youtube.com/watch?v=YyINPCICLCA>



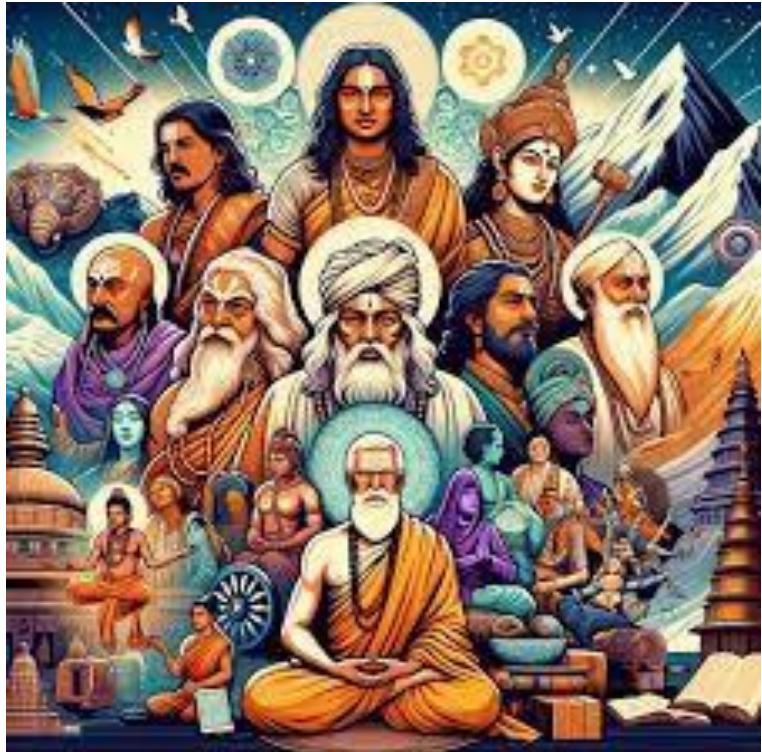
Importance of Ancient Knowledge

- Ancient knowledge is the accrued knowledge over several generations and preserved in formal and informal means.
 - **Formal** means include documented knowledge and
 - **Informal** means include shared values and practices through oral traditions.
- The thinking patterns and the repository of knowledge created by the forefathers in any society enable the current generation to understand the **thought processes and frameworks** of the previous generations,
- Ancient knowledge serves multiple roles for society.



Identity

Ancient knowledge preserves the history, traditions, and collective memory of societies, helping communities maintain a sense of who they are and where they come from. Myths, folklore, and ancestral knowledge strengthen national and ethnic identities.



Culture

Traditions, languages, art, and philosophical thought rooted in ancient knowledge shape societal values and norms. Rituals, religious beliefs, and historical practices continue to define cultures worldwide



Received

Lessons from past civilizations, whether through oral tradition, written texts, or historical events, offer guidance on ethics, governance, and human behaviour.

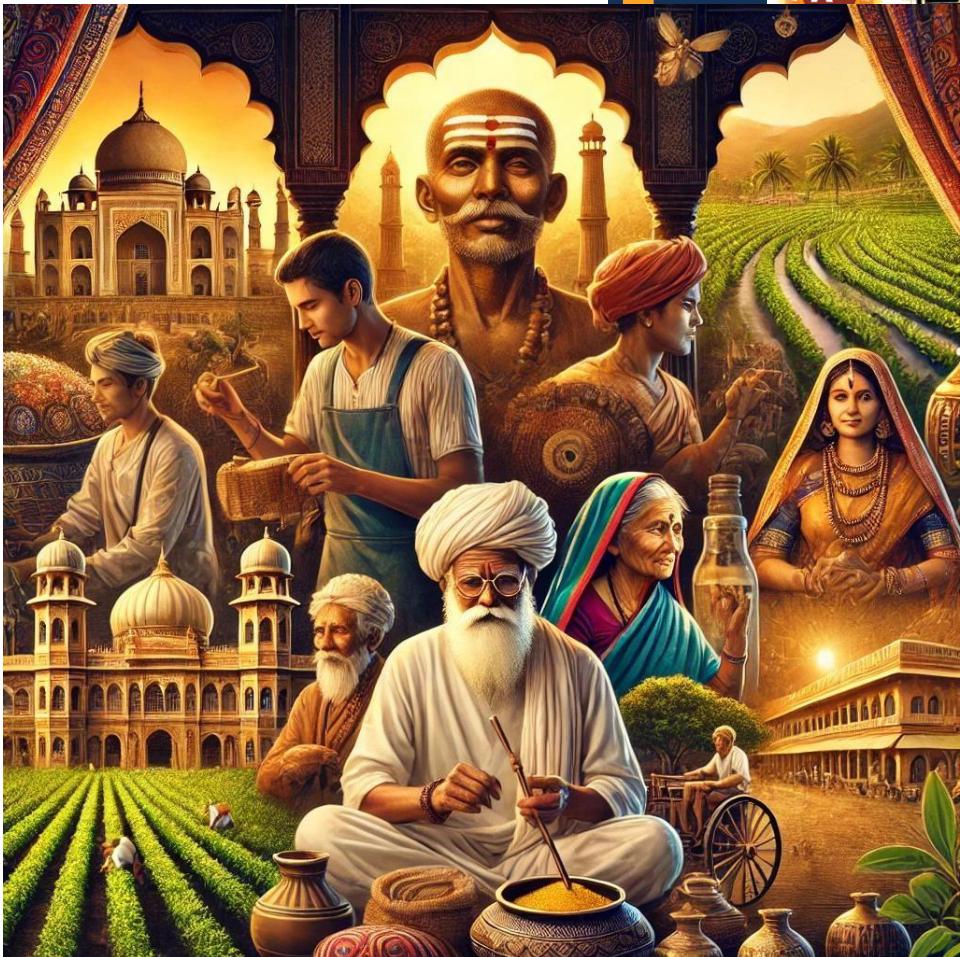
This inherited knowledge helps societies learn from past successes and mistakes.



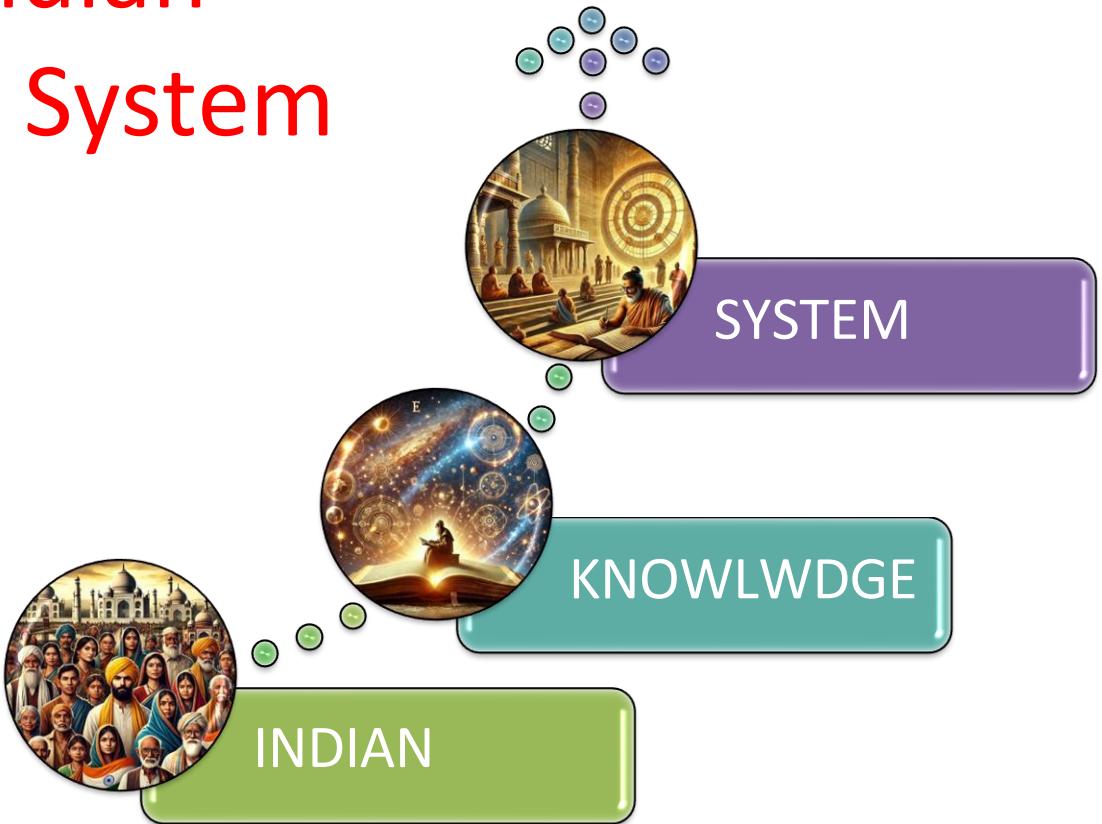
Economic Value

Ancient technologies, agricultural techniques, and craftsmanship still contribute to economic practices today.

Traditional knowledge in medicine, textiles, and architecture continues to drive industries such as tourism, heritage conservation, and alternative medicine.

