

Paper 2:

Subtopic – **Parallels to temples**

Problem statement – **Religious structures and their expanse in Indian continent**

Understanding the nature of various other religious structures and drawing parallels from them complementing to the study of temple structures.

India had been ruled by not just Hindu rulers but also rulers of other religion. This has resulted in establishment of various other religions and their respective religious structures in the Indian continent. e.g., Islamic Architecture, originally from middle east, is known as Indo-Islamic Architecture mainly because Hindu masons used to work under Islamic rulers in India. They built mosques, tombs, grave, madrasa, minar, Charbagh with local materials like sand stone, lime-mortar, marble, etc. responding to the Indian climate along with some elemental features of their style like arches and beams, vaults, decorative brackets, balconies, Chat(terraces), Chhatris (smaller domes), geometrical shapes, natural elements and Arabic or Urdu lettering as ornamentation.

Continuing the tradition, Mughal Architecture is a culmination of Indian, Islamic, Persian and Turkish styles which has more or less similar characteristics. These styles were seen not only in the traditional structures but also reflects in the modern and contemporary buildings through aesthetics, ornamentation, form or spatial volume, orientation and hierarchy of spaces.

This is applicable even for religions like Jain, Buddha, Christian and so on. Their respective religious structures like stupas, churches, pagodas, monastery and many more act as a symbol of their religion. In almost all of these categories, the altitude and volume is maintained due to the belief that the height leads you to the almighty. Churches are well known for different types of roof systems whereas stupas are known for their domical shape. Monasteries and pagodas have stepped elevations demarcating their religious symbols.

Be it a temple, church, mosque or stupa; one can find peace of mind in that holy place. It takes you to that divine potential.

Paper 1:

Topic - Indian temples

Problem statement - ROLE OF TEMPLES: THEN AND NOW

Understanding how the role of temples has evolved from traditional to contemporary architecture on the basis of following parameters –

- Functions -

Temples serve multiple functions apart from just being a place of worship. In the traditional temple styles, different mandapas used to have particular functions. e.g. *bhoga mandap* as a detached space for dining, *sabha madap* as a place of gathering, programmes, performing arts, *kalyan mandap* as a place of holy rituals like wedding, *mantri mandap* for patrons, authorities, important people, etc.

• Khajuraho temple, MP	Rekha Shikhara, pradakshina path, ardhmandap
• Lingaraja temple, Bhubaneshwar -	Ratha Deul, Jagmohan, Natya mandir, Bhoga mandap
• Brihadeeswarar temple, Tamil Nadu	Nandi mandap, Nataraja mandap, shrines of five deities, Three entrance gates

In addition to these functions, some more facilities were added in the temple complex. e.g. The Global Vipassana pagoda, Mumbai is not only a popular tourist spot being an architectural wonder but also includes Meditation centre and the courses affiliated to it, Art gallery, Library and study rooms, guest rooms Administration building and two auditoriums.

- Global Vipassana Pagoda, Mumbai
- Vipassana International Academy, Igatpuri

- Political background –

The invasion by different rulers, empires, kingdoms, etc. from other countries as well as the regional authorities built several temples during their rule. Even if the main reason behind that was to showcase their power it had major contribution in the field of art, architecture and culture. The North Indian Nagara style was originated and developed during the Gupta empire. Whereas the South Indian Dravidian style was started during the cholas, Pandyas and flourished during Satvahanas, Vijayanagar empire. The great son of Bharat – Raj Raja chozhan built grand temples and was considered as the champion of art and culture.

Another example is the 11<sup>th</sup> century Chausath Yogini Temple from Morena (MP) built by the Kachchapaghata king Devapala and destroyed during invasions in middle ages. The temple was the venue of providing education in astrology and mathematics based on the transit of the Sun. The design of the temple has withstood earthquake shocks, without any damage to its circular structural features in the past several centuries. Coincidentally the design of Indian Parliament (1912) done by Sir Edwin Lutyens had its influence.

The political involvement and influence of the ruling party continues to be seen in the contemporary temples as well. The most recent, acclaimed and well-known example is the Ram mandir in Ayodhya. The temple has such a huge political background that it becomes the symbol of that particular political conflict and the respective political party.

- Ram Janmabhoomi – Ram Mandir, Ayodhya
- Siddhivinayak Temple trust, Mumbai
- Dagdusheth Halwai, Pune

- Architectural qualities and decoration styles –

Since temples were major contributors in the Indian traditional Architecture, various architectural inventions, experiments, explorations and advancements had been made in several Indian Traditional temples.

Name of the style	Region	Inventions	Elemental feature
1.Nagara	Northern India	Ratha(projections)	Rekha Shikhara
2.Dravidian	Southern India	Vimana/Gopuram	Stepped pyramidal elev.
3.Hemadpanti	Deccan Plato	Rock cut architecture	Monolithic structure
4.Vesara	Madhya Pradesh	Experimental stage	Merging the two

The science of light and ventilation, water management, sound, materials, building crafts and joinery, structure and loads was embodied and set as tradition. Thus, the foundation of Indian Temple Architecture was laid and came to be known as Vastu-shilpa shastra (space-built form) and its Sthapati, as architect.

