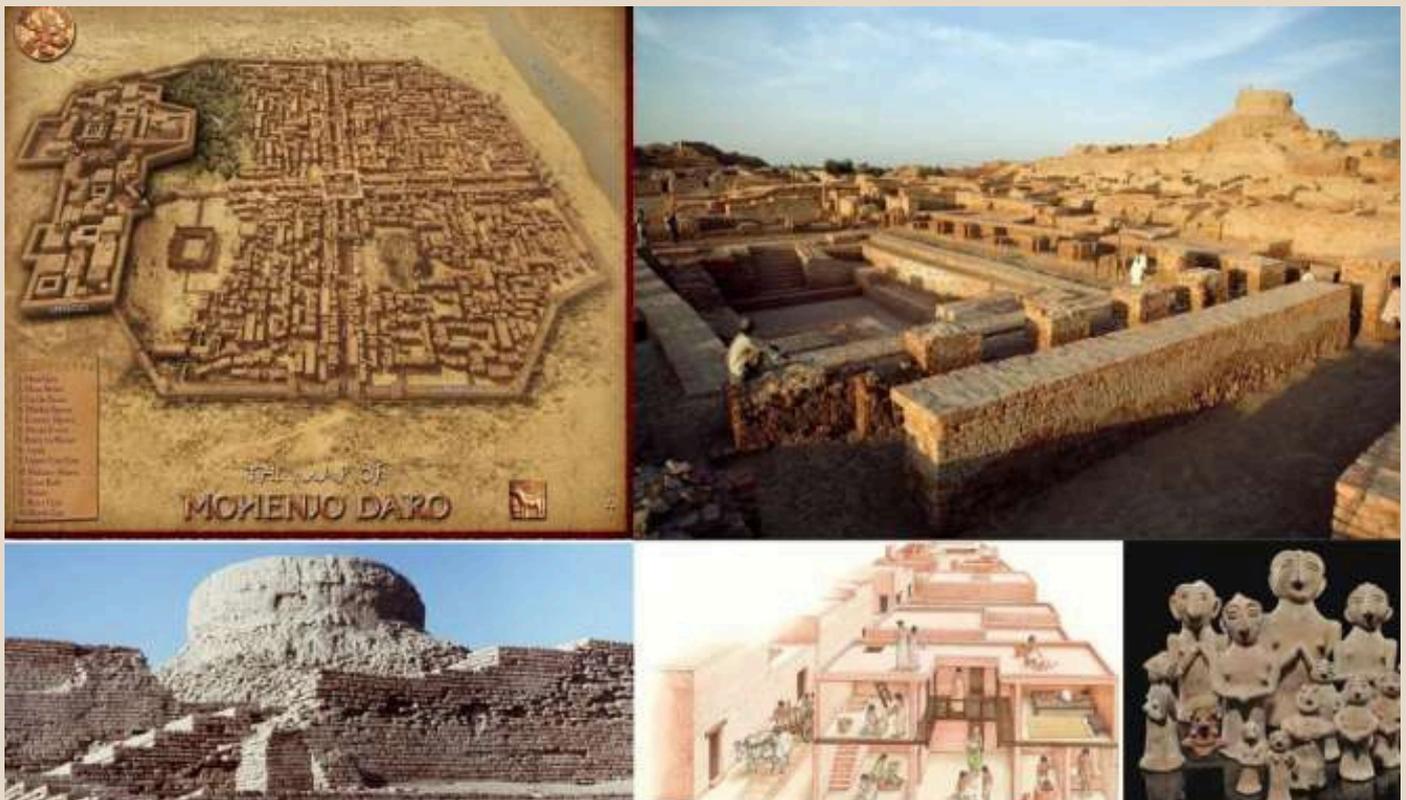


### 1. Town Planning & Urban Architecture (Core Component)

The Indus Valley Civilisation (IVC), also known as the Harappan Civilisation (c. 3300–1300 BCE), represents one of the earliest examples of urban sophistication in human history. Its town planning and urban architecture highlight a high degree of central planning, standardisation, and engineering prowess, often compared to modern planned cities like Chandigarh.