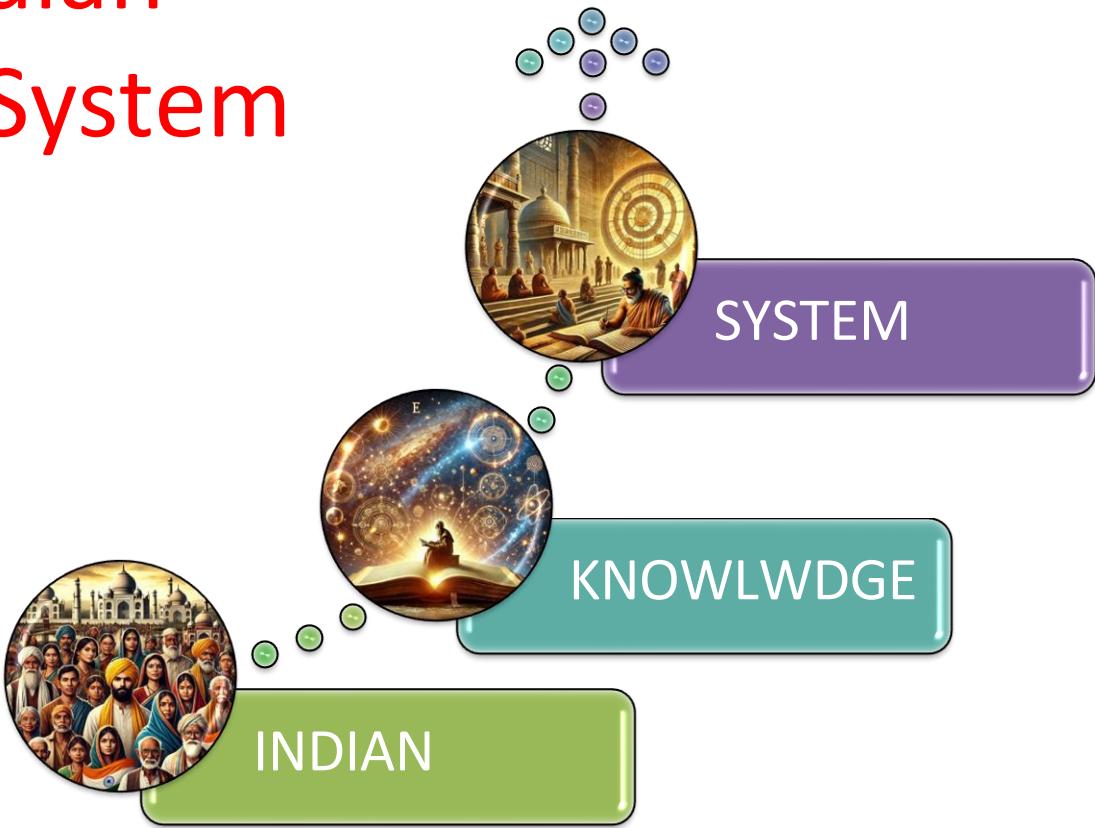


Defining- Indian Knowledge System



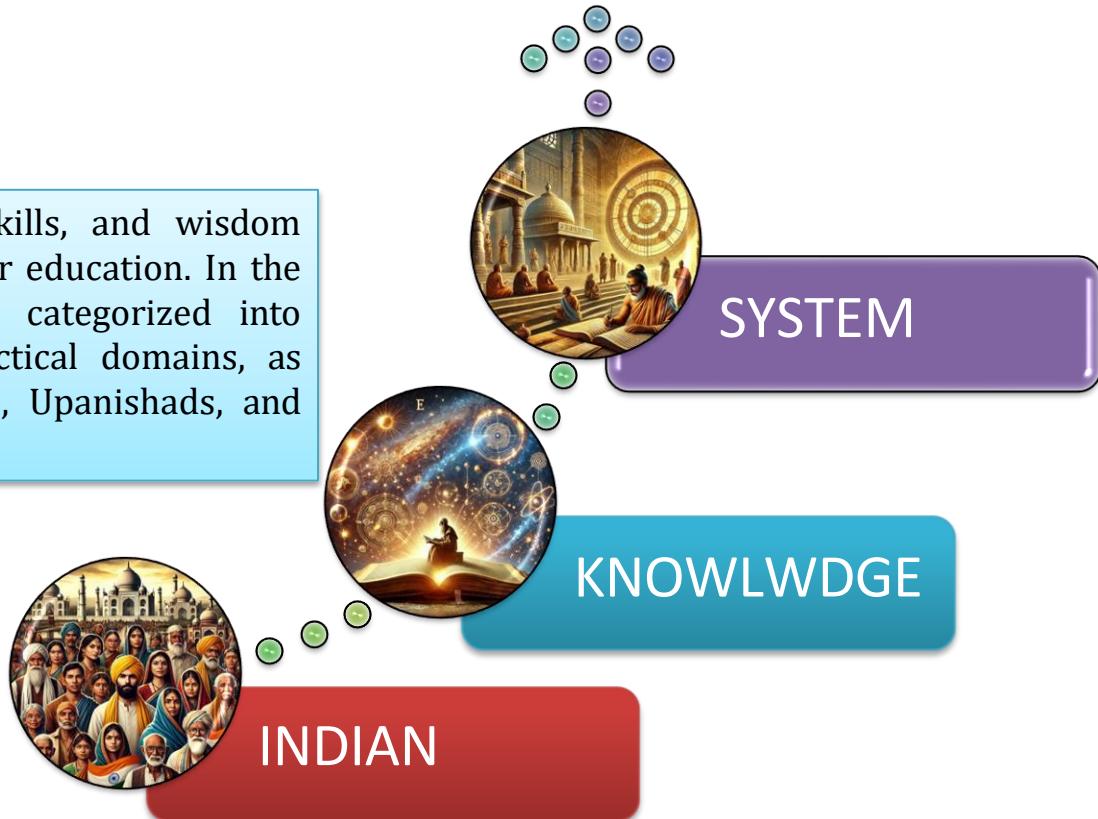
Defining- Indian Knowledge System

Refers to anything related to India, including its culture, traditions, philosophies, and historical heritage. It encompasses the diverse knowledge, practices, and wisdom developed in the Indian subcontinent over thousands of years.



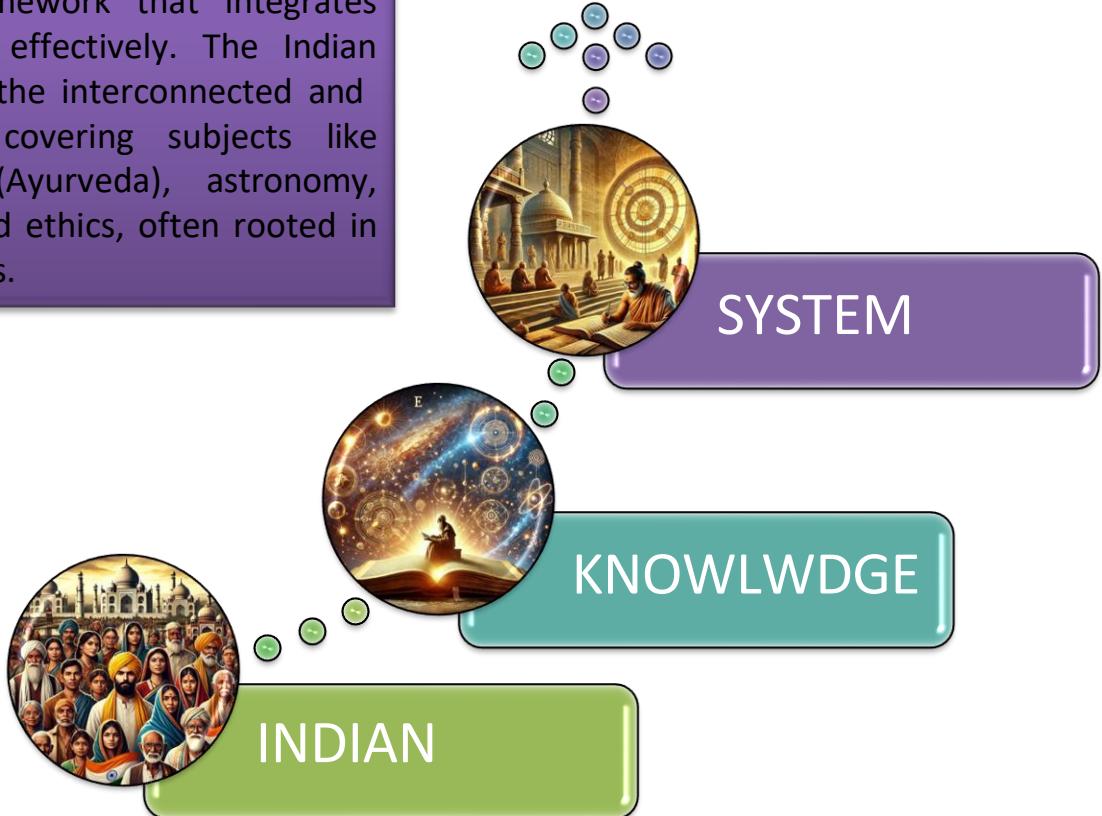
Defining- Indian Knowledge System

The accumulation of information, skills, and wisdom acquired through experience, study, or education. In the Indian context, knowledge is often categorized into spiritual, scientific, artistic, and practical domains, as seen in ancient texts like the Vedas, Upanishads, and various classical treatises.



Defining- Indian Knowledge System

A structured and organized framework that integrates various components to function effectively. The Indian Knowledge System (IKS) refers to the interconnected and holistic approach to learning, covering subjects like philosophy, science, medicine (Ayurveda), astronomy, mathematics, arts, governance, and ethics, often rooted in ancient scriptures and oral traditions.



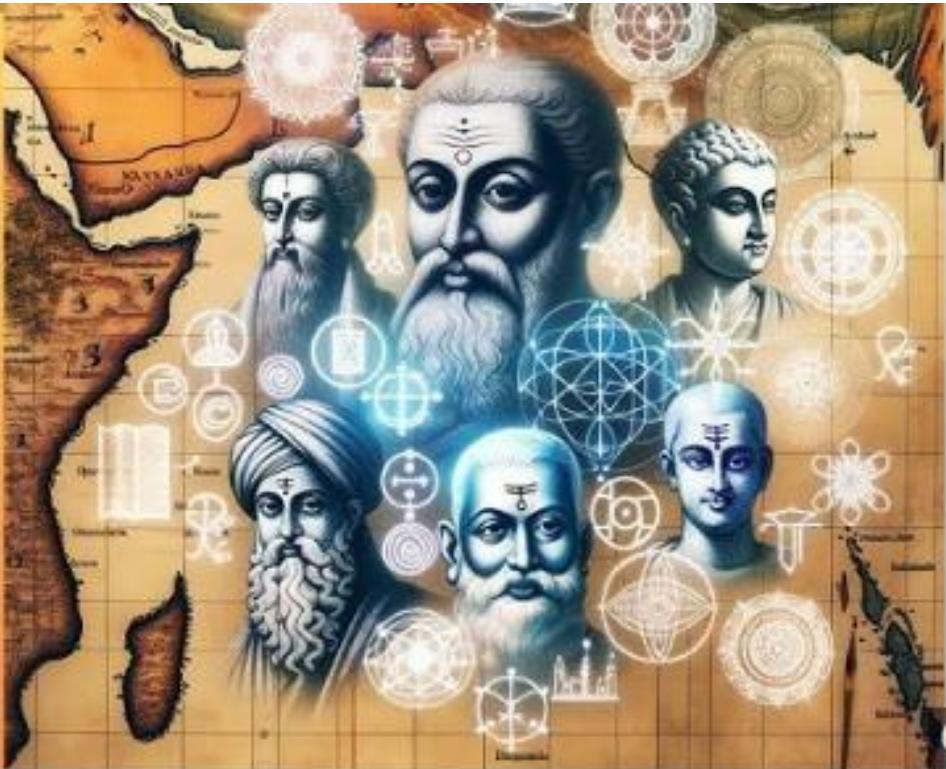


IKS Corpus

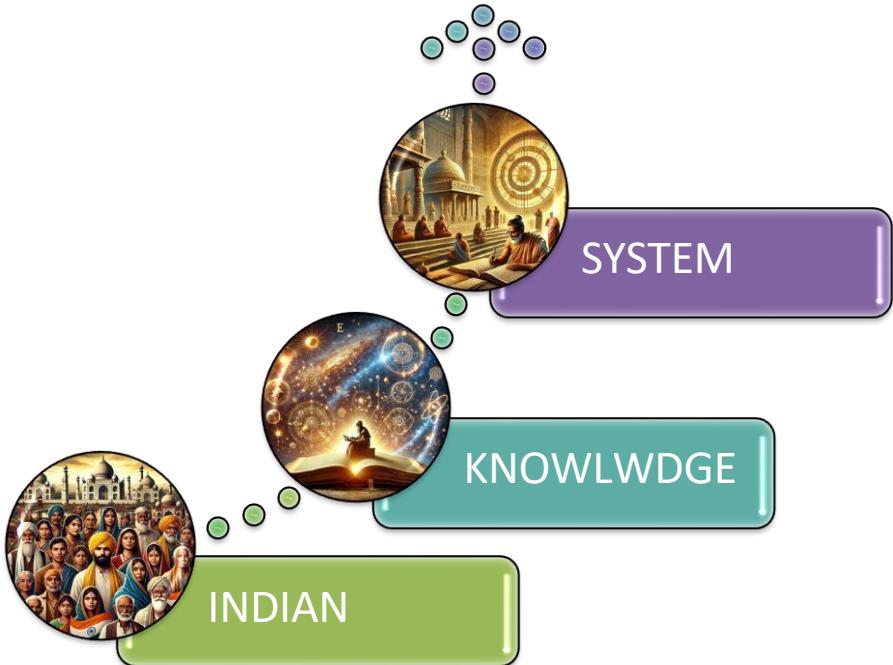
There are many ways to define and identify what constitutes IKS

The IKS Corpus

Discover how the
library of Indian
knowledge is
organised.



