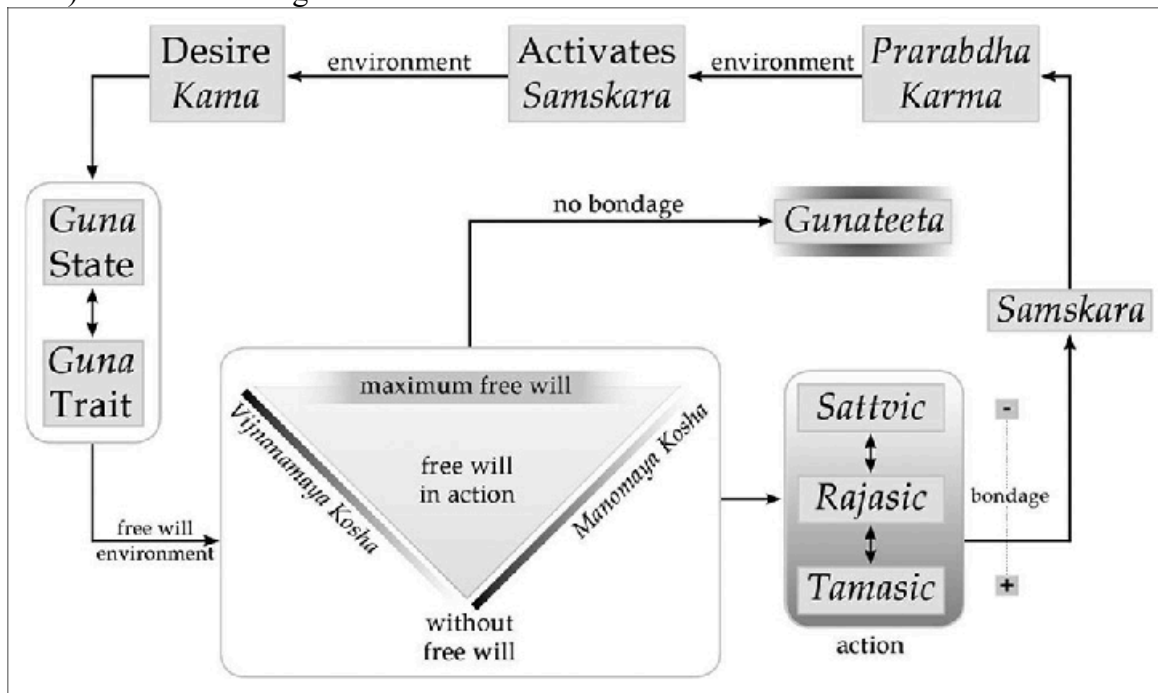


UNIT IV

Yoga and Ayurveda: Tridoṣas, Trigūṇa System, Body-Mind-Intellect-Consciousness Complex, Sixty-four art forms and occupational skills (64 Kalas). Irrigation Systems and Water management Practices Town Planning & Architecture: Indian Architecture in India, Vāstu Śāstra; Eight limbs of Vāstu, Town Planning; Temple Architecture

1) Tridoṣas (Vāta, Pitta, Kapha) — The Functional Principles of the Body Ayurveda models physiology as the interplay of three governing principles (doṣas). Each doṣa is a functional aggregate of elemental qualities (mahābhūtas) rather than a single substance.



1.1 Core Definitions

Vāta: Movement principle (Air + Ether). Governs motion, nerve impulses, circulation, respiration, peristalsis.

Pitta: Transformation principle (Fire + a little Water). Governs metabolism, digestion, thermoregulation, vision, enzymatic and hormonal actions.

Kapha: Cohesion principle (Water + Earth). Governs structure, lubrication, immunity, growth, stability.

1.2 Gunas (Qualities) and Functions

Doṣa	Core Qualities (Gunas)	Primary Sites (classical)	Key Functions
Vāta	Light, Dry, Cold, Mobile, Subtle, Rough	Colon, pelvic region, ears, bones, skin	Movement, nerve signals, respiration, elimination
Pitta	Hot, Sharp, Light, Liquid, Spreading, Slightly Oily	Small intestine, liver, eyes, blood, sweat	Digestion, metabolism, heat, pigmentation, intellect fire
Kapha	Heavy, Slow, Cool, Oily, Smooth, Stable, Slimy	Stomach, chest, head, synovial fluids, fat	Structure, lubrication, immunity, memory stability

Subtypes (e.g., Prāṇa/ Udāna/ Samāna/ Vyāna/ Apāna Vāta; Pachaka/Raṇjaka Pitta; Kledaka/ Avalambaka Kapha) further localize functions.

1.3 Constitution (Prakṛti) and Imbalance (Vikṛti)

- **Prakṛti:** Congenital doṣa ratio shaping physique, temperament, and tendencies (e.g., Vāta-Pitta type).
- **Vikṛti:** Current imbalance due to diet, lifestyle, seasons, age, stress.

Age and season cycles:

- Childhood → Kapha-dominant; Spring tends to increase Kapha.
- Adulthood → Pitta-dominant; Summer increases Pitta.
- Old age → Vāta-dominant; Autumn/Windy seasons increase Vāta.

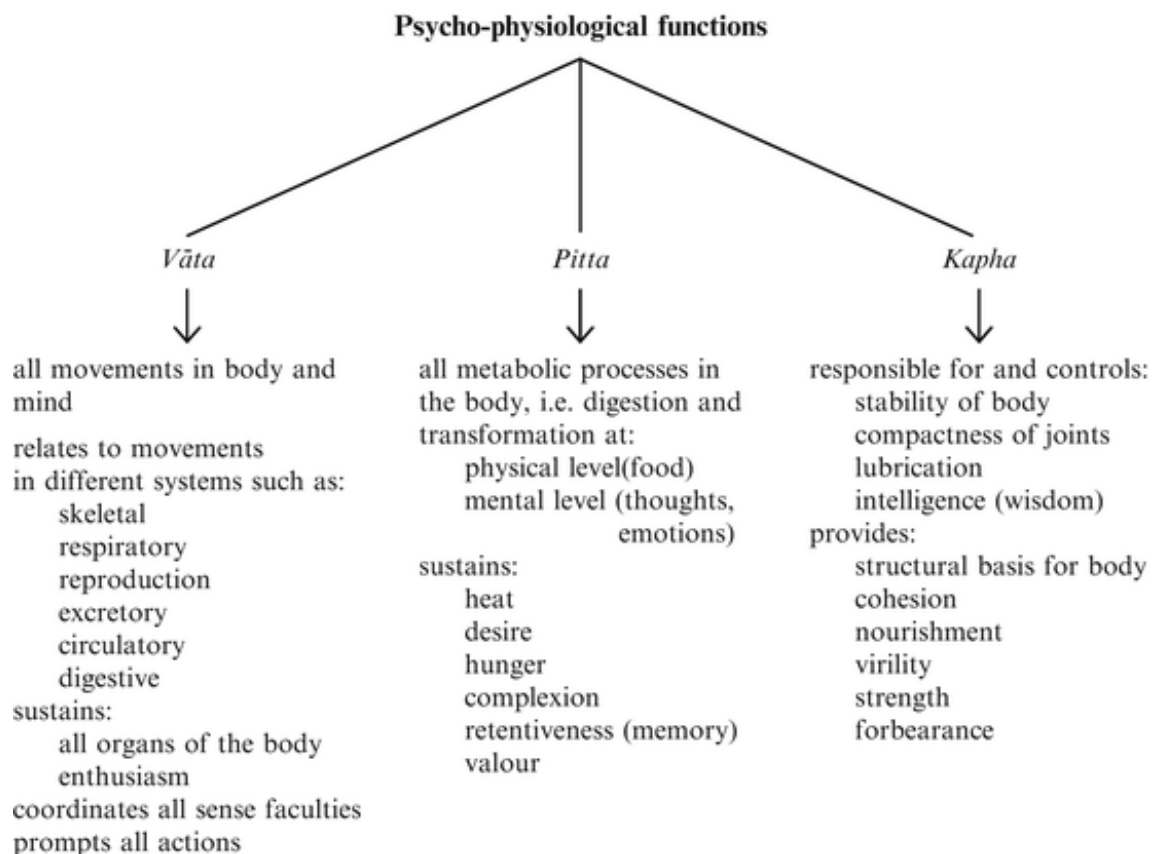
1.4 Signs of Aggravation (for quick recognition)

