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Mains Tests with Synopsis

Q.1) The art and architecture of the Indus Valley reveal a sophisticated aesthetic and technological sensibility. Discuss with reference to seals, terracotta figurines, and town planning features. (150 words, 10 marks)

Introduction

The **Indus Valley Civilisation (c. 2500–1750 BCE),** one of the world's earliest urban cultures, displayed a refined aesthetic sense and remarkable technological capabilities. Its **seals, figurines, and urban planning reflect a civilisation ahead of its time in both function and form.**

Body

Seals: Artistic Precision and Symbolic Communication

- Made mostly from **steatite**, seals were intricately carved with high precision using fine tools.
- Common motifs include the **unicorn**, **bull**, and composite animals, possibly representing religious or clan symbols.
- Many seals contain a **script of pictographic symbols**, still undeciphered, likely used for trade, identification, or administrative control.

- The famous **Pashupati seal** depicts a horned figure seated in yogic posture, suggesting proto-Shiva worship.
- These seals demonstrate a **unified artistic tradition** across sites like Harappa, Mohenjo-daro, and Lothal, indicating central cultural norms.

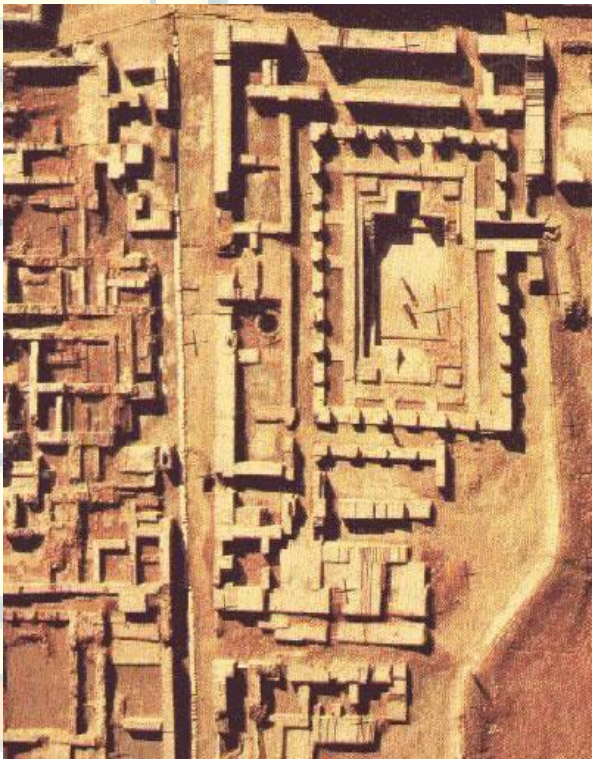
Terracotta Figurines: Reflection of Everyday and Spiritual Life

- Terracotta was used to craft **female figurines**, often interpreted as **mother goddesses**, symbolising fertility.
- Figurines of **animals, bullock carts, and wheeled toys** depict aspects of agrarian and domestic life.