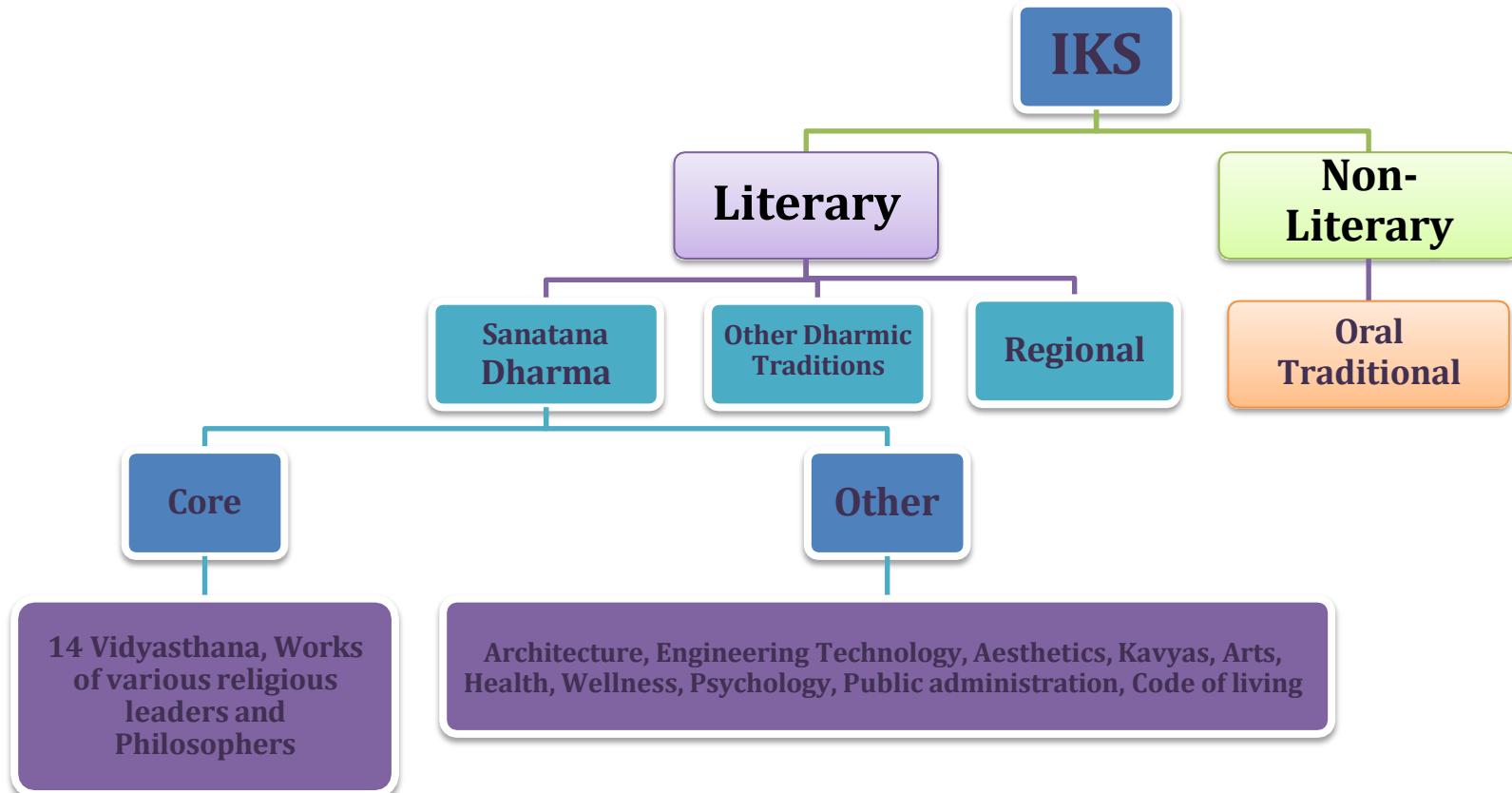
The IKS Corpus- A classification Framework



The **Indian Knowledge System (IKS) corpus** refers to the vast and diverse body of knowledge developed in the Indian subcontinent over thousands of years. This corpus includes ancient scriptures, scientific treatises, philosophical texts, artistic traditions, and practical wisdom that have shaped Indian civilization. It encompasses multiple disciplines, often integrating spirituality, science, and holistic learning.



The IKS Corpus- A classification Framework



The IKS Corpus- A classification Framework

- The usefulness of a classification framework depends on 3 factors:
 1. Completeness
 2. Compactness
 3. Inter-connectedness.

The IKS Corpus- A classification Framework

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 1. Completeness
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Completeness ensures that all important components of the IKS are included in the proposed framework. If significant omissions are found in the classification, it makes the IKS non-exhaustive and non-representative.

The IKS Corpus- A classification Framework

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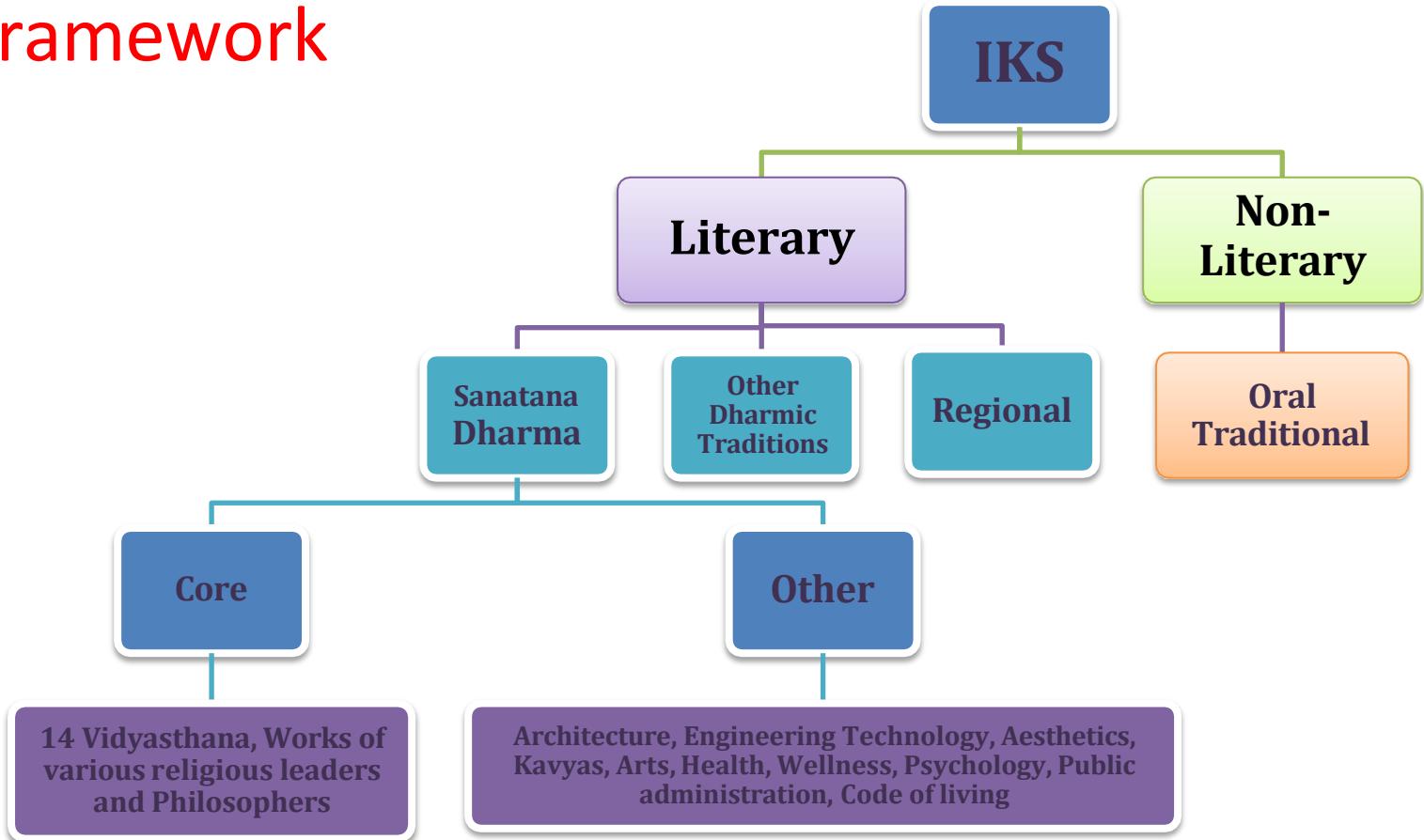
Compactness indicates the efficacy of the grouping of various topics in IKS in a congruent and logical fashion. This makes the representation simple, concise, and easy to understand and remember.

The IKS Corpus- A classification Framework

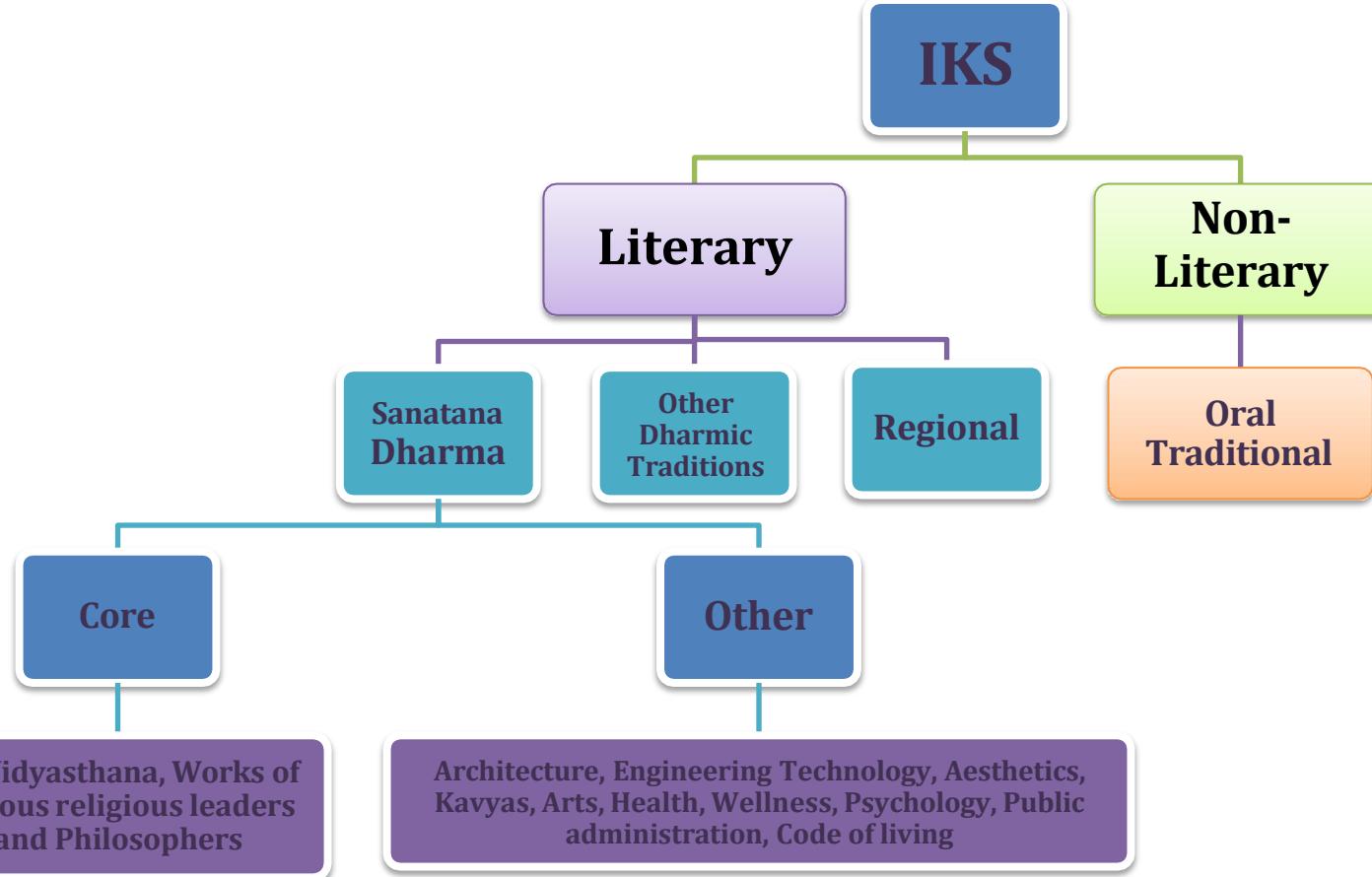
- The usefulness of a classification framework depends on 3 factors:
 1. Completeness
 2. Compactness
 3. Inter-connectedness.