Doṣa	Aggravation Signs (examples)
Vāta	Anxiety, insomnia, dryness (skin/constipation), cold intolerance, gas
Pitta	Irritability, acidity/heartburn, heat, redness, inflammation, loose stools
Kapha	Lethargy, heaviness, edema, congestion, sluggish digestion, weight gain

1.5 Balancing Strategies (General Guidelines)

- Vāta down-regulation: Warm, moist, grounding meals (soups, stews), regular routine, gentle oil massage (abhyanga), calming breath (extended exhale), adequate sleep, reduce stimulants and excessive travel.
- Pitta down-regulation: Cooling foods (bitters, sweet fruits), avoid alcohol/excess spice, cooling pranayama (śītalī), time in nature/water, cultivate patience/non-competitive activity.
- Kapha down-regulation: Light, warm, pungent foods, vigorous movement, sweating practices, reduce sugars/dairy, stimulating breath (kapālabhātī) if appropriate.

Support pillars: Agni (digestive fire), Dhātu (tissues), Mala (wastes), Ojas (vital resilience), Srotas (channels). Many interventions aim to optimize Agni and clear Srotas.



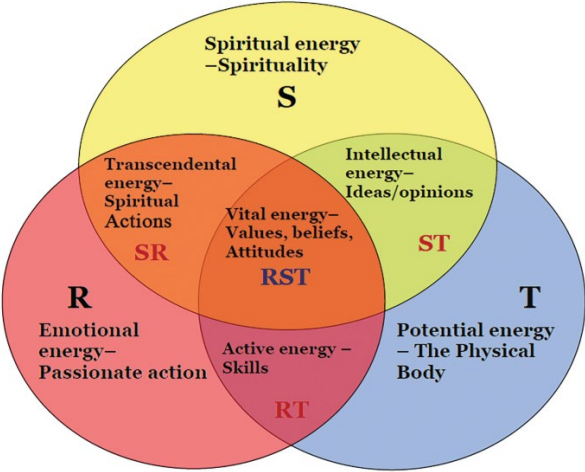
2) Triṣaṇḍa System (Sattva, Rajas, Tamas) — The Qualities of the Mind

In Sāṃkhya/Yoga philosophy, mental states are governed by three guṇas.

2.1 Definitions and Mental Phenomenology

- Sattva (clarity, harmony, light): Calm, compassion, discernment, contentment, joy.
- Rajas (activity, passion, restlessness): Desire, ambition, agitation, outward movement.

- Tamas (inertia, obscurity, heaviness): Lethargy, confusion, resistance, apathy.
- All three are always present; the relative dominance shapes behavior and perception.



2.2 Influencers of Guṇa Balance

Factor	Sattva ↑	Rajas ↑	Tamas ↑
Diet	Fresh, seasonal, balanced, light, non-irritant	Very spicy, caffeinated, stimulating	Stale, heavy, processed, alcohol excess
Lifestyle	Regularity, moderation, service, nature time	Overwork, competition, irregular schedules	Oversleeping, inactivity
Media/Inputs	Uplifting, contemplative	Sensational, fast-paced	Depressing/violent or numbing content
Practices	Meditation, gratitude, ethics (yamas-niyamas)	Intense goal-pursuit without reflection	Avoidance, escapism

2.3 Practical Cultivation

- To increase Sattva: Meditation, mindful breath, study (svādhyāya), kindness, clean diet, orderliness, satsang (good company).
- To moderate Rajas: Periodic digital fasts, set limits on stimulants, cultivate patience and non-attachment to outcomes.
- To reduce Tamas: Morning light exposure, rhythmic exercise, decluttering, timely sleep, energizing pranayama.

Interaction with Doṣas:

- Vāta ↔ Rajas (mobility) and sometimes Tamas (fear → freeze).
- Pitta ↔ Rajas (drive, intensity).
- Kapha ↔ Tamas (inertia) and Sattva (stability when balanced).

3) Body–Mind–Intellect–Consciousness (BMI–C) Complex

A Vedāntic/Yogic integrative model linking the layers of human experience. Useful for understanding how physical, emotional, cognitive, and spiritual dimensions interact.

3.1 Components and Roles

- Body (Śarīra): The physical instrument; senses and action organs; subject to growth, disease, aging.
- Mind (Manas): Emotive, sensory processing, likes/dislikes, imagination; rapid, associative, often reactive.
- Intellect (Buddhi): Discrimination, reasoning, decision, values, long-term planning; the “inner governor.”

- Consciousness (Ātman/Puruṣa): The witnessing awareness; unchanging, luminous “knower.” In Yoga, realized as pure awareness distinct from mind-matter.
- Helpful cross-mapping (optional classical lens):
- Panchakośa (five sheaths): Annamaya (body), Prāṇamaya (vital energy), Manomaya (mind), Vijñānamaya (intellect), Ānandamaya (bliss); Consciousness illumines all sheaths.

3.2 Interactions and Flow

- Inputs: Sense data reach Mind → evaluated by Intellect → actions via Body.
- Feedback: Body state (sleep, nutrition, hormones) shapes Mind clarity; Mind state biases Intellect; Intellect can re-train Mind/Body habits.
- Consciousness: The background in which BMI changes are observed; practices aim to stabilize attention in/with that witnessing presence.

3.3 Practical Development

- Body: Nutrition aligned to doṣa, exercise/asana, sleep hygiene, breath regulation.
- Mind: Emotional literacy, journaling, metta (loving-kindness), appropriate therapy/coaching when needed.
- Intellect: Study, critical thinking, ethical reflection, value clarification, purposeful goals.
- Consciousness: Meditation, self-inquiry (ātma-vicāra, “Who am I?”), contemplative prayer, silence retreats.

Outcomes:

- Greater Sattva supports clear Buddhi; clear Buddhi guides Rajas constructively; reduced Tamas lessens inertia and reactivity.

4) Integrated View: How the Three Frameworks Co-relate

- Doṣas describe physiological tendencies and somatic expressions;
- Guṇas describe mental-emotional tone;
- BMI–C describes functional architecture.

Examples:

- Vāta aggravation may correlate with rajasik restlessness (anxiety) or tamasik freeze (overwhelm); stabilizing Body (warmth, oilation) quiets Mind, enabling Intellect to choose wisely.
- Pitta excess often pairs with rajasik intensity (anger/perfectionism); cooling Body and cultivating compassion modulates Mind, refining Buddhi.
- Kapha excess parallels tamasik inertia; lightening routines and energizing practice lift Mind and sharpen Intellect.

Therapeutic logic (Ayurveda + Yoga):

Clear channels (srotas) + steady Agni → better tissue nutrition (dhātu) → resilient Body → calmer Mind → sharper Intellect → easier access to Sattvic states and contemplative insight.