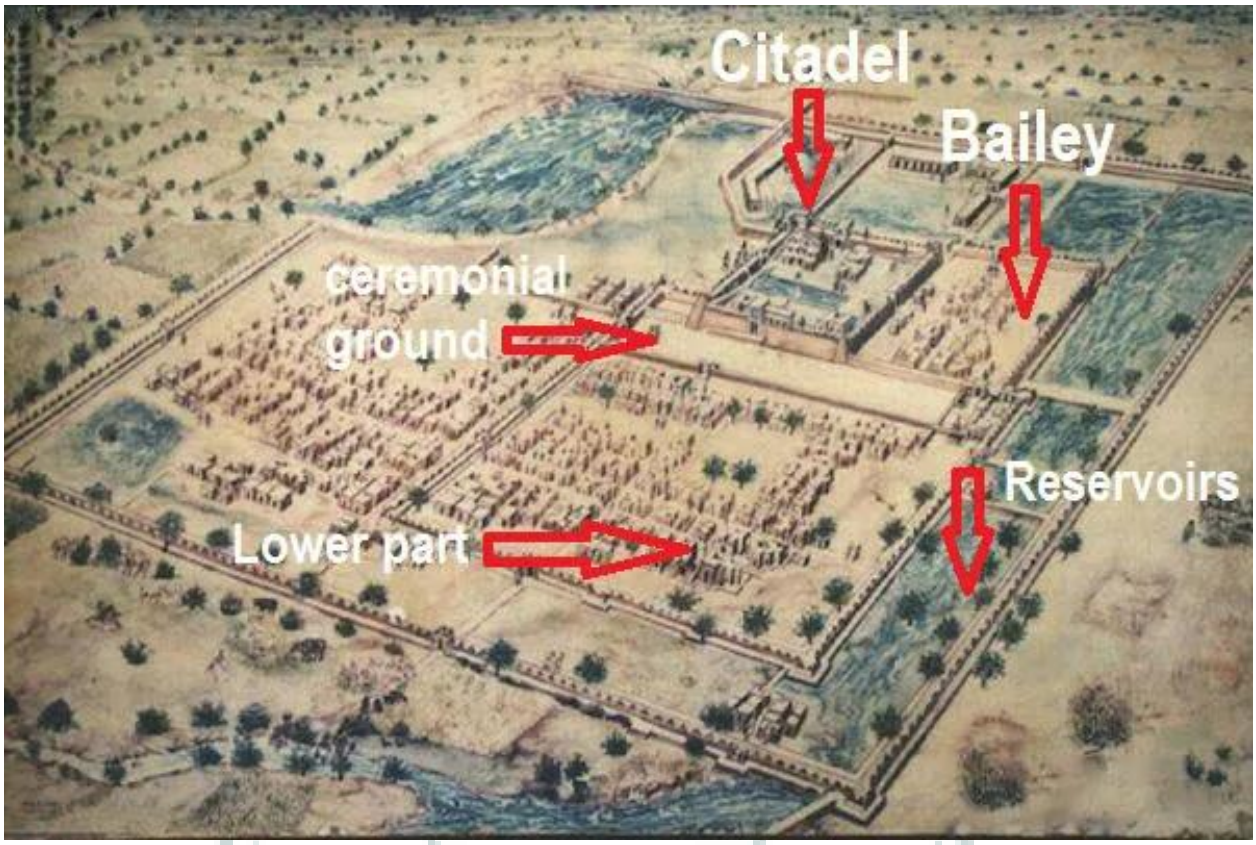
- Fine detailing, such as hairstyles and ornaments, reveals **aesthetic preferences** and possibly regional styles.
- The use of moulds for production indicates a **semi-industrial technique** suited for mass production.
- Figurines also served **religious, symbolic, and educational** purposes, integrating art into daily life.

Town Planning: Engineering Excellence and Urban Vision

- Cities like **Mohenjo-daro**, **Harappa**, and **Dholavira** had a **grid-pattern layout**—an early example of planned urbanism.
- The **Great Bath** at Mohenjo-daro, with watertight bricks and a drainage system, implies ritual purity and public utility.
- **Covered drains, soak pits, and garbage bins** in almost every house reveal sanitation awareness unmatched in the ancient world.
- Standardized bricks (ratio 1:2:4), uniform weights, and tools suggest **metrological and construction precision**.



- Presence of a **Citadel** and a **lower town** suggests social hierarchy and zoned governance.



Conclusion

The Indus Valley's art and architecture reflect a **convergence of aesthetic grace and scientific planning**. Through seals, figurines, and urban design, it portrays a civilisation rich in symbolic thought, civic organisation, and technical mastery—marking a glorious chapter in India's ancient cultural heritage.

Q.2) Compare the teachings of Jainism, Buddhism, and Ajivika in terms of karma, liberation, and conduct. (10 Marks, 150 Words)

Introduction

In **6th century BCE**, **Jainism**, **Buddhism**, and **Ajivika** emerged from the **Śramaṇa movement**, offering distinct frameworks on **karma**, **liberation**, and **ethical discipline**, and together enriching the **pluralistic** and **spiritual fabric** of Indian philosophical thought.