### Key Features of Town Planning:

#### Grid Pattern Layout:



Cities were laid out in a systematic **grid pattern**, with streets intersecting at right angles. Main streets were wide (up to 10 meters) and oriented north-south and east-west, facilitating efficient movement and possibly aligning with cardinal directions for astronomical or ritual purposes. This layout minimised congestion and allowed for organised expansion.

#### Division of the City:



**Citadel (Upper Town):** Elevated on mud-brick platforms, this area housed administrative, religious, and elite structures. It symbolised authority and was fortified with walls—examples: The Citadel at Mohenjo-daro and Harappa.

**Lower Town (Residential Area):** Situated at a lower level, this was the main living quarters for the common populace. It featured densely packed houses arranged in blocks, separated by lanes.

### Standardized Burnt Bricks:



**Bricks** were uniformly sized (ratio 4:2:1, e.g., 28x14x7 cm), baked in kilns for durability. This standardisation across sites like Harappa, Mohenjo-daro, Kalibangan, and Lothal indicates a centralised authority enforcing quality control, possibly a form of proto-state governance.

### Advanced Drainage System:



One of the most remarkable features, reflecting hygiene and public health priorities.

- **Covered drains** ran along streets, made of bricks with gentle slopes for gravity flow.
- **Soak pits** (cesspools) collect waste from houses, preventing waterlogging.
- **Manholes** allowed for maintenance, showcasing engineering foresight.
- This system was superior to many contemporary civilisations (e.g., Mesopotamia) and prevented diseases in densely populated areas (estimated 20,000–40,000 inhabitants in major cities).

### Uniformity in Construction:



Buildings followed **modular designs**, with consistent brick sizes and layouts. No monumental palaces or temples suggest an egalitarian society or decentralised power, though the Citadel implies hierarchy. Fortifications (e.g., walls at Dholavira) protected against floods or invasions.

## 2. Major Architectural Structures

IVC architecture emphasised functionality over grandeur, with structures built for public utility, storage, and trade. No large temples or palaces indicate a secular or non-theocratic emphasis, though some structures had ritual connotations.

### Great Bath (Mohenjo-daro):



- A **large rectangular tank** (12x7x2.4 meters) made of baked bricks, waterproofed with natural bitumen (asphalt) and gypsum plaster.
- Surrounded by rooms and a pillared veranda, steps led into the pool, with provisions for water supply from wells and drainage.
- **Possible Use:** Ritual bathing or purification ceremonies, similar to later Hindu traditions (e.g., sacred water tanks).
- Evidence of symbolism in IVC religion.
- **Significance:** Highlights engineering (watertight construction) and communal activities; the largest public structure, suggesting an organised society.

## Dockyard (Lothal):



- World's earliest known tidal dockyard (220x35 meters), connected to the Sabarmati River via channels.
- Brick-lined basin with inlet/outlet gates to manage water levels during tides; warehouse nearby for goods.
- Evidence of Maritime Trade: Exported beads, cotton; imported copper, lapis lazuli. Suggests IVC's international connections (e.g., with Mesopotamia).

## Assembly Hall / Pillared Hall:



- At **Mohenjo-daro**: A large hall with 20 pillars, possibly for public gatherings, administration, or markets.
- **Suggests**: Civic functions, community decision-making, or religious assemblies.

## 3. Domestic Architecture

Houses in IVC were designed for comfort, privacy, and hygiene, reflecting a mature urban lifestyle.

### Houses:



- **Materials and Structure**: Built with standardized baked bricks; single to multi-storied (up to three floors inferred from staircases).
- **Courtyard-Centred Design**: Central open courtyard for light, ventilation, and family activities; rooms arranged around it.
- **Multi-Room Layout**: Included living rooms, kitchens (with hearths), bathrooms, and wells. Bathrooms had sloping floors connected to street drains.
- **Privacy Features**: No windows on main streets; entrances via narrow lanes. Thick walls for insulation against heat.
- **Hygiene Focus**: Private wells (one per house in some cases), latrines with terracotta pipes leading to drains.