5) Diagnostics and Assessment (Study Pointers)

- Doṣa assessment: Pulse, tongue, stool, skin, appetite, sleep, emotional tone, history (classically via an Ayurvedic clinician).
- Guṇa assessment: Journaling mood/energy/clarity; content of thoughts; media/diet/lifestyle audit.
- BMI reflection:
 - Body: What physical patterns dominate (pain, energy, digestion)?
 - Mind: What recurring emotions and stories appear?
 - Intellect: Are decisions value-aligned or impulse-driven?
 - Consciousness: Is there awareness of awareness? Capacity to witness states?

Ethical caution: Use these models as reflective tools; medical conditions require professional care.

6) Sample Study Tables

6.1 Quick Balancing Matrix

State	Typical Clues	First-Line Supports
High Vāta/Rajas	Anxiety, dryness, irregularity	Warmth, routine, oilation, slow exhale, grounding meals
High Pitta/Rajas	Irritability, heat, competitiveness	Cooling foods/practices, time-off, compassion, moonlight walks
High Kapha/Tamas	Lethargy, heaviness, congestion	Light spicy meals, vigorous movement, morning sunlight
Sattva-building	Clarity, calm courage, kindness	Meditation, service, clean diet, nature, gratitude

6.2 Doṣa–Guṇa Tendencies (not absolute)

Doṣa (balanced)	Guṇa tilt when imbalanced	Virtue when balanced
Vāta	Rajas (restless), Tamas (scattered)	Creativity, adaptability
Pitta	Rajas (anger, judgment)	Discernment, leadership
Kapha	Tamas (inertia, attachment)	Stability, empathy, memory

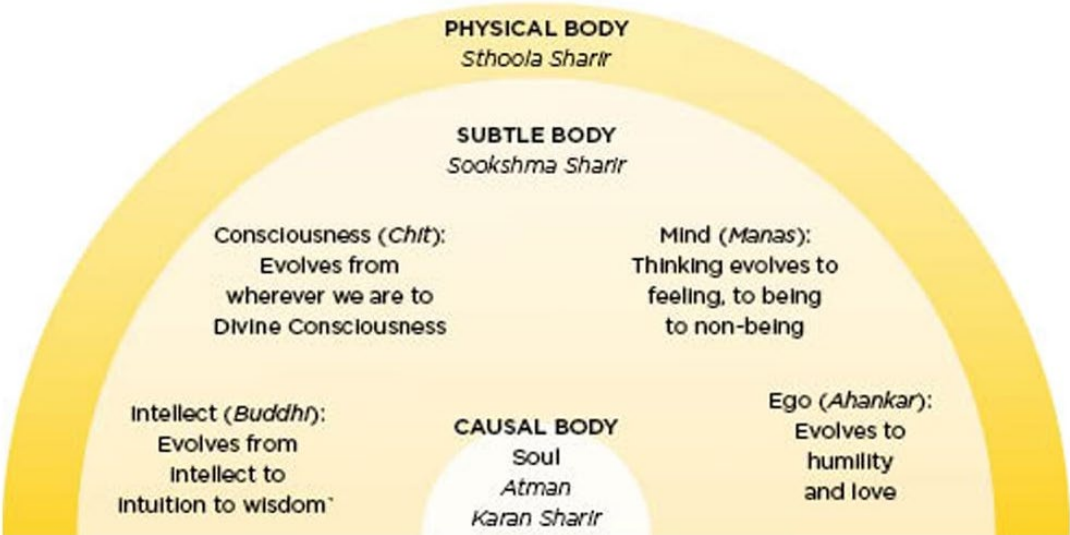
7) Practices and Routines (Dinacharya/Ritucharya highlights)

Daily (Dinacharya):

- Wake near sunrise; tongue cleaning; gentle oil pulling; abhyanga (type-specific oil); movement/asana; breath practice; meditation; main meal midday (strongest Agni); digital sunset (reduce screens at night).

Seasonal (Ritucharya):

- Spring: Kapha-reducing (lighter, spicier diet, more movement).
- Summer: Pitta-reducing (cooling foods, avoid midday heat).
- Autumn/Winter: Vāta-reducing (warmth, oils, soups, regularity).



Exam Tips and Short Answers

- ✓ Define Tridoṣa: Three functional bio-regulators—Vāta (movement), Pitta (transformation), Kapha (cohesion)—whose balance sustains health.
- ✓ Define Trigūṇa: Sattva, Rajas, Tamas—three qualities of nature shaping mental states and behavior.
- ✓ BMI–C: Body executes; Mind emotes and processes; Intellect discriminates; Consciousness is the witnessing awareness.

- ✓ Link doṣas and guṇas: Doṣas are somatic-functional; guṇas are psycho-qualitative; both co-vary but are distinct lenses.
- ✓ Two ways to build Sattva: Meditation and selfless service (seva); also clean diet and truthful speech (satya).

9) Suggested Diagrams to Sketch

- Tridoṣa triangle annotated with qualities and sites.
- Triguna spectrum (Tamas ↔ Rajas ↔ Sattva) with lifestyle levers.
- BMI–C flow: Senses → Mind → Intellect → Action; Consciousness as the witness behind all.
- Agni at the center with srotas pathways feeding dhātus.

10) Further Reading (Classical/Introductory)

- Charaka Saṃhitā and Suśruta Saṃhitā (Ayurveda classics)
- Ashtāṅga Hṛdaya (concise clinical Ayurveda)
- Sāṃkhya Kārikā (Triguna metaphysics)
- Bhagavad Gītā (chapters 14, 17 on guṇas)
- Tattvabodha/Upaniṣads (BMI and Ātman concepts)

The “64 Kalas” are a classical Indian list of sixty-four arts and skills that a cultured person was ideally expected to know, ranging from fine arts like music and dance to practical crafts, social skills, and even technical sciences.

Meaning and context

In Sanskrit, *kalā* means an art, skill, or branch of accomplishment, and the 64 Kalas form a holistic curriculum of life skills described in texts such as the Kama Sutra and later traditional lists. Tradition often associates mastery of all 64 arts with figures like Krishna, symbolizing complete refinement of mind, body, and social conduct.

Main types of arts

The list mixes performative arts, crafts, and intellectual skills, for example:

- Performing arts: singing (*gīta vidyā*), playing musical instruments (*vādyā vidyā*), dancing (*nṛtya vidyā*), drama and theater (*nāṭya vidyā*).
- Visual and decorative arts: painting, body decoration, flower arrangement, bed and garment decoration, and ornament design.
- Domestic and craft skills: cooking, preparing drinks, sewing and weaving, carpentry, jewelry work, metallurgy, and architecture or engineering (*vāstu vidyā*).

Social and intellectual skills

The Kalas also cover subtle social and mental abilities.

- Language and expression: conversation, composing poetry mentally, solving riddles and enigmas, and familiarity with regional dialects.
- Games and amusements: gambling, dice play, children’s toys, and various clever games of hands and objects.
- Knowledge and sciences: testing metals and gems, herbal knowledge, mechanics (*yantra*), and aspects of prognostication and symbolic interpretation.

Which ancient texts mention the 64 Kalas

Several important Sanskrit works mention or list the 64 Kalas, especially within the broader tradition of *kāmaśāstra* and allied literature.

Core textual sources

- Kama Sutra of Vatsyayana: Gives the most famous list of 64 Kalas as accomplishments expected of a refined man and woman.
- Devi Bhagavata Purana: Refers to the sixty-four Kalas in the context of divine qualities and education, linking them to Hindu religious thought.

Other classical references

- Shilpashastra texts (artistic/architectural treatises): Use the concept of Kalas when discussing arts and crafts, including architecture and mechanical arts.
- Later literary and commentarial works:
 - Bāṇabhaṭṭa's Sanskrit novel *Kādambari* includes a 64-Kalas list or references for cultured characters.
 - Yasodhara's *Jayamaṅgalā* (13th-century commentary on the Kama Sutra) expands the idea, even mentioning much larger enumerations such as 512 Kalas while preserving 64 as the canonical number.