Body

Karma: Nature and Function

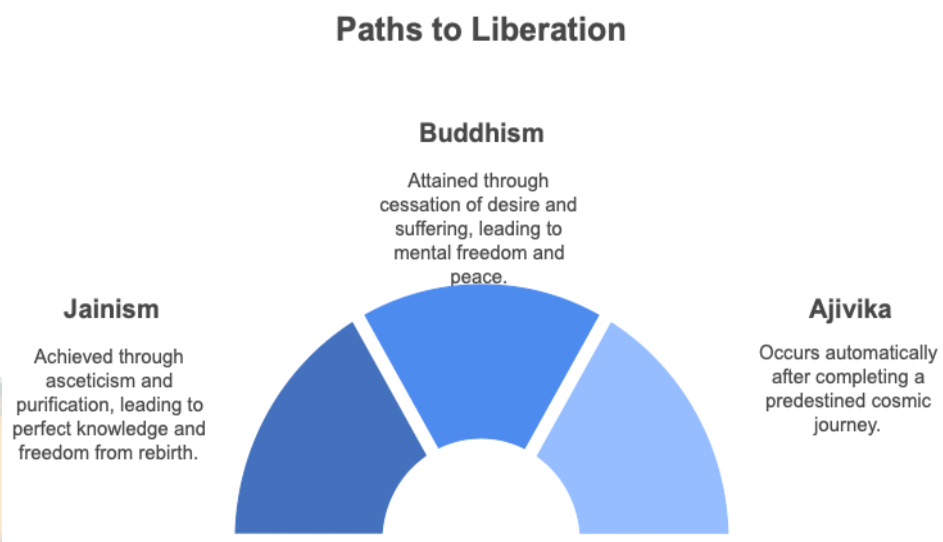
- **Jainism**: Karma is a **real, physical substance (pudgala)** that binds itself to the soul due to passions (kasayas) and actions. Both intentional and unintentional acts cause karmic bondage. Liberation requires the **complete destruction of karmic particles** through right knowledge (*jnana*), right faith (*darshana*), and right conduct (*charitra*).
- **Buddhism**: Karma is **mental volition (cetana)** — intention behind action. It is not a material substance but an ethical force determining rebirth. Only **intentional acts** produce karmic consequences. Unintentional actions do not bind karma.

- **Ajivika**: The Ajivikas held a **fatalistic view** of karma. They believed in *Niyati* (cosmic determinism), where everything is predetermined — including karmic outcomes. **Human effort or morality had no role** in shaping destiny or escaping the cycle of rebirth.

Liberation (Moksha/Nirvana)

- **Jainism**: Liberation is achieved through **intense asceticism**, annihilation of all karmas, and purification of the soul. The liberated soul attains **Kevalajnana (perfect knowledge)** and rises to **Siddhaloka**, free from rebirth.

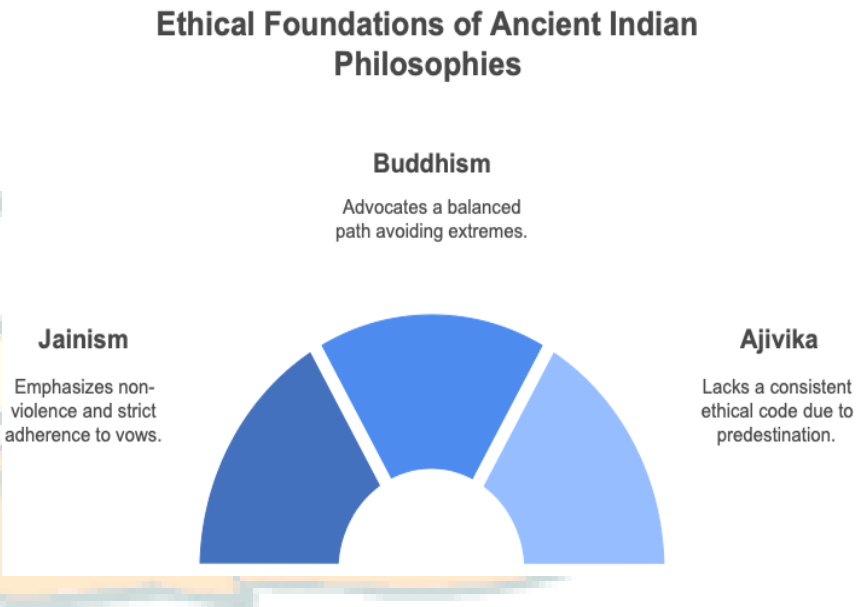
- **Buddhism**: Liberation is the attainment of **Nirvana** — the cessation of desire, ignorance, and suffering. It is not a place but a state of **mental freedom and peace**. It can be achieved through the **Four Noble Truths and the Eightfold Path**.



- **Ajivika**: Moksha, in Ajivika belief, occurs **automatically** after a soul has completed its predestined cosmic journey. **Effort, ethics, or rituals have no role**, as liberation is governed entirely by Niyati.