Inter-connectedness brings logical relationships among the various sub-classifications. The classification framework will identify how the different components are logically connected. Thus, it presents a unified picture of the entire knowledge

The IKS Corpus- A classification Framework



The IKS Corpus- A classification Framework



Core literature

- This comprises a vast repository of knowledge starting with the Vedas, known as Śruti.
- The Vedas are considered foundational by the Indian society and several important literary works were developed later, which substantially added to the Vedic corpus by facilitating better understanding and implementation of the ideas presented in the Vedas.

The other literature

It consists of works that addressed key issues of day-to-day life such as health, wellness, science, engineering, technology that aided societal progress and development, and aesthetics and art forms.

Other Literature

Basic and applied science

Engineering and technology

Health, wellness and Psychology

Niti-sastras

Public Administration

Aesthetics, Kavyas and performing Arts

Mayamata- Vastu Shastra

Aryabhatia

Charaka Samhita/ Sushrutha Samhita

Nitishastra/Arthashastra by Chanakya (also known as Kautilya)

Shakuntala Kavya - Abhijnanashakuntalam- by poet Kalidasa.

Natyashastra- Bharathamunni

Other Dharmic Traditions

Buddhist

Tripitaka, Nagarjuna's Rasaratnakara

Jain

Suryaprajnapti

Regional Literature

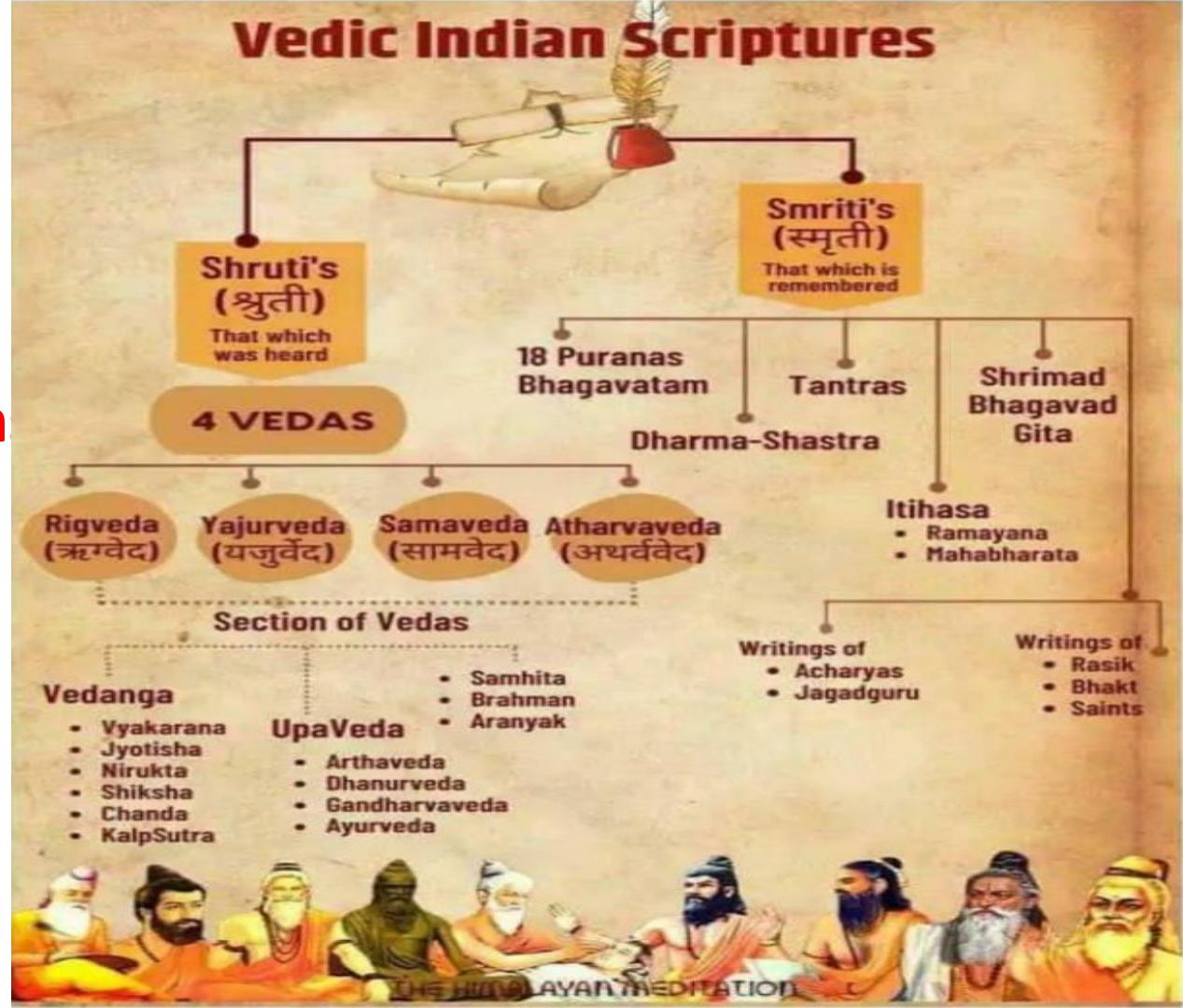
- Indian subcontinent has a rich and diverse mix of cultural and linguistic variations.
- The 8th schedule of the Indian constitution has listed 22 languages of the country.
- In each of these languages, there is a huge corpus of religious, philosophical, and other literature.

Oral Traditions

- The diversity of cultural practices and regional preferences have paved the way for oral traditions to preserve and transmit knowledge across generations.
- These have been primarily in the form of **folklore artistic endeavours**, skilful jobs, food and life practices, and health.
- The **64 Kalas** mentioned in the IKS literature are mostly skill-based and artistic chores that are orally transmitted.
- Sanskrit has been the dominant language for transacting knowledge for a long time in India.

Vedic Indian Scriptures

Unravelling the Depth of Vedic Scriptures



Chaturdasa

Vidyasthana

- Chaturdasa vidyasthana is a term that refers to the 14 sections of science in ancient India. It is a knowledge framework that organizes the Vedas, Puranas, and other texts into 14 major divisions.
 - The four Vedas and their six supplements
 - The Puranas
 - Dharma Shastras, which contain instructions on religious conduct, ceremonies, and jurisprudence
 - Mimamsa interpretation of the Vedas
 - The science of Nyaya logic
 - The upavedas
 - The itihas (stories and anecdotes)

Chaturdaśa Vidyāsthāna

Vedas

1. Rigveda
2. Yajurveda
3. Sāmaveda
4. Atharva-veda

Vedāṅgas

5. Śikṣā
6. Vyākaraṇa
7. Nirukta
8. Chandas
9. Jyotiṣa
10. Kalpa

11. Purāṇas &

Itihāsas

12. Dharma Śāstras & Smritis

Darśanas

13. Nyāya, Vaiśeṣika Sāmkhya & Yoga
14. Pūrva-Mīmāṃsā
Uttara-Mīmāṃsā

VEDAS

- The Vedas are made up of four Vedas:
 1. Rigveda,
 2. Yajurveda,
 3. Samaveda, and
 4. Atharvaveda

Rigveda

- The *Rigveda* or *Rig Veda* is an ancient Indian collection of Vedic Sanskrit hymns (*sūktas*)
- The *Rigveda* is the oldest known Vedic Sanskrit text.
- The text is layered, consisting of the *Samhita*, *Brahmanas*, *Aranyakas* and *Upanishads*.
- The *Rigveda Samhita* is the core text and is a collection of 10 books (*maṇḍalas*) with 1,028 hymns (Stōtragaḥ) in about 10,600 verses.(Padyagalu)

Rigveda Mandalas



- The first and 10th Mandalas are the youngest and the longest books. Second to Seventh Mandalas are oldest parts of Rig-Veda but the shortest books. 8th and 9th books are of mixed ages. Notable facts about Mandals are as follows:
 - The Famous Gayatri mantra is in Rig Veda Mandala 3
 - Each mandala consists of Suktas which are basically eulogies.
 - Rig-Veda has two recensions or Branches. The major surviving branch is Śākalya. Another branch is Bāskala or Vatkal.
 - The first word of Rig-Veda is Agni. Hymn 1.1 is addressed to Agni.
 - The 10thmandala contains the purush Sukta which explains the 4 Varnas were born from the Mouth, arms, thighs and feet of the Brahma or Purusha. It is said to have been added later.
- The **Rig Veda** remains an influential sacred text in modern Hinduism. Verses continue to be recited at religious ceremonies like weddings and sacrificial fires. Ideas of Rita/dharma/karma originate in the Rig Veda.

Yajurveda

- The **Yajurveda** (Sanskrit: यजुर्वेद, IAST: *yajurveda*, from यज्‌, "worship",^[3] and वेद, "knowledge") is the Veda primarily of prose mantras for worship rituals.^[4] An ancient Vedic Sanskrit text, it is a compilation of ritual-offering formulas that were said by a priest while an individual performed ritual actions such as those before the yajna fire.
- The Yajurveda is broadly grouped into two – the "black" or "dark" (*Krishna*) Yajurveda and the "white" or "bright" (*Shukla*) Yajurveda. The term "black" implies "the un-arranged, unclear, diverse collection" of verses in Yajurveda, in contrast to the "white" which implies the "well arranged, clear" Yajurveda.
- The earliest and most ancient layer of Yajurveda samhita includes about 1,875 verses, that are distinct yet borrow and build upon the foundation of verses in Rigveda

Yajurveda



- The Yajurveda has six primary Upanishads embedded within it.
- 1. **Brihadaranyaka (बहदा॑ रण्यकोपनिषद्) Upanishad:** It is found in the White Yajurveda, is one of the principal Upanishads and one of the first Upanishadic scriptures of Hinduism.
- 2. **Isha (ईशोपनिषद्) Upanishad:** It is one of the shortest Upanishads, embedded as the final chapter of the Shukla Yajurveda. A key scripture of the Vedanta sub-schools of Hinduism, its name is derived from "hidden in the Lord (Self).
- 3. **Taittiriya (तैत्तिरीयोपनिषद्) Upanishad:** It is found in the black Yajurveda, includes verses that are partly prayers and benedictions, partly instruction on phonetics and praxis, partly advice on ethics and morals given to graduating students from ancient Vedic *gurukul* (schools), partly a treatise on allegory, and partly philosophical instruction.
- 4. **Katha (कठोपनिषद्) Upanishad:** The Katha Upanishad is found in the black Yajurveda.^[5] The Upanishad is the legendary story of a little boy, Nachiketa – the son of sage Vajasravasa, who meets Yama – the Indian deity of death. Their conversation evolves to a discussion of the nature of man, knowledge, Ātman (Soul, Self) and moksha (liberation).

