



CURRENT AFFAIRS



Argasia Education PVT. Ltd. (GST NO.-09AAPCAI478E1ZH)
Address: Basement C59 Noida, opposite to Priyagold Building gate, Sector 02,
Pocket I, Noida, Uttar Pradesh, 201301, CONTACT NO:-8448440231

Date -20 September 2023

HOYSALA SACRED ENSEMBLES

This article covers "Daily Current Affairs" and the Topic details "Hoysala Sacred Ensembles". This Topic has relevance in the Art Culture section of the UPSC CSE exam.

For Prelims:

*About the Hoysala Dynasty?
Prominent Hoysala Sacred Complexes?*

For Mains:

*GS 1: Art and Culture
Architectural Characteristics of Hoysala Architecture?*

Why in the news:

The Sacred Ensembles of the Hoysalas have been included in the UNESCO World Heritage List.

About Hoysala Dynasty

- **Early Emergence:** The Hoysala dynasty is thought to have been established around the 10th century by Nripa Kama I, initially serving as vassals under the Western Ganga dynasty.
- They governed from their capital, which was initially in Dwarasamudra (present-day Halebidu) but was later relocated to Belur.
- The Hoysalas held strong devotion to both Vaishnavism and Shaivism, two prominent sects within Hinduism, and their enthusiastic support for temples and artistic endeavors reflected their deep religious commitment.
- **Emergence as a Major Force:** The Hoysalas rose to prominence during the rule of King Vishnuvardhana, who reigned from approximately 1110 to 1152 CE. Under his leadership, the Hoysalas transitioned into an independent kingdom, relocating their capital from Belur to Halebidu (Dwarasamudra). This period witnessed a significant upsurge in prosperity and cultural development.
- **Cultural Apex:** The Hoysala dynasty reached its cultural zenith during the reign of King Ballala II, who ruled from around 1173 to 1220 CE. This era witnessed the construction of some of South India's most magnificent temples and monuments.
- **Gradual Decline:** In the late 13th century, the Hoysalas encountered invasions from the Delhi Sultanate and other neighboring powers, leading to a gradual erosion of their authority. By the early 14th century, the dynasty had substantially diminished in power and influence.

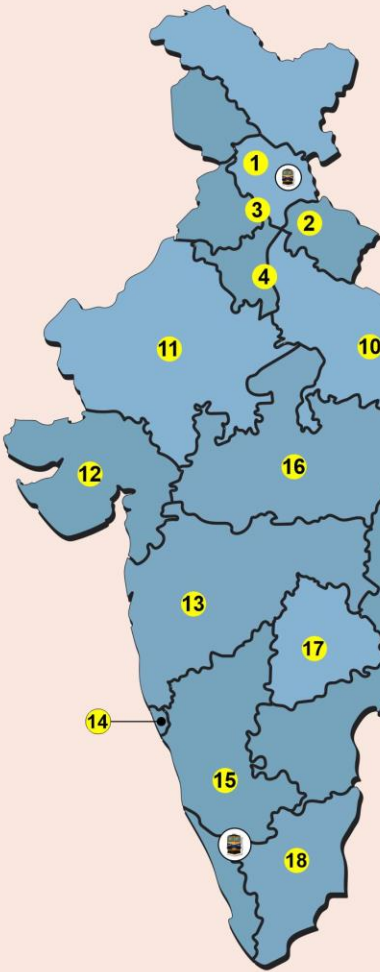
Architectural Characteristics of Hoysala Architecture:

The architectural style of Hoysala sacred complexes is celebrated for its distinctive blend of North Indian Nagara and South Indian Dravidian influences, enriched with unique Hoysala elements. Here are the key architectural attributes:

- **Stellate Ground Plans:** Hoysala temples are renowned for their star-shaped ground plans, known as “stellate.” These designs feature multiple projecting points, and some of the most famous instances can be observed in the Chennakesava Temple in Belur and the Hoysaleswara Temple in Halebidu.
- **Exquisite Sculptural Artistry:** Among the most remarkable aspects of Hoysala temples are their intricate and finely detailed sculptures. These sculptures grace the exterior walls and depict a wide range of subjects, including scenes from Hindu mythology, everyday life, and the Hoysala royal court. The craftsmanship is truly exceptional, characterized by delicate filigree work and lifelike expressions.
- **Turned and Polished Pillars:** Hoysala temples are distinguished by their lathe-turned pillars, which are meticulously polished and exhibit diverse designs. Each pillar is a unique work of art that contributes to the overall interior aesthetics of the temple.
- **Deity Representations:** The primary sanctum of Hoysala temples often houses a deity, and the vimana (tower) above it is intricately adorned with depictions of the presiding deity or relevant mythological narratives. These vimanas possess a pyramid-like shape and are adorned with miniature shrines on their surfaces.
- **Elaborate Entrances:** The entrances of Hoysala temples showcase ornate door frames adorned with intricate carvings of deities, celestial beings, and floral motifs. These doorways are considered as masterpieces of Hoysala artistry.