## 4. Sculpture (Stone, Bronze, Terracotta)

IVC art was realistic, functional, and diverse, showcasing metallurgical and artistic skills.

### Stone Sculpture:



- **Priest-King (Mohenjo-daro)**: Bearded male bust in steatite, with trefoil-patterned robe, filleted hair, and half-closed eyes (meditative pose). Realistic features suggest portraiture.
- **Other**: Seated male figures, showing anatomical precision.

## Bronze Sculpture:



- **Dancing Girl (Mohenjo-daro):** 10.5 cm figurine cast via lost-wax (cire perdue) technique. Slim, confident pose with bangles; advanced metallurgy (copper-tin alloy).
- **Significance:** Artistic freedom, gender representation; technique influenced later Indian bronzes (e.g., Chola art).

## Terracotta Figures:



- **Mother Goddess idols** (fertility symbols with elaborate headdresses).
- Animals (bulls, birds), toys (carts with wheels), human figurines.
- Mass-produced, indicating everyday art.

## 5. Seals (Most Important Art Form)

Seals are the hallmark of IVC art, with over 3,000 found, primarily from Mohenjo-daro and Harappa.

### Seals:



- **Material:** Soft steatite (soapstone), coated with glaze for durability.
- **Features:** Square/rectangular (2-4 cm), with intaglio carvings of animals (unicorn most common, bull, elephant, tiger), human figures, and pictographic script (undeciphered, 400+ signs).
- **Uses:** Trade (as stamps on goods), ownership marks, amulets, and administrative tokens.
- **Symbolism:** Unicorn seal (one-horned bull?), possibly a clan emblem; Pashupati seal (discussed later).

## 6. Pottery & Ceramics

IVC pottery was utilitarian yet artistic, evolving from plain to decorated wares.

### Pottery & Ceramics:



- **Types:** Wet-ware (red slip with black painted designs); black-on-red pottery is dominant.
- **Motifs:** Geometric (lines, circles), naturalistic (fish scales, pipal leaves, animals).
- **Techniques:** Wheel-thrown, kiln-fired; some perforated for straining.
- **Purpose:** Storage jars, cooking vessels, decorative items.

## 7. Beads, Jewelry & Ornaments

IVC excelled in lapidary arts, reflecting craft specialisation.

### Beads, Jewellery & Ornaments:



IVC excelled in lapidary arts, reflecting craft specialisation.

- **Materials:** Gold, silver, copper; semi-precious stones (carnelian from Gujarat, lapis lazuli from Afghanistan, turquoise from Iran).
- **Techniques:** Etching, drilling, gold granulation.
- **Centres:** Chanhudaro (bead factory with furnaces); Lothal (shell-working).
- **Items:** Necklaces, bangles, earrings, segmented beads.

## 8. Tools & Craftsmanship

### Tools & Craftsmanship:

- **Materials:** Copper/bronze (axes, chisels, razors); no iron (pre-Iron Age).
- **Precision:** Standardised weights (binary system: 1, 2, 4... up to 12,800 units), measures (scale from Lothal: 27.5 cm units).
- **Crafts:** Weaving (cotton fabrics), shell inlay, ivory carving.

## 9. Religious & Symbolic Art (Indirect Evidence)

IVC religion is inferred from artifacts, as no texts or temples exist.

### Religious & Symbolic Art:



- **Mother Goddess Figurines:** Terracotta idols with fan-shaped headdresses, symbolising fertility cults; found in houses, suggesting domestic worship.
- **Pashupati Seal:** Male figure (proto-Shiva?) seated in yogic pose, surrounded by animals (elephant, tiger, buffalo, rhinoceros); horned headdress, implying "Lord of Animals."
- **Fire Altars (Kalibangan):** Brick-lined pits with ash and bones, indicating fire rituals (possible precursor to Vedic yajnas).