६० स्वतिंशीगणेशायनमाः ॥ उभ्यनमः श्रीविद्वाणे ॥ उद्दिव्याहृष्याजापद्याः देवाश्चकरा
श्वतःकानीयसावदेवज्ञायसीव्रकास्त्राषुलोकेष्वस्यद्विल ॥ तिहंदेवाकुद्दलासु
गन्यज्ञउद्दियेनात्ययानेति ॥ तिहवाचमृदुस्त्वन्नउद्दायेतियेतिनेभ्यावागुदगा
वद्योवाचिभोगसंदेवेभ्यञ्जागविद्युत्त्वाणामदतितदानेतेविदुनेनेवेनउद्दात्रा
येष्यन्तीतितमभिद्वयपाय्यनाविध्यत्ययःसपायामावदेवेदमध्रतिव्यस्तदतिसएव
पायामा ॥ उद्यहवालामृदुस्त्वन्नउद्दायेतियेतिनेभ्यञ्जागामुदगावद्याःवाणेभागल
वेभ्यञ्जागविद्युत्त्वाणाम्भितितदात्मनेतेविदुनेनेवेनउद्दात्रायेष्यन्तीतितमभि
त्यपाय्यनाविध्यत्ययःसपायामदेवेदमध्रतिव्यजिष्वतिसएवसपायामा ॥ ४ ॥ उद्यह
दुस्त्वन्नउद्दायेतियेतिनेभ्यञ्जुहुरुदगावद्यश्वकुमोगस्तन्देवेभ्यञ्जागविद्य

Charioteer of life

Katha Upanishad

- Body
- Prana
- Indriyas: manas
- Buddhi

- Soul is superior which is storehouse of energy/pranas
- Eg. Electrical gadgets

Yajurveda

- The Yajurveda has six primary Upanishads embedded within it.

1. Brihadaranyaka Upanishad:
2. Isha Upanishad:
3. Taittiriya Upanishad:
4. Katha Upanishad:

5. **Shvetashvatara श्वेताश्वतरोपनिषद् ,) Upanishad:** It is found in the black Yajurveda. The text opens with metaphysical questions about the primal cause of all existence, its origin, its end, and what role if any did time, nature, necessity, chance, the spirit had as primal cause?

6. **Maitrayaniya (मैत्रायणीय उपनिषद्) Upanishad:** is found in the black Yajurveda. It consists of seven *Prapathakas* (lessons). The first *Prapathaka* is introductory, the next three are structured in a question-answer style and discuss metaphysical questions relating to Atman (Self, Soul), while the fifth to seventh *Prapathaka* are supplements.

7. **Srautasutras (श्रौतसूत्र):** The Yajurveda had Shrautasutras and Gṛhyasutras attached to it, from fifteen schools: Apastamba, Agastya, Agniveshyaka, Baudhayana, Bharadvaja, Hiranyakeshi, Kaundinya, Kusidaka, Katyayana, Lokaksita, Madhyamdina, Panca-Kathaka, Satyasadha, Sakala, Sandilya, Vaikhana, and Vadula



॥६० स्वास्ति श्री गणेशाय नमः ॥ उ॒श्वेत॒सः श्री ब्रह्मणे ॥ उ॒द्या॒ह॒वा॒जा॒पा॒या॒ देवा॒शा॒स्तु॒रा॒
श्वेत॒तः॒का॒नी॒यसा॒व॒देव॒ज्या॒यसी॒व॒रुक्ता॒त्तु॒व॒लो॒कै॒ष्टस्य॒द्व॒न्ते॒ ॥ उ॒तेह॒देव॒जु॒ह॒ला॒रा॒
गन्तु॒रु॒उ॒ज्ञी॒थेना॒त्यु॒या॒मैति॒ ॥ उ॒तेह॒वा॒व॒म॒द्व॒स्त्व॒न्तु॒उ॒ज्ञा॒य॒ति॒य॒ति॒म्य॒वा॒गुरु॒गा॒
य॒द्यो॒वा॒विभ॒ग्न॒तं॒देव॒भ्य॒त्राणा॒व्य॒द्युल्या॒णा॒न्व॒दति॒दा॒त्तु॒न्ते॒विदुर्ग्न॒न्व॒नेन॒उ॒ज्ञा॒त्रा॒
य॒त्येष्वल्ली॒ति॒तम्भिद्व॒त्या॒प्नुना॒विध्य॒त्तम्य॒स्या॒प्ना॒व॒देव॒म्प्रा॒ति॒त्व्य॒न्व॒दति॒स्या॒व॒
मुपा॒प्ना॒ ॥ ३ ॥ उ॒यह॒प्रा॒णा॒म॒द्व॒स्त्व॒न्तु॒उ॒ज्ञा॒य॒ति॒त्य॒ति॒भ्य॒श्वा॒रु॒दगा॒व्य॒द्य॒श्वा॒मै॒गस्तु॒
देव॒भ्य॒त्रा॒गा॒व्य॒द्युल्या॒णा॒ज्ञि॒ति॒दा॒त्तु॒न्ते॒विदुर्ग्न॒न्व॒नेन॒उ॒ज्ञा॒त्रा॒य॒त्येष्वल्ली॒ति॒तम्भि॒
द्व॒त्या॒प्नुना॒विध्य॒त्तम्य॒स्या॒प्ना॒व॒देव॒म्प्रा॒ति॒त्व्य॒ज्ञि॒ति॒सु॒व॒स्या॒प्ना॒ ॥ ४ ॥ उ॒यह॒कु॒
द्व॒त्यु॒स्त्व॒न्तु॒उ॒ज्ञा॒य॒ति॒त्य॒ति॒भ्य॒श्वकु॒रु॒दगा॒व्य॒द्य॒श्वकु॒षि॒मौ॒गस्तु॒न्दे॒व॒भ्य॒त्रा॒गा॒व्य॒

Samaveda



- The Samaveda (Sanskrit: सामर्वद्, IAST: Sāmaveda, from सामन्, "song" and वेद् "knowledge"), is the Veda of melodies and chants.
- The Indian classical music and dance, is rooted in the sonic and musical dimensions of the Sama Veda, along with the Upanishads and Agamas.

Atharvaveda

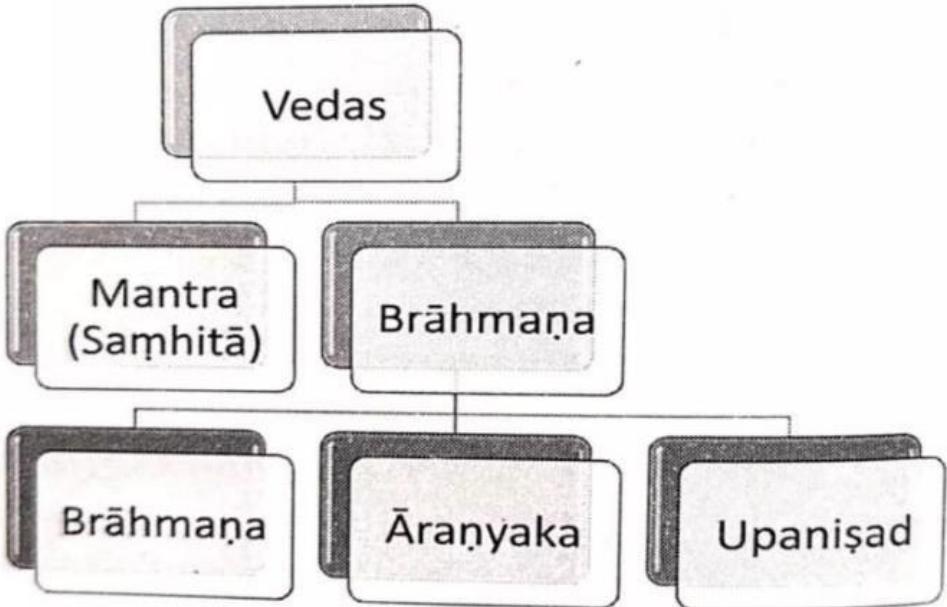


- The Atharvaveda or Atharva Veda (Sanskrit: अथर्ववेद, IAST: Atharvaveda, from अथर्व, "priest" and वेद, "knowledge") or is the "knowledge storehouse of atharvans, the procedures for everyday life.
- It is a collection of 730 hymns with about 6,000 mantras, divided into 20 books. About a sixth of the Atharvaveda texts adapt verses from the Rigveda, and except for Books 15 and 16, the text is mainly in verse deploying a diversity of Vedic meters.
- The Atharvaveda is sometimes called the "Veda of magical formulas", a description considered incorrect by other scholars.

Here's a table outlining the four Vedas and their approximate periods of composition:

Veda	Approximate Period of Composition (BCE)
Rigveda	1500 – 1000
Yajurveda	1100 – 800
Samaveda	1200 – 800
Atharvaveda	1000 – 800

The four divisions of each Vedas



Classification of each Veda into sub components

Chaturdaśa Vidyāsthāna

Vedas

1. Rigveda
2. Yajurveda
3. Sāmaveda
4. Atharva-veda

Vedāṅgas

5. Śikṣā
6. Vyākaraṇa
7. Nirukta
8. Chandas
9. Jyotiṣa
10. Kalpa

11. Purāṇas &

Itihāsas

12. Dharma Śāstras & Smritis

Darśanas

13. Nyāya, Vaiśeṣika Sāmkhya & Yoga
14. Pūrva-Mīmāṃsā
Uttara-Mīmāṃsā

Vedangas

- **Shiksha** (Sanskrit: शक्षा śikṣā, "instruction, teaching"): [phonetics](#), [phonology](#), pronunciation.^[2] This auxiliary discipline has focused on the letters of the Sanskrit alphabet, accent, quantity, stress, melody and rules of euphonic combination of words during a Vedic recitation.^{[3][4]}
- **Chandas** (Sanskrit: छन्दस् chandas, "metre"): [prosody](#).^[5] This auxiliary discipline has focused on the poetic meters, including those based on fixed number of syllables per verse, and those based on fixed number of [morae](#) per verse.^{[6][7]}
- **Vyakarana** (Sanskrit: व्याकरण vyākaraṇa, "grammar"): [grammar](#) and linguistic analysis.^{[8][9][10]} This auxiliary discipline has focused on the rules of grammar and linguistic analysis to establish the exact form of words and sentences to properly express ideas.^{[11][12]}
- **Nirukta** (Sanskrit: निरुक्त nirukta, "etymology"): [etymology](#), explanation of words, particularly those that are archaic and have ancient uses with unclear meaning.^[13] This auxiliary discipline has focused on linguistic analysis to help establish the proper meaning of the words, given the context they are used in.^[11]
- **Kalpa** (Sanskrit: कल्प kalpa, "proper. fit"): [ritual](#) instructions.^[2] This field focused on standardizing procedures for Vedic rituals, [rites of passage](#) rituals associated with major life events such as birth, wedding and death in family, as well as discussing the personal conduct and proper duties of an individual in different stages of his life.^[14]
- **Jyotisha** (Sanskrit: ज्योतिष jyotiṣa, "astrology"): Right time for rituals with the help of position of nakshatras and asterisms^[2] and astronomy.^{[15][16]} This auxiliary Vedic discipline focused on time keeping.^{[17][18]}