Scriptural and devotional links

- Lalita Sahasranama and related traditions: Invoke the Goddess (Lalita/Tripurasundari, Sarasvati) as embodying or possessing the 64 Kalas, embedding the concept into devotional literature.
- Itihasa and Krishna-traditions: Retellings related to the *Mahabharata* and Puranic narratives describe Krishna learning all 64 Kalas in the āshrama of Guru Sandipani, reinforcing their status in the education ideal.

Which manuscripts or commentaries preserve those lists

Several specific manuscripts and traditional commentaries preserve explicit lists of the 64 Kalas, especially around the Kama Sutra and related kāmashāstra material.

Kama Sutra tradition

- Vātsyāyana's Kama Sutra: The primary list is preserved in Sanskrit manuscripts of the Kama Sutra, usually in the early *Adhyāyas* on education and accomplishments (often Book 1).
- Yashodhara's Jayamaṅgalā commentary: A major medieval commentary on the Kama Sutra that transmits, glosses, and occasionally expands the 64-Kalas list; most printed critical editions of the Kama Sutra rely on Kama Sutra + Jayamaṅgalā manuscript traditions.

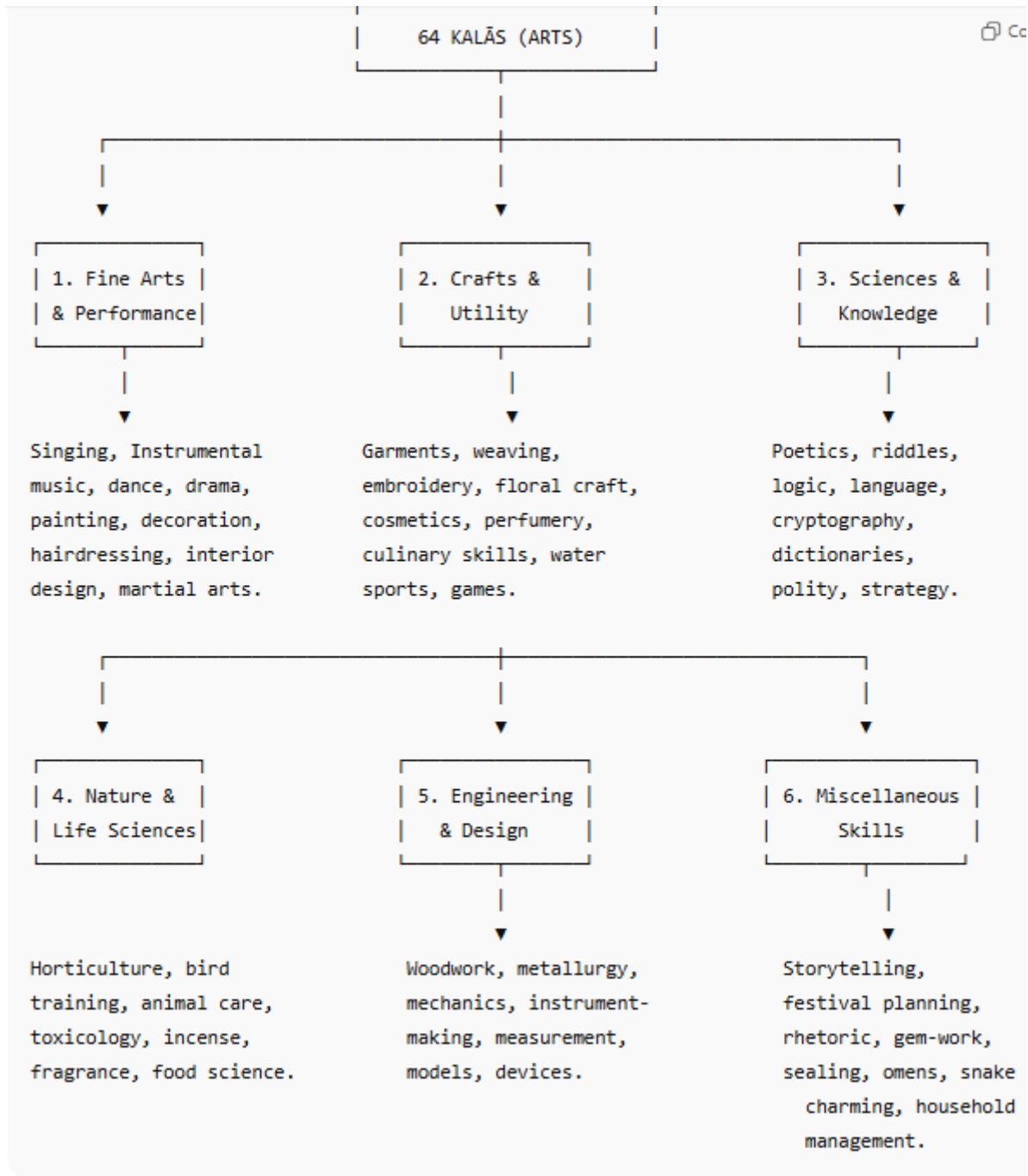
Puranic and narrative sources

- Devi-Bhāgavata Purāṇa manuscripts: Certain recensions include references to the 64 Kalas as divine or educational accomplishments; these are preserved in standard Purāṇa manuscript lines and modern critical printings.
- Bhāgavata- and Krishna-lore manuscripts: Narrative manuscripts and their traditional commentaries that describe Krishna studying all 64 Kalas under Sandipani (often in regional Sanskrit or vernacular Krishna-Purāṇas) preserve shorter or allusive lists.

Later scholastic and encyclopedic works

- Shilpaśāstra and arts treatises: Some manuscripts of कला / शिल्पा compendia adopt or paraphrase the 64-Kalas sequence within broader classifications of arts and crafts, so their critical editions indirectly preserve variant lists.
- Traditional nighaṇṭu / kośa and educational manuals: A few later lexicographical or educational handbooks (for example, regional pañjikās and vidyā-saṅgrahas) copy the 64-Kalas headings, and these survive both as palm-leaf manuscripts and as modern printed digests.

For precise line-by-line lists, scholars usually consult critical editions of the Kama Sutra with Jayamaṅgalā and specialized studies such as Anil Baran Ganguly's "Sixty-four arts in ancient India," which collates readings from multiple manuscript families.



Fine Arts & Performance (1–10)

- Singing (Gīta)
- Instrumental music (Vādyā)
- Dance (Nṛtya)
- Drama (Nāṭya)
- Painting (Ālekhya)
- Body decoration, hairstyling, ornament design
- Martial arts
- Interior décor (śayyā-racana)

2. Crafts & Utility Skills (11–20)

- Weaving, sewing, knot-making
- Floristry, garland making
- Cosmetics, dyes, perfumery
- Culinary arts, sweets
- Water sports, games

3. Literary, Linguistic & Intellectual Arts (21–30)

- Encyclopedic knowledge
- Solving poetic puzzles
- Recitation
- Ethics, polity, strategy
- Architecture
- Mechanics, metallurgy
- Cryptography
- Regional languages

4. Nature & Life Sciences (31–40)

- Vṛkṣāyurveda (plants)
- Animal training (birds, elephants)
- Toxicology
- Perfumery

Culinary sciences

5. Engineering, Craftsmanship & Design (41–50)

Model making

Goldsmithing, gem polishing

Woodcraft

Musical instrument making

Measurement sciences

Textile work

6. Miscellaneous Skilled Arts (51–64)

Umbrella/canopy making

Leatherwork

Chariot construction

Storytelling

Riddles and rhetoric

Festival management

Snake charming

Household harmonization

1. INTRODUCTION TO INDIAN ARCHITECTURE

1.1 Definition

Indian architecture refers to the scientific, aesthetic, and culturally embedded structural practices evolved in the Indian subcontinent from the Indus Valley Civilization to contemporary times.