Prominent Hoysala Sacred Complexes:

- **Chennakesava Temple in Belur:** This temple, devoted to Lord Vishnu, stands as an exemplary masterpiece of Hoysala architecture. It is renowned for its breathtaking sculptures, especially the bracket figures that depict various dance poses.
- **Hoysaleswara Temple in Halebidu:** Dedicated to Lord Shiva, this temple is celebrated for its intricate wall panel sculptures that narrate tales from the epics, Puranas, and Hindu mythology.
- **Kesava Temple in Somanathapura:** Situated near Mysore, this temple is another splendid representation of Hoysala architecture. It is acclaimed for its exquisitely detailed and symmetrically arranged sculptures.
- **Kedareshwara Temple in Halebidu:** This temple showcases a distinctive architectural style known as “Vesara,” a harmonious fusion of Nagara and Dravidian influences. Notably, it features twin sanctums and finely detailed carvings.



- 1 HIMACHAL PRADESH**
Great Himalayan National Park Conservation Area
- 2 UTTARAKHAND**
Nanda Devi and Valley of Flowers National Parks
- 3 CHANDIGARH**
The Architectural Work of Le Corbusier, an Outstanding Contribution to the Modern Movement

- 4 DELHI**
Humayun's Tomb, Qutub Minar and its Monuments, Red Fort Complex
- 5 BIHAR**
 - Archaeological Site of Nalanda Mahavihara at Nalanda
 - Mahabodhi Temple Complex at Bodh Gaya
- 6 SIKKIM**
 - Khangchendzonga National Park
- 7 ASSAM**
 - Kaziranga National Park
 - Manas Wildlife Sanctuary
- 9 ODISHA**
 - Sun Temple, Konark
- 8 WEST BENGAL**
 - Sundarbans National Park
 - Santiniketan
- 10 UTTAR PRADESH**
 - Agra Fort
 - Taj Mahal
 - Fatehpur Sikri

- 11 RAJASTHAN**
 - Hill Forts of Rajasthan
 - 1. Jaisalmer Fort, 2. Chittorgarh Fort,
 - 3. Kumbhalgarh Fort, 4. Gagron Fort,
 - 5, Ranthambore Fort, 6. Amber Fort
 - Keoladeo National Park
 - The Jantar Mantar, Jaipur
 - Jaipur City, Rajasthan
- 12 GUJARAT**
 - Dholavira: a Harappan City
 - Historic City of Ahmadabad
 - Champaner-Pavagadh Archaeological Park
 - Rani-ki-Vav (the Queen's Stepwell) at Patan
- 13 MAHARASHTRA**
 - Ellora Caves
 - Ajanta Caves
 - Elephanta Caves
 - Chhatrapati Shivaji Terminus (formerly Victoria Terminus)
 - Victorian Gothic and Art Deco Ensembles of Mumbai

- 14 GOA**
Churches and Convents of Goa
- 15 KARNATAKA**
 - Group of Monuments at Pattadakal
 - Group of Monuments at Hampi
- 16 MADHYA PRADESH**
 - Buddhist Monuments at Sanchi
 - Rock Shelters of Bhimbetka
 - Khajuraho Group of Monuments
- 17 TELNAGANA**
Kakatiya Rudreshwara (Ramapoo) Temple
- 18 TAMIL NADU**
 - Group of Monuments at Mahabalipuram
 - Great Living Chola Temples
- Mountain Railways of India**
 - Darjeeling Himalayan Railway - West Bengal
 - Nilgiri Mountain Railways — Tamil Nadu
 - Kalka Shima Railways - Himachal Pradesh

Source:

<https://indianexpress.com/article/india/karnatakas-sacred-ensembles-of-hoysalas-inscribed-on-unesco-world-heritage-list-8945731/>

Q.1 Consider the following statements regarding Hoysala architecture:

1. Hoysala temples are primarily characterised by their Vesara architectural style.
2. They used a distinct star-shaped ground plan.

Which of the statements given above is/are correct?

- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

ANSWER: C

Q.2 Consider the following:

1. Chennakesava Temple
2. Hoysaleswara Temple
3. Brihadishwara Temple
4. Meenakshi Temple

How many of the above Temples were built by the Hoysala dynasty?

- (a) Only one
(b) Only two
(c) Only three
(d) All four

ANSWER: B

Q.3 “Examine the distinctive features of Hoysala architecture and its cultural significance in the context of Indian art and heritage. How did Hoysala temples contribute to the rich cultural tapestry of South India?”

Rishabh

MATSYA 6000

This article covers “Daily Current Affairs” and the topic details “Matsya 6000”. This topic has relevance in the “Science and Technology” section of the UPSC CSE exam.