- Role of Vedangas

Oral Preservation – Phonetics, Pronunciation etc. (Śikṣā)

Present Knowledge Properly – Grammar (Vyākaraṇa)

Prevent Corruption – Rules for Presenting Knowledge (Chandas)

Ensure Correct Meaning – Book of Synonyms and Etymology (Nirukta)

Establish Norms, Rules and Practices – Manual (Kalpa)

When to do – Methodology for Timing Events (Jyotiṣa)

Panca Maha yajna

- Share and care
- Bhuta yajna: solve ecological problem
- Manusya yajna: social sustainability
- Pitr yajna: sense of gratitude
- Deva Yajna: space, air, fire, water, earth: clean ambience
- Brahma yajna: show respect to great risis

Vedic Life: distinctive features

- Vedas extol living a zestful life
- Balanced life priorities
- Emphasis on sustainable living
- The primacy of Agni
- A life guided by rta, stya and dharma

Chaturdaśa Vidyāsthāna

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Purānas



- Purānas (Sanskrit: पुराण, lit. Ancients) are a vast genre of Indian literature that include a wide range of topics, especially legends and other traditional lore.
- The Puranas are known for the intricate layers of symbolism depicted within their stories. Composed originally in Sanskrit and in other Indian languages several of these texts are named after major Hindu deities such as Vishnu, Shiva, Brahma, and Tridevi.
- The Puranic literature is encyclopedic, and it includes diverse topics such as cosmogony, cosmology, genealogies of gods, goddesses, kings, queens, heroes, heroines, sages, other gods, other goddesses, folk tales, pilgrimages, temples, medicine, astronomy, grammar, mineralogy, humour, love stories, theology, philosophy, etc.
- There are 18 ***Mukhya Puranas*** (Major Puranas) and 18 ***Upa Puranas*** (Minor Puranas), [\[8\]](#) with over 400,000 verses.

Itihasa

- In Sanskrit, Itihasa means history.
- An Itihasa is a story that tells about what happened in the past in the land of India. Itihasas are usually epic poems. The important itihasas to Hindus are the Ramayana and the Mahabharata.
- Modern excavations and archaeological evidence are slowly beginning to prove these Indian epics as actual history.
- One of the earliest references to Itihaasa in the literature of antiquity is in **Chanakyas's Arthashastra**. He defines Itihaasa, in the syllabus prescribed for training of a Prince, with the following words;
- Puraana (the chronicles of the ancient), Itivrtta (history), Akhyayika (tales), Udaaharana (illustrative stories), Dharmashastra (the canon of Righteous conduct), and Arthashastra (the science of Government) are called **Itihaasah**.

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Dharmaśāstra & Smritis



- Dharmaśāstra (Sanskrit: धर्मशास्त्र) are Sanskrit Puranic Smriti texts on law and conduct, and refer to treatises (śāstras) on Dharma. Like Dharmasūtra which are based upon Vedas, these texts are also elaborate law commentaries based on vedas,
- The textual corpus of Dharmaśāstra were composed in poetic verse, and are part of the Hindu Smritis, constituting divergent commentaries and treatises on ethics particularly duties, and responsibilities to oneself and family as well as those required as a member of society.
- The texts include discussion of **ashrama** (stages of life), **varna** (social classes), **purushartha** (proper goals of life), **personal virtues** and **duties** such as **ahimsa** (non-violence) against all living beings, **rules of just war**, and other topics.

Darshana's

- In Indian religions, a darshan (Sanskrit: दर्शन, IAST: darśana; lit. 'showing, appearance,[1] view, sight') or darshanam is the auspicious sight of a deity or a holy person.

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The 64 Kalas:

The 64 Kalas (skills or arts) are a traditional list of skills that are considered important for a well-rounded education in ancient Indian culture. These arts cover a wide range of practical, creative, and intellectual activities. Here is the list of the 64 Kalas with a brief explanation for each:

1. Geet vidya (गानविद्या) – Art of singing.
2. Vadya vidya (वादविद्या) – Art of playing musical instruments.
3. Nritya vidya (नृत्यविद्या) – Art of dancing.
4. Natya vidya (नाट्यविद्या) – Art of theatics and drama.
5. Alekhya vidya (अलेख्यविद्या) – Art of painting.
6. Visheshakacchedya vidya (विशेषकच्छेदविद्या) – Art of painting the face and body with colors and cosmetics.
7. Tandula kusuma bali vikara (तण्डुल कुसुम बलि विकार) – Art of preparing offerings from rice and flowers.
8. Pushpastarana (पुष्पास्तरण) – Art of making a bed using flowers.
9. Dasana vasthara (दन्त धावन) – Art of preparing toothpicks and making decorative patterns on teeth.
10. Manibhumikarma (मणिभूमिकर्म) – Art of inlaying precious stones and metals.

11. Shayana rachana (श्यारेचना) – Art of preparing beds.
12. Udaka vadya (उदकवाद्य) – Art of using water as a musical instrument.
13. Udaka ghata (उदकघात) – Art of splashing and playing with water.
14. Chitra yogya (चित्रयोग) – Art of making designs and drawings.
15. Malya granthana vikruti (माल्य ग्रंथन विकृति) – Art of making and wearing garlands.
16. Kesha sheka (केश शेखा) – Art of arranging hair.
17. Nirmiti vidya (निर्मितिविद्या) – Art of creating various crafts.
18. Ranga (रङ्ग) – Art of decorating with colors.
19. Kusuma shayana (कुसुमशया) – Art of making beds with flowers.
20. Udaka ghatika (उदकघटिका) – Art of understanding water-related architecture.
21. Aksara mushtika kathana (अक्षरमुष्टिककथन) – Art of reciting or playing games with alphabets.
22. Mlechita kriya (म्लेच्छितकृत्य) – Art of secret writing and communication.
23. Desha bhasa vigraha (देशभाषाविग्रह) – Art of knowing and understanding different languages and dialects.
24. Pushpa kasta (पुष्पकाष्ठ) – Art of preparing flowers and wood.
25. Shuka shuka narikela (शुकशुकनारीकेल) – Art of training parrots and mynahs.

26. Upakarika vidya (उपकरीविद्या) – Art of making ointments and pastes.
27. Keshmarjana (केशमर्जन) – Art of cleansing and beautifying hair.
28. Akshara mushtika kathanam (अक्षरमुष्टिककथनम्) – Art of secret writing.
29. Dharana matra (धारणामात्र) – Art of mnemonics. A mnemonic is a technique or device for remembering information. Mnemonics can be made up of words, mental pictures, body movements, physical objects, or just about anything that can help you remember information.
30. Deshabhasajnana (देशभाषाज्ञान) – Art of knowledge of different languages.
31. Vaijayanti vidya (वैजयन्तीविद्या) – Art of preparing knowledge scrolls.
32. Vriksha ayurveda (वृक्षायुर्वेद) – Art of Ayurveda related to trees and plants.
33. Anka shastra (अंकशास्त्र) – Art of understanding mathematics and numbers.
34. Dharana matra (धारणामात्र) – Art of memory training.
35. Mani bhandha (मणिबन्ध) – Art of gem-studded ornaments.
36. Mudrakhya (मुद्राख्य) – Art of seal-making and sealing.
37. Vastra (वस्त्र) – Art of making and dyeing clothes.
38. Takshanam (तक्षणम्) – Art of carpentry and woodcutting.
39. Vastu shastra (वास्तुशास्त्र) – Art of architecture and construction.
40. Takshan vidya (तक्षणविद्या) – Art of carpentry.

41. *Vyajanadya* (व्यजनाद्य) – Art of fanning and waving.
42. *Kavya* (काव्य) – Art of poetry and literature.
43. *Nati katha* (नाटिकथा) – Art of storytelling and narration.
44. *Vina damuraka vadya* (वीणादमरुकवाद) – Art of playing the veena and small drums.
45. *Prahelika* (प्रहेलिका) – Art of solving riddles and puzzles.
46. *Durvacaka yoga* (दुर्वचक्योग) – Art of mispronunciation for humor.
47. *Vrihanna ketu* (वृहन्त्रकेतु) – Art of concealing. (लपविण्याची कला)
48. *Balaka kridanaka* (बालकक्रीडनक) – Art of making children's toys.
49. *Vaijayanti shastra* (वैजयन्तीशास्त्र) – Art of preparing magical or alchemical substances.
50. *Khida* (खिदा) – Art of various games and sports.
51. *Karnapatra bhanga* (कर्णपत्रभङ्ग) – Art of making ear ornaments.
52. *Sugandhadiyoga* (सुगन्धादियोग) – Art of using perfumes and aromatics.
53. *Bhushanayojana* (भूषणायोजना) – Art of using jewelry and adornments.
54. *Indrajala* (इन्द्रजाल) – Art of illusion and magic.
55. *Kautukika* (कौतुकिका) – Art of making fun and amusements.

56. Vainayaki vidya (वैनायकीविद्या) – Art of enforcing discipline.
57. Kushalata (कुशलता) – Art of skillfulness in various tasks.
58. Hasta laghavam (हस्तलाघवम्) – Art of sleight of hand. (हातचलाखी)
59. Chitrayoga (चित्रयोग) – Art of making decorations.
60. Malya grathana (माल्यग्रहण) – Art of garland making. (फुलांची आणि पानांची वर्तुळाकार रचना केलेली माळ)
61. Manibandh vidya (मणिबन्धविद्या) – Art of making bracelets.
62. Sharira madhya (शरीरमाध्यम) – Art of beautifying the body.
63. Chitra shala (चित्रशाला) – Art of painting galleries.
64. Vastra rachanam (वस्त्र रचनम्) – Art of designing clothes.



Philosophical System

- Upanishad confine to the discussion of questions that are related to 'true identity'.
- Father-son conversation in Taittiriya Upanishad: Bhargu Varuna conversation on knowledge Brahman
- What is "the reality"?
- Deep Introspection and a single point focus (tapas)
- Goal of life: to be happy, to progress or evolve in life.
- Philosophical system inquire into who I am, what is my source and destination, what are nature of God and Universe, Are there any universal laws to remain happy forever?
- It provides the vision of life and help us to resolve the problems which we face in life
- **Darsana/Schools of Philosophy:** holistic understanding of the world to attain the final goal of life.