1.2 Features

- Unity of **function + form + philosophy**.
- Strong influence of **cosmology, geometry, and symbolism**.
- Use of locally available materials (stone, wood, bricks).
- Focus on **climate-responsive design**.
- Integration of **religion, art, astronomy, mathematics, and metaphysics**.
- Continuity across time—Harappan, Vedic, Buddhist, Jain, Hindu, Indo-Islamic, Modern Indian.

Period	Key Features
Indus Valley (2600–1900 BCE)	Grid-planned cities, drainage systems, standardized bricks.
Vedic Age	Early forms of Vāstu, sacrificial altars (Śulbasūtras geometry).
Mauryan Age	Stone architecture, pillars, chaitya-halls.
Gupta Age	Beginnings of classical temple architecture.
Medieval Period	Nagara, Drāviḍa, Vesara temples flourish; forts and palaces.
Indo-Islamic	Arches, domes, minarets, Persian influences.
Modern India	Indo-Saracenic, colonial, and contemporary architecture.

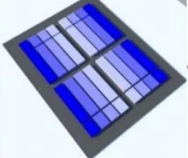


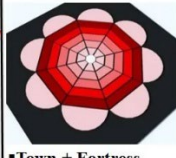
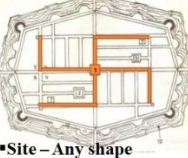
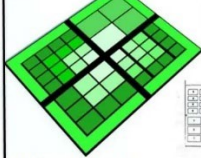


2. VĀSTU ŚĀSTRA

2.1 Definition

Vāstu Śāstra is the traditional Indian science of architecture and spatial design aligning human dwellings with:

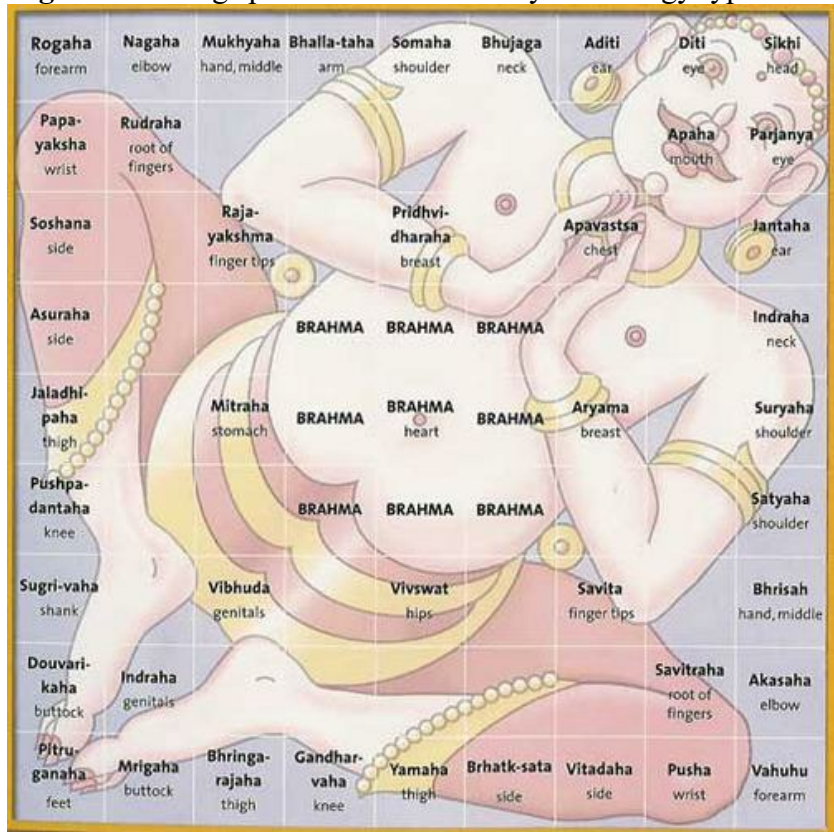
- **Pañca Mahābhūta** (Earth, Water, Fire, Air, Space)
- **Dikpālas** (Guardians of 10 directions)
- **Cosmic grid (Vāstu Purusha Maṇḍala)**
- **Energy flow (Prāṇa)**

It integrates **science, art, astronomy, geometry, ecology, and spirituality**.

DANDAKA  <ul style="list-style-type: none">▪ Small Village – Square + Rectangular.▪ Gates On all sides.	SARVATHOBADRA  <ul style="list-style-type: none">▪ Large Village & Town.▪ Square Site.▪ Temple is in centre.	NANDYAVARTA  <ul style="list-style-type: none">▪ No Village Only TOWN.▪ Circular/ Square Site.▪ Temple is in centre.▪ Nandyavarta - Flower	PADMAKA  <ul style="list-style-type: none">▪ Town + Fortress around▪ Plan – Lotus Petals▪ Island + MOAT
SWASTIKA  <ul style="list-style-type: none">▪ Site – Any shape▪ Diagonal Streets▪ Rampart Wall + MOAT▪ Inspiration Swastika▪ Temple – Centre	PRASTARA  <ul style="list-style-type: none">▪ Site – Either Square or Rectangle▪ Segregation for Rich And Poor	KARMUKA  <ul style="list-style-type: none">▪ Site – Semi Circular+ Parabolic + At River Bank+ Bow Shaped▪ Streets At Right Angle▪ Forming Various Blocks	CHATURMUKHA  <ul style="list-style-type: none">▪ Largest Town to Smallest Village▪ Site – Square + Rectangle▪ Temple – Centre

2.2 Core Principles of Vāstu

- 1. **Orientation** — optimal alignment with cardinal directions.
- 2. **Vāstu Purusha Maṇḍala** — a geometrical plan of energy zones (8×8 or 10×10 grids).
- 3. **Energy balancing** — balancing natural forces and spaces.
- 4. **Proportion systems** — Māna, Āyatana, Tala-māna systems.
- 5. **Site selection** — soil testing, slope, shape.
- 6. **Environment integration** — sunlight, wind, topography.
- 7. **Functional zoning** — allocating spaces based on activity and energy type.



3. EIGHT LIMBS (AṢṬĀṄGA) OF VĀSTU ŚĀSTRA

The *Mayamata* and *Mānasāra* texts describe **8 fundamental limbs** of architecture:

Limb (Aṅga)	Meaning	Scope
1. Sthāpatya	Architecture	Planning towns, buildings, temples.
2. Vāstu	Site selection	Land analysis, soil quality, topography.
3. Prāsāda	Building science	Dimensions, materials, load, openings.
4. Yāna	Vehicles/chariots	Design of mobile structures.
5. Śayana	Furniture & bedding	Ergonomic spatial utilities.
6. Asana	Seating objects	Thrones, seats, platforms.
7. Ayudha	Weapons	Design of protective structures.
8. Ābharāṇa	Decoration & ornamentation	Aesthetics, carvings, color, sculpture.

These constitute the holistic field of **Sthapatya-Veda** — architecture as a complete life system.

The eight aspects of the Vastu construction process

- **Yajamana (Host/Owner):** The person for whom the construction is being undertaken.
- **Architecture:** The design and structural planning of the building.