Continuing the tradition, contemporary temples do follow some of the design paradigms in terms of its architectural qualities like form and orientation, light and ventilation, structure and loads, water management, position of deity and mandapas, etc. However, there are some exceptions which depart from the traditional in various degrees and scales. e.g. lotus temple.

• Temple of steps, Andhra Pradesh by Ar. Sameep Padora	pyramidal elevation
• Temple of Stone and Light, Rajasthan by Ar. SpaceMatters	local Jaisalmer yellow sandstone, climate responsive, play of light

- Building craft and workmanship –

The traditional temples were built under the ruling authorities by local craftsman. Also, local materials like wood, stone and brick; suitable for the particular climate type were used. The building craft and joineries were exposed and ornamented intricately by showcasing natural elements like flora and fauna, animals, geometric patterns and figures, motifs of gods and goddesses, etc.

- Lord gommeteshwara, Karnataka
- Vitthal temple, Hampi
- Sunchindram Mandir, Kanyakumari

Over the years, advancements and modifications in the local materials resulted in addition of layers onto the main structural member like plastering, painting, covering and more such techniques; concealing the joineries. It can also substitute the local materials and craftsmen making it possible to built anywhere and by anyone.

<ul style="list-style-type: none"> <li>Lotus temple, Delhi by Ar. Fariborz Sabha</li> </ul>	Petal design, glass and steel roof, red sandstone walkways and landscape gardens construction time – 10 years
<ul style="list-style-type: none"> <li>Shiv temple, Wadeshwar, Maharashtra by Ar. Sameep Padora</li> </ul>	Built through “shramadaan”(self-built), local stone, symbolic – shikhara and mandapas
<ul style="list-style-type: none"> <li>Maruti Mandir- Home for God on Earth, Nashik, Maharashtra, by Ar. Within N without</li> </ul>	local stone, built on existing plinth, geometric design

- Understanding the “sacred space” –

During the process of evolution, man started realizing the strength of five fundamental forces, called water, fire, earth, air and sky. This initiated the need for their enshrinement. Hence, they created a sacred place for these shrines and temples emerged. “Vimana” means that which “measures out” or that which stretches our mind. In architecture, it alludes to the grand pyramidal tower above the room where the deity is enshrined in a temple. It refers to the chariot of gods. These flying elevators refer to the psychological state that elevated us towards the divine potential. Therefore, it was reflected through the real things - objects created by ancient scientists and architects.

- Virupaksha temple, Hampi –
- Sri Ranganatha Swamy Temple, Tamil Nadu

The perception about sacred space has diversified in various ways. The germ of this idea lies in the fact that temple is a holy, spiritual and peaceful space, sacred experience can be accessed through non-traditional forms in the modern world. Along with the main focus as to pray and worship, there have been allied aspects and corresponding structures like meditation centre, spiritual and skill development centre, research and institute, etc.

• Jetavana project, Kopagaon, Maharashtra by Ar. Sameep padora –	spiritual and skill development centre
• Isha Yoga centre, Velliangiri Mountains	Home of Brahmacharis meditation hall (a pillarless structure with a dome and an underground water body)
• Parmarth Niketan, Rishikesh	located on the riverside with the backdrop of Himalayan ranges, yoga courses and accommodation for devotees
• Mantrimandir, Auroville	meditation chamber, symbolically represents cosmic egg, dodecagonal in plan with a conical roof, the super structure is supported by four pairs of 38-metre-long sickle-shaped piers which are the principal load-bearing components.

- Continuing the tradition –

When man started living in settlement, communities were formed. Due to similarities in faith, belief, lifestyle, economic condition, region and locality, “religion” started growing up. As a result, religious temples were formulated conceiving a particular religion and built symbolically.

So as the religions have expanded across the world, religious temples have spread all over the world. Buddhist and Hindu temples are seen beyond Indian continent as well like Bangkok, Thailand, Sri Lanka, etc.

Temples not only constitute the spread of religion but also serve as architectural heritage and traditional identity. They have been conserved over the years as our treasure and will be continued to do so. Now a days, they have become popular tourist spots or heritage sites; generally, offset from the urban cities.

- Relevance of temples –

There are many aspects that can be extracted and implemented into contemporary structures from the study of traditional Indian temple architecture. It is also necessary to preserve and look back to our treasury time to time so that we don't go away from it.

Considering the needs and demands of today's time, worship or pray is not the sole function of temple; Rather there have been additions of many allied functions and spaces to the main idea of elevating towards divine potential. Even if the traditional paradigms of temples in terms of form, aesthetic, materials, orientation, etc. won't be relevant in the coming era, we can definitely draw lines from them and enrich our tradition.