Indian Philosophical system (IPS): Development and unique features



- Teaching of Upanishads suggest that attainment of Brahman is the highest goal of life.
- Happiness require Jiva, the Universe/Jagat and the God/Isvara
- Rgveda: mantras to inquiry about functioning of devtas. One of famous sukta about origin of Universe.
- Purusa and Brahman
- Unique features:
 - IPS based on religious thoughts
 - Two generic classes (Vedic and Non vedic)
 - All IPS agrees on certain common parameters (karma/fruit of action, birth death cycle/Samsara, Mukti)
 - ultimate goal of life
 - Every school employ Pramana for establishment of valid knowledge
 - Healthy and respectful culture b/w all schools despite divergent views
 - Debate and interaction between all philosophical schools

IPS (Darsanas)



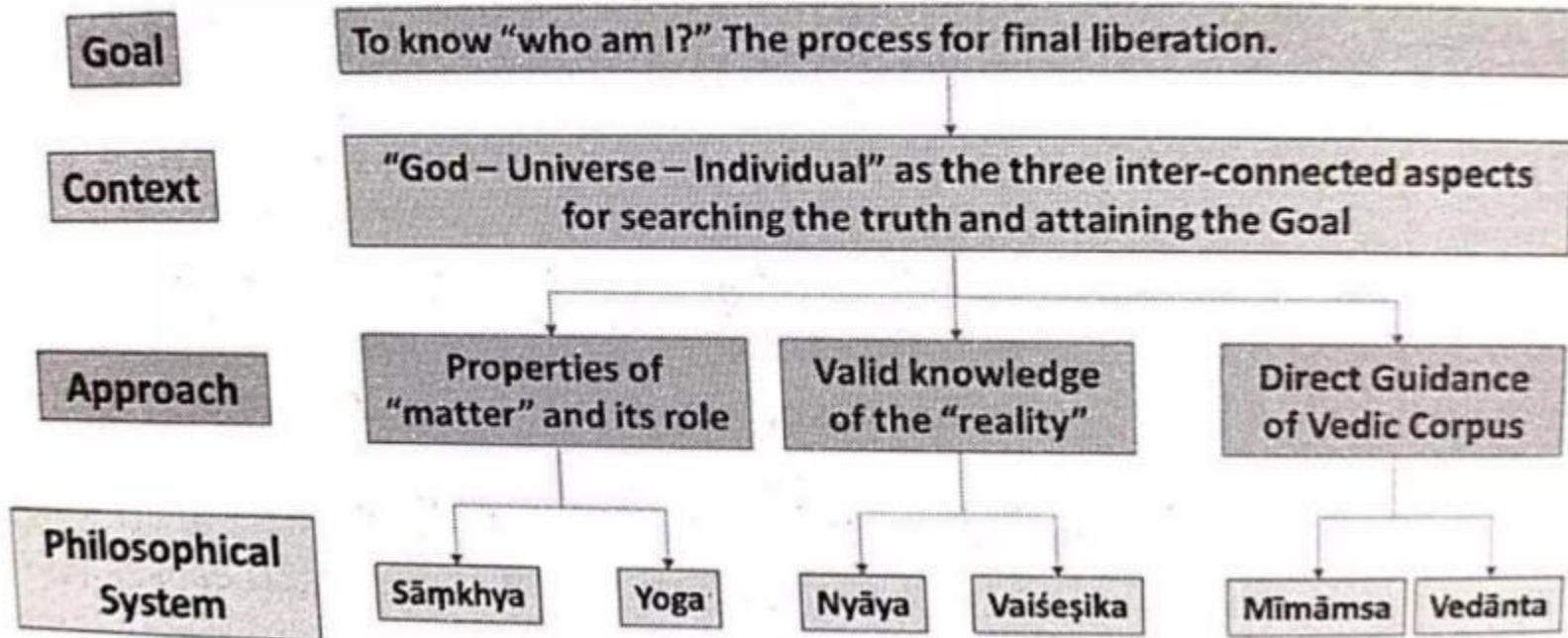
God-Universe-Individual

Classification of Schools in Indian Philosophy

<u>Astika(Orthodox)</u>	<u>Nastika(Heterodox)</u>
Samkhya	Buddhism
Yoga	Jainism
Nyaya	Charvaka
Vaisheshika	
Mimamsa	
Vedanta	

Six Vedic Schools

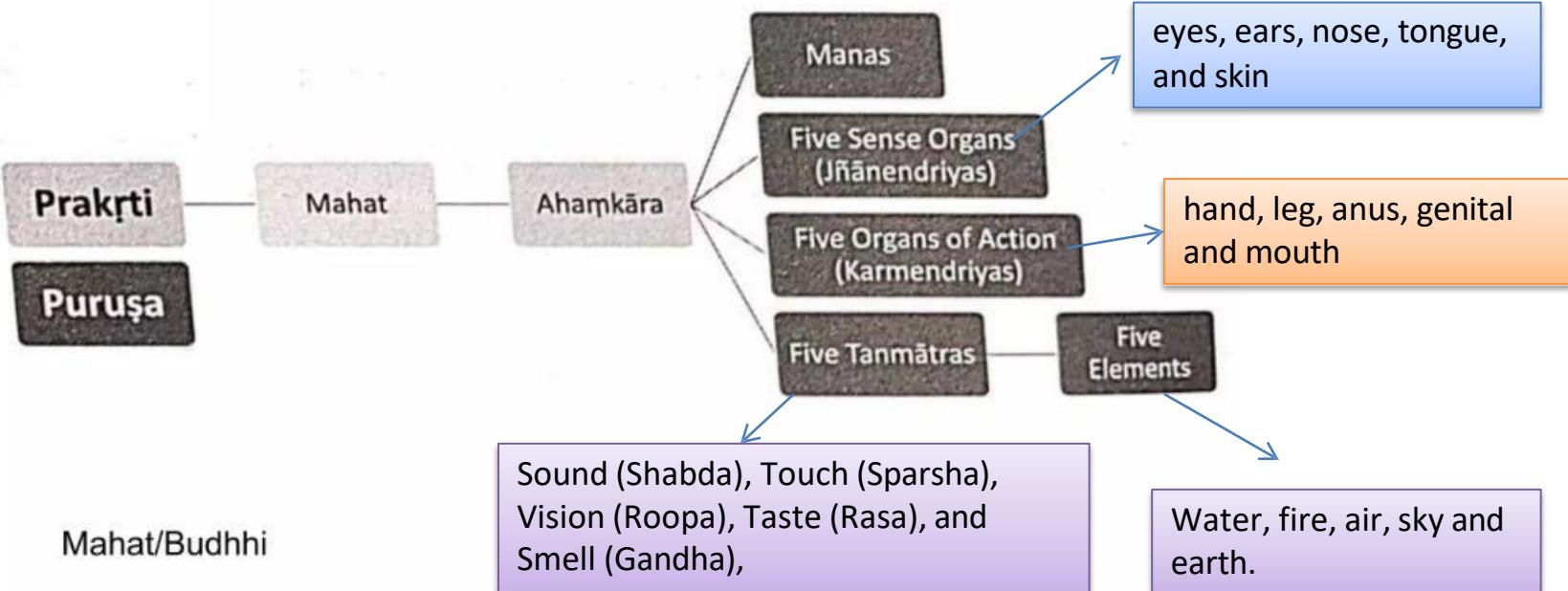
- Some salient features:



Samkhya Darsanas

- Vedic schools acknowledge authority of vedic text while non vedic don't
- Prakrti/matter, source of physical universe, self are subordinates of Purusa/spirit.
- Getting right knowledge of **Purusa and Prakrti**
- Prakrti constitutes tri-gunas (sattva, rajas, tamas) and form relation between Prakrti and purusa.
- Doesn't acknowledge the existence of Isvara
- Emphasis on analysis leading to experimental knowledge

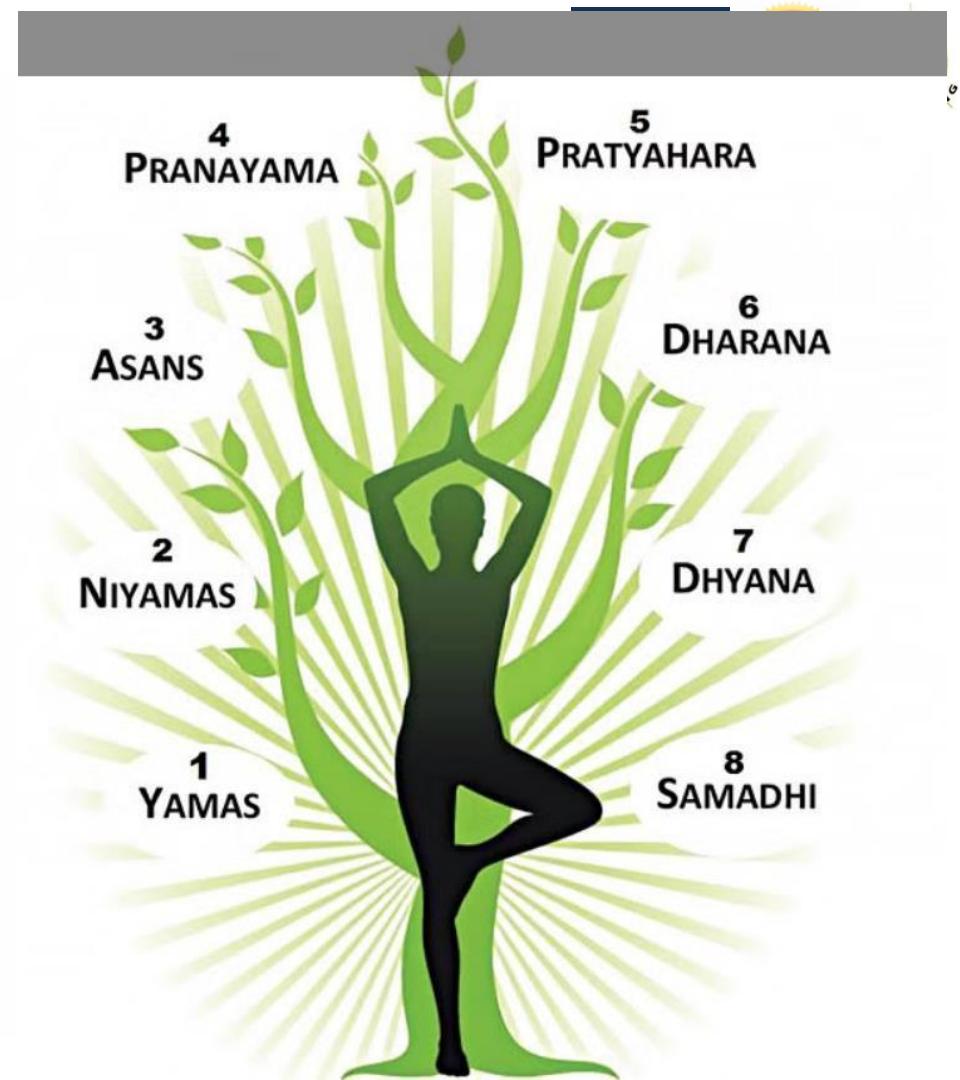
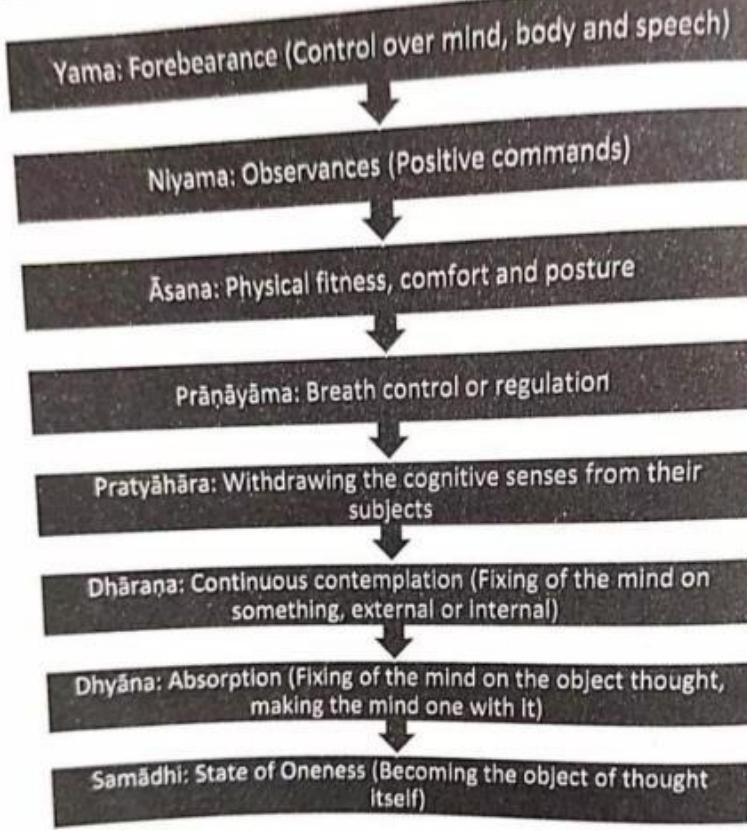
Prakrti and its evolution