For Prelims:

What is Samudrayaan Mission?

What is Matsya 6000?

For Mains:

GS3: Science and Technology

Why in the news?

India is preparing for an ocean expedition after the successful Chandrayan 3 and Aditya L1 missions.

India’s First Manned Deep Ocean Mission: Samudrayaan

- India’s first manned Deep Ocean Mission, “Samudrayaan”, aims to study deep-sea resources and biodiversity without disrupting the ocean ecosystem.

- Samudrayaan plans to send three humans to depths of six kilometres under the sea using Matsya 6000- the first Manned Submersible in India.
- The venture supports the 'blue economy' vision, which focuses on the sustainable use of ocean resources for the country's economic growth, improved livelihoods, job opportunities, and preservation of ocean ecosystem health.
- The Ministry of Earth Sciences (MoES) is the nodal ministry implementing this ambitious, multi-institutional mission.

Matsya 6000: India's First Manned Submersible

- Developed by Chennai's **National Institute of Ocean Technology (NIOT)**, Matsya 6000 is a **three-person submersible capable of descending 6000 meters underwater**.
- According to news reports, the Matsya 6000 will undergo trials in the Bay of Bengal in early 2024.
- The submersible is part of India's Rs 4,077-crore Deep Ocean Mission, planned to launch by 2026.
- It would make **India** one of just six countries (the **United States, Russia, Japan, France, and China**) to have piloted a crewed undersea expedition deeper than 5,000 meters.

Structure and Design of Matsya 6000

- The Matsya 6000 is a **2.1m-diameter sphere made of an 80mm-thick titanium alloy**, built to **withstand pressure 600 times greater than that at sea level**.
- It **can operate for 12 to 16 hours straight** and has an oxygen supply that extends up to 96 hours.
- For safety purposes, redundancy is applied to all components, excluding the sphere.
- The submersible design was reviewed after the previous Titan submersible disaster, leading to a change from using Carbon fibre to insisting on titanium enclosures. Given its strength and fracture-resistant properties, titanium is considered the best option for deep-sea exploration.
- The **Matsya 6000 also features a USBL (ultra-short baseline) acoustic positioning system for optimal safety**. This system facilitates communication with the mothership carrying the transponder above the water surface.

Deep Ocean Mission

PLUTUS
IAS






- Development of Technologies for Deep Sea Mining and Manned Submersible
- Development of Ocean Climate Change Advisory Services
- Public Awareness About Earth System Science
- Technological Innovations for Deep-Sea Biodiversity Exploration and Conservation
- Deep Ocean Survey and Exploration
- Energy and Freshwater from the Ocean
- Advanced Marine Station for Ocean Biology

Significance of Deep Ocean Mission

- **Adding Value to Biodiversity and Tourism**
 - The Matsya 6000 is expected to explore chemosynthetic biodiversity in hydrothermal vents and low-temperature methane seeps in the ocean.
 - Additionally, it aims to promote tourism and ocean literacy, thereby adding value to India's blue economy.
- **Exploration of Ocean Resources**
 - The Samudrayaan project endeavours to discover precious metals such as cobalt, copper, and manganese. In addition, it aims to catalogue the ocean's biodiversity.
- **India's Vision for Ocean Exploration and Conservation**
 - India strives to play a critical and leadership role in the exploration of the ocean and the sustainable development of resources to maintain a balanced ecosystem.
 - The country's approach to ocean exploration focuses on research, preparing for deep dives, and encompassing land and ocean ecosystems' connectivity.

Way Forward

- The government is actively promoting the blue economy, angling to increase its contribution to the national GDP, currently less than 10%.

- Developing coastal economies and leveraging potential ocean resources, India envisions transforming oceans from a vast, potent canvas to a resourceful powerhouse.

Sources:

[Matsya 6000: All you need to know about India's first manned submersible](#)

Q1. With reference to Matsya 6000, consider the following statements:

1. Matsya 6000 is a three-person submersible developed by Chennai's National Institute of Ocean Technology (NIOT).
2. The submersible will undergo trials in the Arabian Sea in early 2024.
3. India will be one of the four countries to have piloted a crewed undersea expedition deeper than 5,000 meters.

Which of the statements given above is/are NOT correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (b)

Q2. Consider the following statements with reference to Matsya 6000:

1. The Ministry of Science and Technology is the nodal ministry implementing this ambitious, multi-institutional mission.
2. Matsya 6000 can operate for 24 to 36 hours straight.
3. It is a three-person submersible capable of descending 6000 meters underwater.
4. It can withstand pressure 6000 times greater than that at sea level.

How many of the statements are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four

Answer: (a)

Q3. Analyse the significance of the Deep Ocean Mission- Samudrayaan in the context of India's Blue Economy and the exploration of deep-sea resources. Discuss the potential economic and scientific impact of this mission.

Gaurav Nikumbh