Ethical Conduct and Discipline

- **Jainism**: Emphasised strict adherence to **ahimsa (non-violence)** in thought, word, and deed — even sweeping the ground while walking. Other vows included **satya (truth), asteya (non-stealing), aparigraha (non-possession), and brahmacharya (celibacy)**. For monks, the discipline was extremely severe.



- **Buddhism**: Advocated a **Middle Path** — avoiding both extreme indulgence and extreme asceticism. Ethical conduct included **Five Precepts** (non-violence, no stealing, no lying, no sexual misconduct, no intoxication) and adherence to the **Noble Eightfold Path**.

- **Ajivika**: Though some Ajivikas practiced **severe asceticism**, their system lacked a consistent code of ethical conduct. Since everything was predestined, **right or wrong behaviour held no spiritual value**, making moral responsibility irrelevant.

Conclusion

While Jainism and Buddhism emphasised **personal effort, ethical living, and spiritual discipline** as means to liberation, Ajivika stood apart with its **rigid fatalism and denial of free will**. **Together, these traditions enriched Indian philosophical discourse with contrasting perspectives on human agency, morality, and salvation.**

Q.3) India's "Neighbourhood First 2.0" policy faces new challenges amid China's growing influence in South Asia. Analyse India's strategy to retain its primacy in the region. (150 words, 10 marks)

Introduction

India's "Neighbourhood First" policy, launched in 2014, emphasizes regional connectivity, security, and cooperation with South Asian nations. However, with China's expanding economic and strategic presence—through projects like the Belt and Road Initiative—India's regional primacy faces new tests.

Body

India's Challenges in South Asia:

- **China's Expanding Footprint:** Large-scale infrastructure investments in Pakistan, Nepal, and Sri Lanka under BRI have increased Beijing's strategic leverage.
- **Debt and Dependency:** Chinese loans have created economic dependencies in countries like Sri Lanka (Hambantota Port) and Maldives, limiting India's influence.
- **Internal Political Shifts:** Domestic changes in Nepal and Maldives have sometimes tilted foreign policy away from India.
- **Connectivity Gap:** India's project delays (e.g., Kaladan, Chabahar) weaken its regional outreach.
- **Perception Issue:** Smaller neighbours often perceive India as a "big brother," affecting trust and cooperation.

India's Strategic Responses:

- **Economic and Infrastructure Outreach:** Enhanced Lines of Credit and projects like the **BBIN initiative**, **Kaladan Multi-Modal Project**, and **Chabahar Port** to boost connectivity.
- **Humanitarian Diplomacy:** Swift assistance during the **COVID-19 pandemic ("Vaccine Maitri")** and disaster relief efforts have strengthened goodwill.
- **Maritime Security and SAGAR Vision:** Through the **Security and Growth for All in the Region (SAGAR)**initiative, India promotes maritime cooperation and blue economy partnerships.
- **Regional Cooperation Platforms:** Reviving **BIMSTEC** and **IORA** to offset SAARC's stagnation and foster multilateral engagement.
- **Digital and Energy Connectivity:** Expanding cross-border power trade and digital connectivity with Bhutan, Bangladesh, and Nepal.

Way Forward:

- **Trust-based Partnerships:** Move from aid-driven to demand-driven cooperation respecting sovereignty.
- **Accelerate Implementation:** Fast-track connectivity projects and deliver on commitments to counter China's speed advantage.
- **Inclusive Regionalism:** Promote "Neighbourhood First" aligned with **"Act East"** and **"Indian Ocean outreach."**
- **People-to-People Diplomacy:** Deepen educational, cultural, and youth exchanges to foster long-term goodwill.

Conclusion

India's neighbourhood strategy is shifting from reactive diplomacy to proactive engagement, balancing China's rise through connectivity, credibility, and compassion. As Prime Minister Modi aptly said, *"India's neighbourhood policy is not driven by reciprocity but by shared prosperity."* Sustaining this approach is key to securing India's leadership in South Asia.

Q.4) Differentiate between surface and deep ocean currents. How do changes in these current systems influence the Indian monsoon regime? (150 words, 10 marks)

Introduction

Ocean currents are large-scale movements of seawater, driven by wind, salinity, temperature, and Earth's rotation. These are classified into **surface currents** and **deep ocean currents**, both of which significantly influence **global and regional climate systems**, including the **Indian monsoon**.