Yoga Darsanas

- Yoga acknowledge the existence of supreme powers
- More structured, practical methodology in mind
- Emphasizes on practical step by step approach
- An individual must focus on physical, psychological and moral states of being

Astanga Yoga



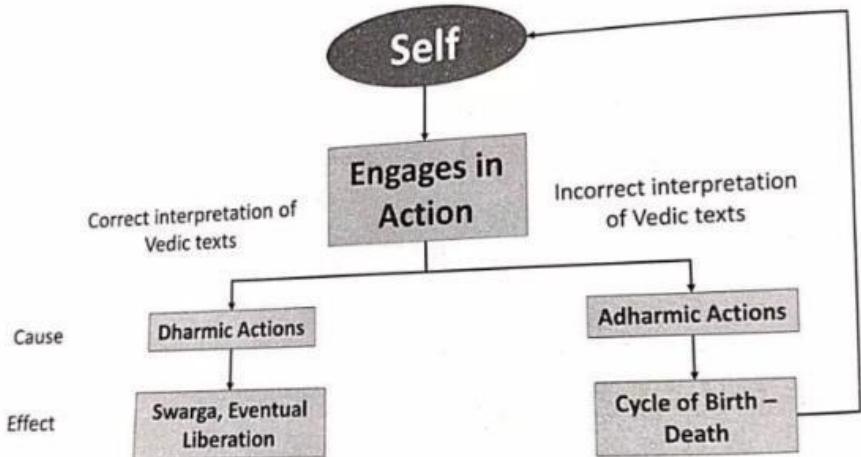
Nyaya and Vaisesika

- Analysis of the experience to understand reality also known as knowable
- The way of knowing the reality: Nyaya
- Objects in the reality that is knowable: Vaisesika
- Nyaya: detail inquiry of knowledge (Prama) and valid cognition and its means (Pramana).
- Goal of self is not to gain pleasure but to liberate from all kind of pains for once n all (he is not body or mind..he is out of illusion)
- Vaisesika: diversity is the fundamental to universe
- Certain categories are there under samanya/jati...able to found supreme good. Eg: cow

Purva-Mimamsa and Vedanta

- To liberate the atma from the cycles of death and birth.
- Purva-Mimamsa: only by engaging in rituals that purify the karma
- Vedanta: total detachment from world activities
- Seek joy and happiness: being dharmic (PM) and Brahman as absolute (V)

Purva Mimamsa (based on karma kanda)



Nyaya	• Logic & analytic philosophy
Vaisheshika	• Few atomic building blocks & consciousness
Mimamsa	• Critical interpretation of the Vedas
Vedanta	• The “essence” of the Vedas
Samkhya	• Consciousness & Matter
Yoga	• Meditation, Contemplation

Non-Vedic Philosophical Systems

- Jaina School of Philosophy
- Bauddha School of Philosophy
- Carvaka School

Jaina School of Philosophy

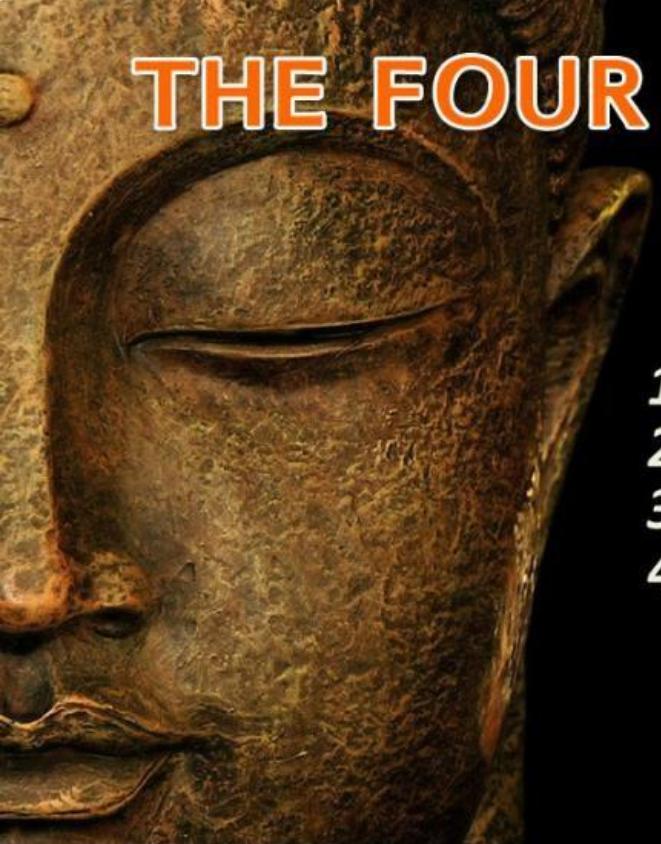


- 24 Tirthankaras (from Vrsabhadeva to Mahavira) as a Prophet of Master of Philosophy
- To educate people to crossover the ocean of re-birth.
- Mahavira considered as last of Tirthankaras
- Details can be found in canonical text of Jainism, based on teaching of Tirthankaras
- Refused to acknowledge the authority of Vedas and notion of supreme God.
- Two sects: Svetambaras and Digambaras (different rituals, practices and organisation)
- Cycle of death-birth is attributed to tiny particle of matter that have embedded into Jiva called Karma.
- In Jainism, spiritual growth is to overcome Karma.
- Ex- wet cloth
- Jiva stuck between karma and passion

Bauddha School of Philosophy

- Based on teaching of Gautama Buddha
- 2 forms of Buddhism: the northern form (Nepal, Tibet, China, Korea, Vietnam) and southern form (Sri Lanka, Cambodia, Myanmar, Thailand)
- Gautama was moved by suffering of life and death.
- Focuses on ending of sufferings of all individuals
- Ultimate goal is to reach Nirvana which is not a state reach after death but in this life only

THE FOUR NOBLE TRUTHS



Buddha's Four Noble Truths:

- 1. Life has inevitable suffering*
- 2. There is a cause to our suffering*
- 3. There is an end to suffering*
- 4. The end to suffering is contained in the eight fold path*

The cycle of suffering

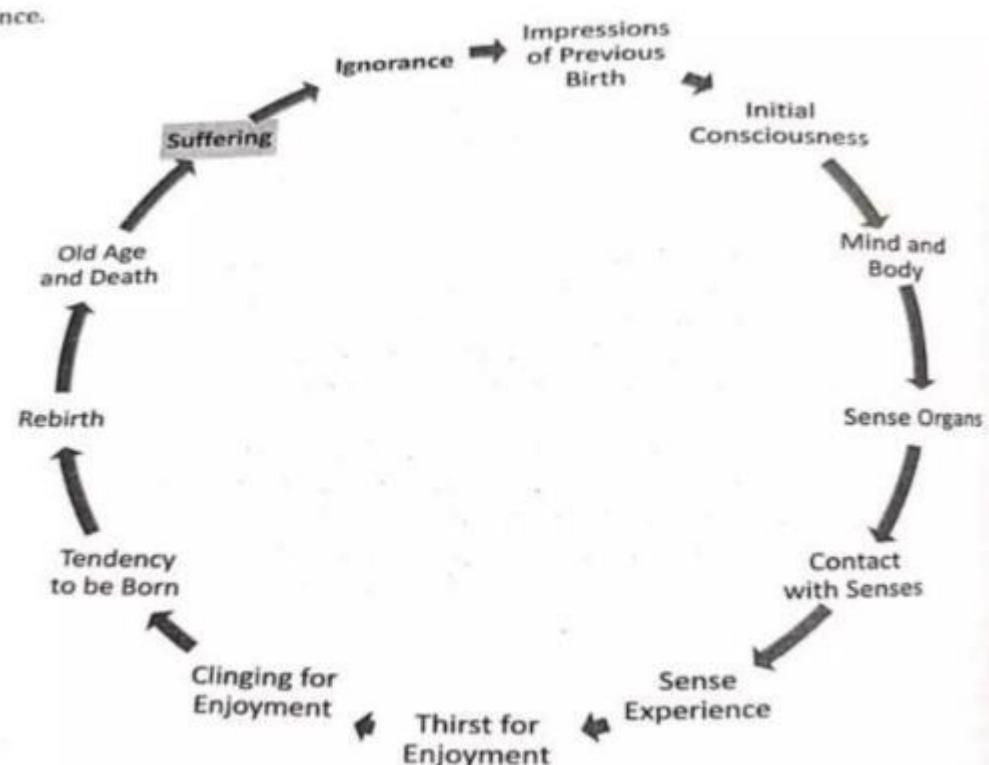


FIGURE 3.7 The Cycle of Suffering

Carvaka School

- No text is available
- Whatever is directive perceptible can only be accepted as valid means of knowledge.
- Reject idea if there is divine/Prakrti
- Nothing like atma
- No re-birth

Indian philosophy encompasses a rich tapestry of diverse schools of thought, each offering unique perspectives on existence, knowledge, and ethics. Among these, the Charvaka school stands out for its materialistic approach and skepticism towards traditional sources of knowledge. In this examination, we delve into the Charvaka philosophy to understand their stance on the valid source of knowledge.

Salient features of Carvaka

The salient features are:

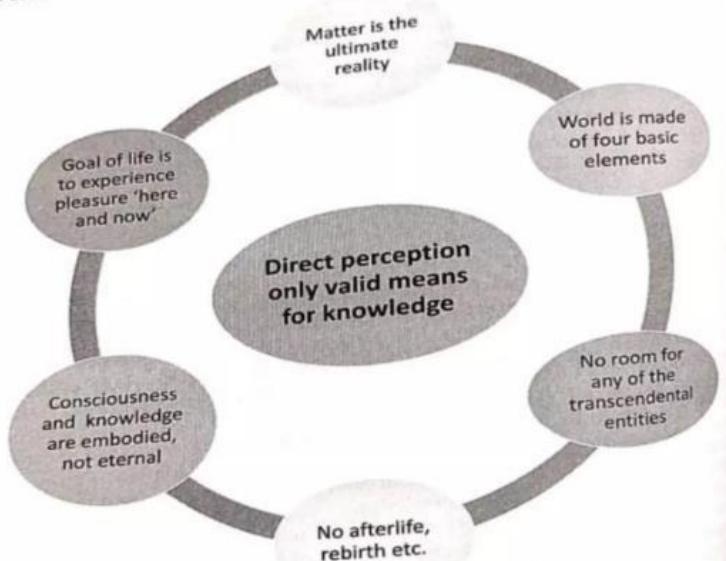


FIGURE 3.8 Salient Features of the Cārvāka School

Wisdom through ages

- Difference between Purānas and Itihāsa as source of wisdom,
- Rāmāyana,
- Mahābhārata,
- Nitiśāstras,
- Subhāssitas.

Debate Topic

Traditional knowledge

- Owned by a wider community
- Traditional knowledge is a dynamic, holistic, and intergenerational system of knowledge. It's passed down through generations and is often rooted in a particular place or ecosystem.

Indigenous knowledge –

- Owned by local groups with a unique culture.
- Indigenous knowledge is a complex way of co-existing with natural ecosystems. It's built and adapted over long periods of time through trial and error.

Debate Topic

Traditional knowledge

- Spiritual and holistic

Western knowledge.

- Materialist and positivist