- **Shilpi (Technicians):** The skilled craftspeople who execute the plan, which can include the Sthapati (master architect), Sutragrahi (draftsman), and Takshaka (carver).
- **Bhumi (Land):** The selection and preparation of the land for construction.
- **Vastoshpati (Offerings):** The rituals and ceremonies performed during the construction process, such as the Vastu Puja.
- **Pada Vinyasa (Site Layout):** The process of designing the site layout based on the Vastu Purusha Mandala grid.
- **Vastu (Materials):** The selection, processing, and use of appropriate building materials.
- **Alankarana (Decorations):** The interior and exterior decoration, finishing, and renovations.

The eight cardinal directions

North (Uttara), East (Purva), West (Paschim), South (Dakshin), Northeast (Ishanya), Southwest (Nairutya), Southeast (Agneya), and Northwest (Wayavya).

4. TOWN PLANNING IN ANCIENT INDIA

4.1 Harappan (Indus Valley) Town Planning

- Earliest scientific urban planning.
- **Grid layout** — streets intersect at right angles.
- **Zoning** — citadel (administrative) + lower town (residential).
- **Drainage** — covered sewage system; soak pits.
- **Granaries, public baths, dockyards** (Lothal).
- Emphasis on **hygiene, uniformity, and public utilities**.

4.2 Vedic and Post-Vedic Towns

- Based on **Vāstu Purusha Maṇḍala** patterns.
- Settlements classified as:
 - *Durgas* (fortified towns)
 - *Pura, Pattana* (cities)
 - *Nagara* (urban)
 - *Grāma* (village)
- Streets aligned with **cardinal directions**.

4.3 Mauryan–Gupta Period

- Palaces (Pataliputra), monasteries (viharas).
- Town planning with gardens, water reservoirs, protective walls.

4.4 Medieval India

- Temple-centric towns (Kanchipuram, Madurai).
- Fortified cities (Jaipur planned on Śilpa Śāstra principles: 9×9 grid).

4.5 Principles of Traditional Indian Town Planning

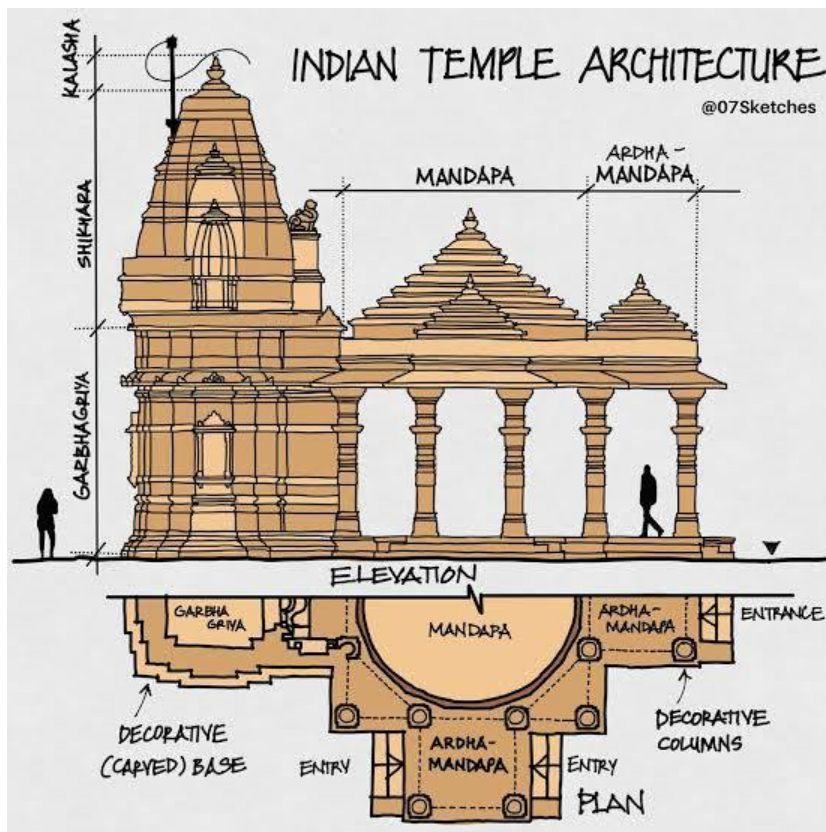
1. **Maṇḍala concept** for city layout.
2. **Centrality** of temple or palace.
3. **Functional zoning** (markets, crafts areas, residential clusters).
4. **Water management** — tanks, stepwells, channels.
5. **Defensive structures** — walls, moats, gateways.
6. **Ecological harmony** — orientation for wind, shade, and climate.

5. TEMPLE ARCHITECTURE OF INDIA

Indian temple design evolved from simple shrines to complex monumental structures.

5.1 Fundamental Components

- **Garbhagṛha** — sanctum; seat of deity.
- **Śikhara/Vimana** — superstructure above sanctum.
- **Antarāla** — vestibule.
- **Maṇḍapa** — pillared hall.
- **Prākara** — enclosures.
- **Gopurams** — gateway towers (South India).
- **Mahadvara** — main entrance.
- **Pradakṣiṇā patha** — circumambulatory path.
- **Kūṭa, śālā, chala motifs** — roof typologies.



6. THREE MAJOR STYLES OF TEMPLE ARCHITECTURE

6.1 Nāgara Style (North India)

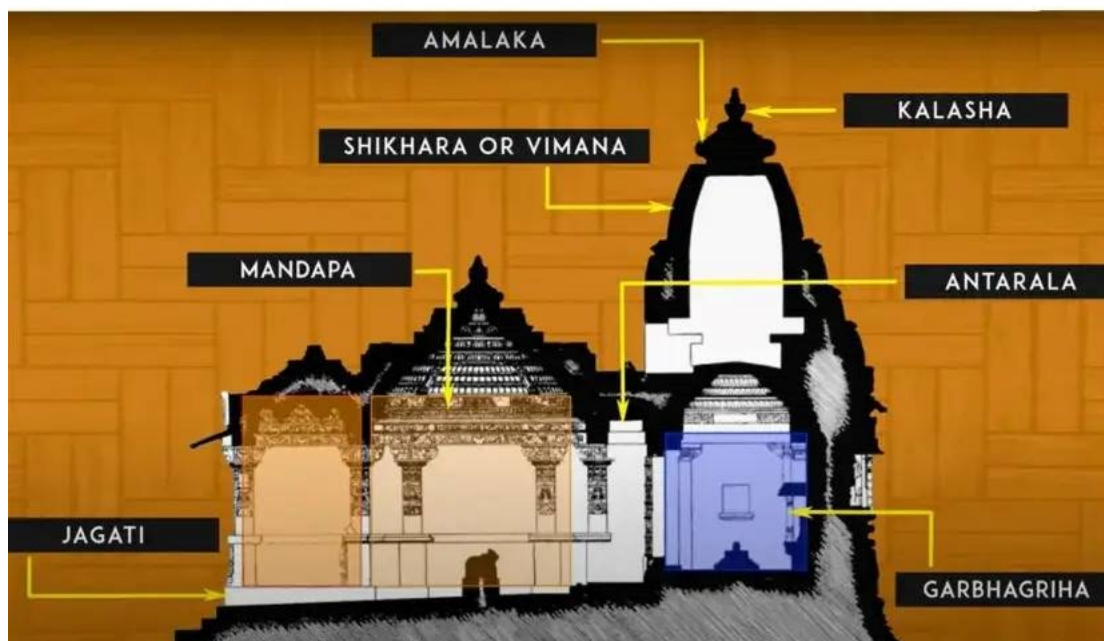
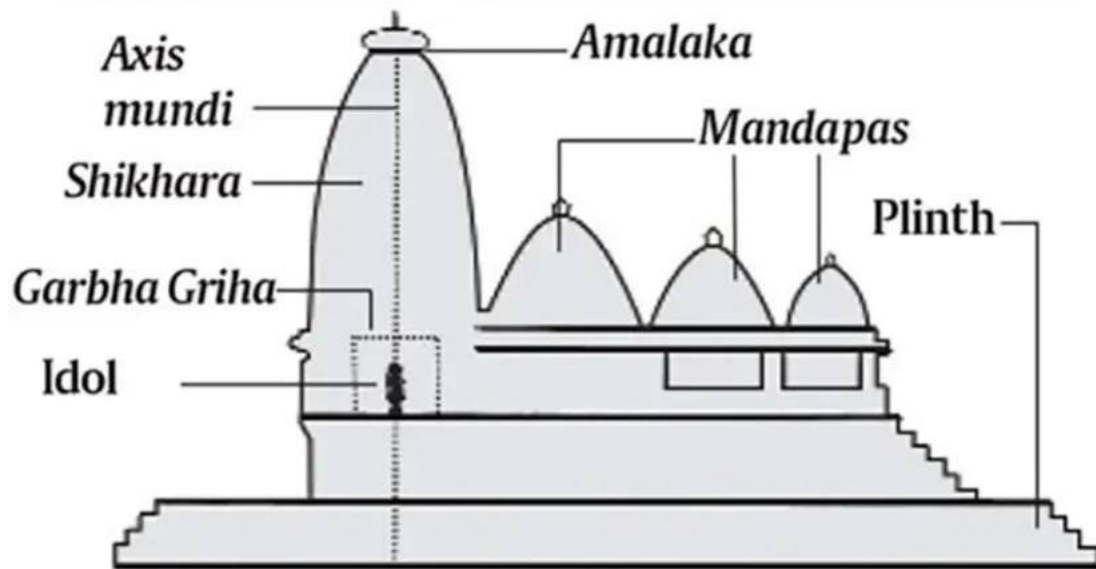
Characteristics