Body

Differentiation between Surface and Deep Ocean Currents

Aspect	Surface Ocean Currents	Deep Ocean Currents
Depth	Top 400 meters of the ocean	Below 400 meters, extending to ocean floor
Driving Force	Mainly **winds**, **Coriolis effect**, and **landmass**	Driven by **thermohaline circulation** (temperature and salinity differences)
Speed	Relatively **faster**	**Slow-moving** (cm/s)
Examples	Gulf Stream, Kuroshio, Agulhas	North Atlantic Deep Water, Antarctic Bottom Water
Climate Influence	Immediate impact on **weather and monsoons**	Long-term influence on **global climate patterns**

Influence of Ocean Currents on Indian Monsoon Regime

1. Surface Currents and Monsoon Winds

- **Indian Ocean Dipole (IOD):** Positive IOD enhances monsoon by warming the western Indian Ocean, strengthening southwest monsoon winds.
- **El Niño-Southern Oscillation (ENSO):** Altered Pacific surface currents disrupt trade winds, often weakening the Indian monsoon.
- **Somali Current:** Strong during southwest monsoon; aids in **moisture transport** toward the Indian subcontinent.

2. Deep Ocean Currents and Thermohaline Circulation

- A weakening **Atlantic Meridional Overturning Circulation (AMOC)** can reduce global heat transport, subtly altering Indian Ocean SSTs and weakening the monsoon over time.
- **Subsurface warming** from deep currents can delay or weaken the **onset** and **intensity** of the monsoon.

Conclusion

Understanding the interaction between oceanic currents and the Indian monsoon is crucial for climate-resilient agricultural and water policies. With rising climate variability, ocean monitoring is essential for monsoon predictability and regional stability.

Q.5) Coral reefs serve as vital ecological barriers and biodiversity hotspots. Examine their ecological functions and analyse the threats posed by ocean acidification and rising sea temperatures. (150 words, 10 marks)

Introduction

Coral reefs, occupying less than **0.1% of the ocean floor**, support nearly **25% of all marine species** (UNEP). India's major reefs—**Gulf of Mannar, Lakshadweep, and Andaman & Nicobar**—are vital ecological and economic assets, but face severe threats from climate change.

Body

Ecological Functions of Coral Reefs

- **Biodiversity Hotspots:** The **Coral Triangle** (Indonesia, Philippines, Papua New Guinea) hosts **600+ coral species**, making reefs key to global marine biodiversity.
- **Coastal Buffers:** Coral reefs absorb up to **97% of wave energy** (Nature, 2014), protecting vulnerable coastlines like the **Sundarbans and Lakshadweep islands** from storm surges and erosion.
- **Fisheries Backbone:** Reefs support **over 500 million people** globally via reef-based fisheries, with **Gulf of Mannar** sustaining traditional livelihoods in Tamil Nadu.
- **Tourism Revenue:** Australia's **Great Barrier Reef** generates **AUD 6 billion annually**, while **Maldives' reef tourism** constitutes nearly **30% of its GDP**.
- **Biogeochemical Regulation:** Reefs aid in **carbon sequestration** through calcification and sustain productivity in nutrient-poor tropical seas via **symbiotic nutrient recycling**.
- **Medical Potential:** Coral ecosystems provide **bioactive compounds** for anti-cancer, anti-inflammatory, and antiviral drugs—e.g., *Ara-C* from Caribbean sponge for leukemia.

Threats from Ocean Acidification and Rising Temperatures

- **Coral Bleaching:** In **2016**, the Great Barrier Reef lost **22% of its coral cover** due to a marine heatwave. India's **Lakshadweep reefs** experienced >60% bleaching (ZSI, 2018).
- **Decline in Calcification:** Acidification has reduced coral calcification rates by **up to 40%** in some Pacific reefs (IPCC AR6), threatening long-term reef sustainability.
- **Habitat Degradation:** The **loss of reef structure** leads to collapse of niche habitats for species like clownfish and butterflyfish, triggering trophic imbalances.
- **Increased Disease Outbreaks:** Higher sea temperatures have accelerated coral diseases—e.g., **White Band Disease** in Caribbean Acropora corals has led to **90% population loss**.
- **Global Reef Loss Trends:** According to the **Status of Coral Reefs of the World (2020)** report, the world has lost **14% of coral reefs** since 2009 due to warming seas.

Conclusion

Coral reefs are lifelines for marine ecology and coastal societies. Climate-resilient strategies, including **restoration (e.g., coral gardening in Gulf of Kachchh)** and **strengthening global targets under the UN Ocean Decade**, are essential to safeguard these living fortresses.