- Curvilinear śikhara (tower).
- No boundary walls in early forms.
- *Amalaka* (ribbed stone disk) and *kalasha* on top.
- Multiple *mandapas* arranged in axial sequence.

Sub-schools

1. **Nagara (General)** — e.g., Khajuraho temples (Madhya Pradesh).
2. **Odishan (Kalinga)** — Rekha Deula/Vimana (Lingaraja).
3. **Solanki/Maru-Gurjara** — intricately carved temples (Modhera Sun Temple).

BASICS OF THE NAGARA STYLE



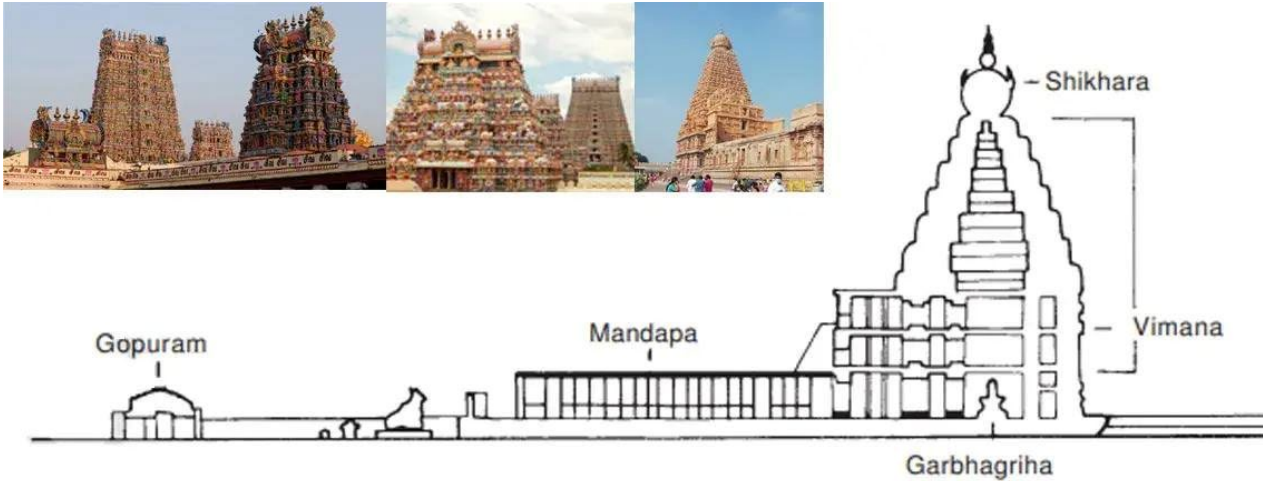
6.2 Drāviḍa Style (South India)

Characteristics

- **Pyramidal vimana.**
- Massive **gopurams** (gateway towers).
- Granite construction.
- Large temple complexes.

Examples

- Brihadeeswara Temple (Thanjavur).
- Meenakshi Temple (Madurai).
- Shore Temple (Mahabalipuram).



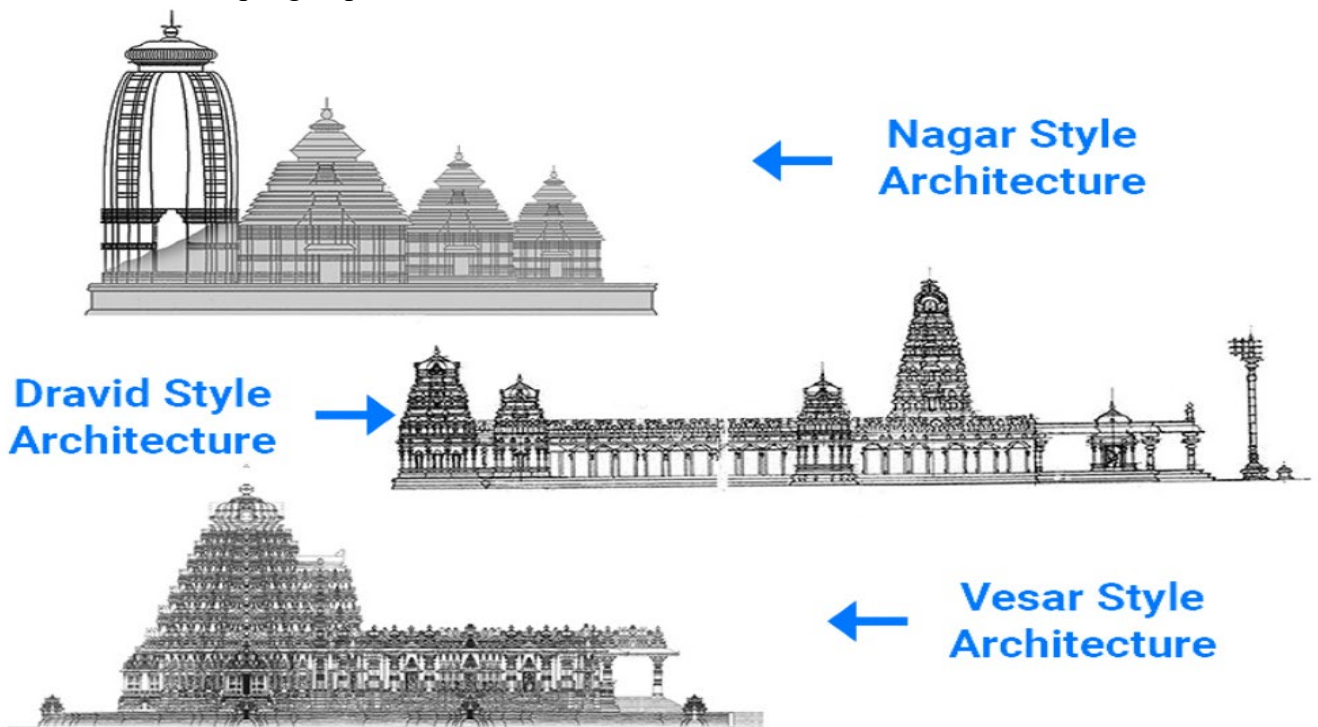
DRAVIDA STYLE OF TEMPLE ARCHITECTURE

6.3 Vesara Style (Deccan Region)

- Fusion of Nāgara + Drāviḍa styles.
- Star-shaped plans common (Hoysala temples).
- Highly intricate stone carvings.

Examples

- Chennakesava Temple (Belur).
- Hoysaleswara Temple (Halebidu).
- Aihole, Pattadakal temple groups.



7. ARCHITECTURAL SCIENCE IN INDIAN TEMPLES

7.1 Geometry & Proportions

- Based on **tala-māna**, **bandha**, **hasta**, **dhanus** units.
- Use of **sacred ratios** (e.g., 1:1, 1:√2, 1:φ).
- Temple plinths often derived from **Maṇḍala grids**.

7.2 Astronomy & Orientation

- Temples aligned to cardinal directions or celestial events.
- Sunlight enters sanctum on specific days (Konark, Modhera).

7.3 Acoustics & Sound Engineering

- Resonance chambers.
- Stone pillars that produce musical notes (Hampi).

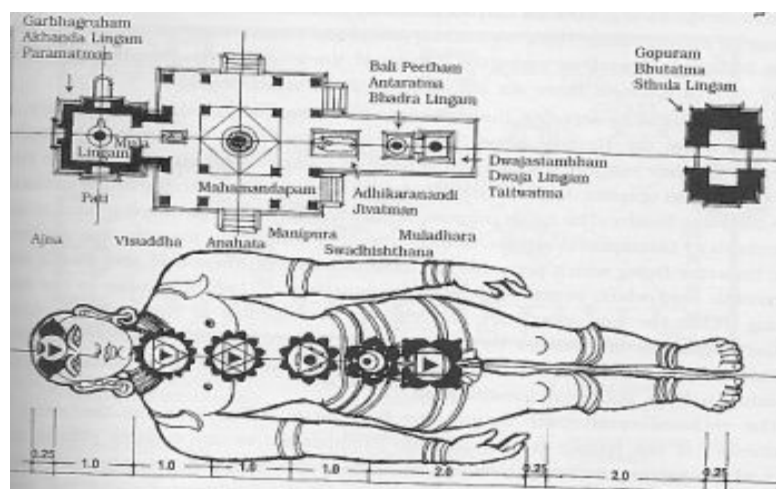
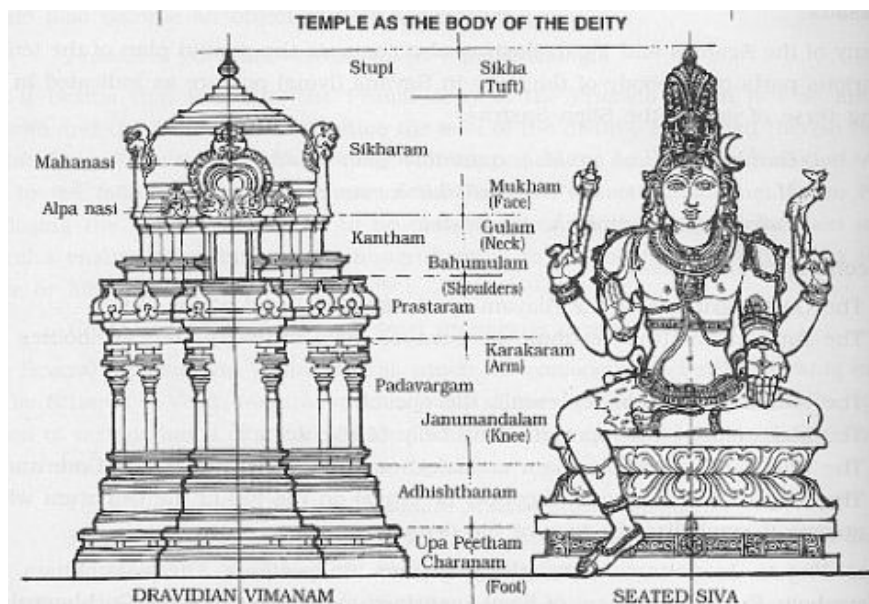
7.4 Material Science

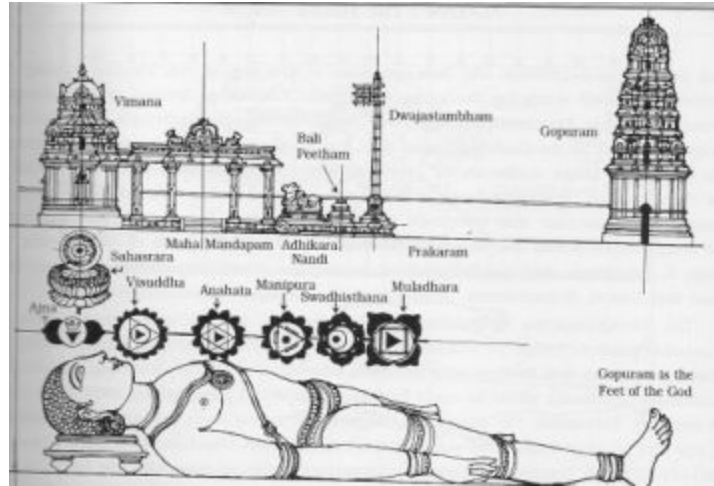
- Granite, sandstone, soapstone, laterite.
- Mortise–tenon joints; no use of mortar in stone temples.
- Polished granite (Chola); soapstone carvability (Hoysala).

8. SYMBOLISM AND PHILOSOPHY

Spiritual Concepts

- Temple as **macrocosm** replicating the **cosmos**.
- Sanctum as **Brahmāṇḍa (cosmic womb)**.
- Vertical elevation = ascent from material to spiritual.
- Circumambulation = movement through cosmic cycles.





9. COMPARATIVE SUMMARY

Aspect	Nāgara	Drāviḍa	Vesara
Tower	Curved Shikhara	Pyramidal Vimana	Hybrid
Gateways	Small	Large gopurams	Moderate
Material	Sandstone/Granite	Granite	Soapstone
Region	North	South	Deccan

10. SHORT NOTES / 1-MARK RECAP POINTS

- Vāstu = science of spatial energy.
- Vāstu Purusha = metaphysical being representing site energy.
- Eight limbs = Sthāpatya → Ābharāṇa.
- Harappan = grid, drainage.
- Temple types = Nāgara, Drāviḍa, Vesara.
- Garbhagrha = sanctum.
- Vimana = superstructure (South).
- Shikhara = tower (North).
- Mandapa = hall.
- Gopuram = gate tower.

11. POSSIBLE EXAM QUESTIONS

Short Answer

1. Define Vāstu Purusha Maṇḍala.
2. Differences between Nāgara and Drāviḍa styles.
3. Explain the Eight Limbs of Vāstu.
4. Write features of Harappan town planning.
5. Explain Garbhagrha and its significance.

Long Answer

1. Critically explain the principles of Vāstu Śāstra.
2. Describe temple architecture evolution in India with examples.
3. Discuss scientific principles used in Indian temples (geometry, acoustics, astronomy).
4. Compare Nāgara, Drāviḍa, Vesara architectures.

<https://banjarakanpuriya.com/hindu-temple-architecture>

<https://sreenivasaraos.com/2012/09/08/temple-architecture-devalaya-vastu-part-three-3-of-7/>