Wada Nirmiti Education Society's
GURUKUL GLOBAL SCHOOL
WORKSHEET

SUB: **LESSON:** **STD: VIII**

NAME: _____ ROLL No: _____ DATE:

Multiple Choice Questions

1. Which Harappan site is particularly noted for its extensive use of locally available stone and a highly fortified 'Castle' area?
(a) Mohenjo-daro
(b) Harappa
(c) Dholavira
(d) Lothal

2. What architectural innovation did Harappan builders introduce in well construction to prevent walls from collapsing under soil pressure?
(a) Interlocking trapezoid-shaped bricks
(b) Iron rebar reinforcement
(c) Circular cement plastering
(d) Wooden beam lining

3. The ornamental gateways erected at the entrance of stupa enclosures, depicting rich scenes of urban and rural life, are known as:
(a) Gopurams
(b) Toraṇas
(c) Shrikharas
(d) Vedikās

4. Which famous cave complex contains Cave No. 10, featuring a massive seated Buddha in a teaching pose set against a stupa with an arched ceiling imitating wooden beams?
(a) Ajanta Caves
(b) Ellora Caves
(c) Udayagiri-Khandagiri Caves
(d) Elephanta Caves

5. The sacred water tanks attached to classical South Indian temples, utilized for rainwater harvesting and ritual bathing, are called:
(a) Stepwells
(b) Bāoris
(c) Pushkariṇīs
(d) Johads

6. In classical temple architecture based on Shilpaśhāstra, what term designates the innermost sanctum chamber housing the main deity's idol?

(a) Maṇḍapa
(b) Gopuram
(c) Garbhagriha
(d) Prākāra

7. The 60-metre-tall Brihadīśhvara Temple at Thanjavur, renowned for its massive monolithic Nandi statue and granite vimāna, was commissioned by which Chola ruler?
(a) Rajendra Chola I
(b) Rājarāja Chola I
(c) Karikala Chola
(d) Parantaka I

8. The exquisite Dilwara Temples located at Mount Abu, Rajasthan, are constructed primarily from which material?
(a) Red sandstone
(b) Fired terracotta bricks
(c) White marble
(d) Basalt rock

9. Which distinct architectural style blends traditional Indian craftsmanship with Islamic features such as domes, pointed arches, minarets, and intricate stone jālis?
(a) Indo-Saracenic architecture
(b) Dravidian architecture
(c) Nagara architecture
(d) Indo-Islamic architecture

10. Traditional mansions in Rajasthan's Shekhawati region, famous for their central courtyards and vibrant fresco paintings on walls, are called:
(a) Havelis
(b) Chettinadu houses
(c) Chhatrīs
(d) Cenotaphs

Short Answer Questions
1. Describe the sophisticated hydraulic engineering system uncovered during excavations at Shringaverpur in Uttar Pradesh.
Answer: Excavations at Shringaverpur revealed an elaborate series of large interconnected water tanks constructed near the river Ganga. During seasonal floodings, river water was diverted through a fed channel into initial settling basins where suspended silt settled down. The clarified water then flowed into subsequent storage tanks, demonstrating advanced water harvesting, filtration, and storage engineering in ancient India.
2. Explain the philosophical concept of 'Puruşha' as applied to classical Indian temple architecture.
Answer: In Shilpaśhāstra treatises, a classical temple is conceptualized horizontally and vertically as a symbolic representation of Puruşha (the cosmic being) as well as the human body. Vertically, the top kalasa and shikhara/vimāna correspond to the head, the mandapa corresponds to the torso, and the lower elevated platform represents the feet. Horizontally, entering the outer gopuram and advancing

toward the sacred garbhagriha represents a spiritual journey from the outer material world into inner cosmic consciousness.
3. Highlight the architectural features and climatic adaptability of Chettinadu houses in Tamil Nadu.
Answer: Chettinadu mansions were built by a prosperous merchant community incorporating materials sourced worldwide, such as Burmese teakwood and Italian marble. They feature large central courtyards surrounded by carved wooden pillars and sloped tiled roofs. Architecturally, these courtyards promote natural ventilation and cooling suited to the hot tropical climate, while providing functional space for family rituals, social gatherings, and household activities.

Long Answer Questions
1. Analyze the structural components, symbolic evolution, and ritual practices associated with early Buddhist stupa architecture.
Answer:
Stupa architecture developed significantly from the 3rd century BCE as monumental centerpieces of Buddhist reverence:
• Core Definition & Function: A stupa is a hemispherical mound or dome-shaped structure built of brick or stone to enclose sacred relics of the Buddha or revered monks.
• Structural Components: Key elements include the Aṇḍa (hemispherical dome), Vedikā (encircling stone railing defining the sacred boundary), and Toraṇas (ornamental gateways placed at cardinal points).
• Ritual Practices: Devotees perform 'Pradakshina' by walking clockwise around the stupa along the lower or upper pradakshina paths within the vedikā enclosure.
• Early Aniconic Symbolism: Early stupa carvings at sites like Sanchi and Bharhut represented the Buddha symbolically through footprints, the wheel of dharma (dharmachakra), or the stupa itself rather than human figures.
• Monumental Evolution: Patronized by rulers like Ashoka, stupas grew into elaborate artistic complexes covered with narrative reliefs portraying scenes from everyday life and Jataka tales.

2. Discuss the origin, key architectural elements, and synthesis of styles in Indo-Islamic architecture with examples.
Answer:
Indo-Islamic architecture emerged in India as Islamic structural traditions integrated with skilled native Indian craftsmanship:
• Key Structural Elements: Dominant features include large central domes, true and corbelled arches, towering minarets for calls to prayer, and directional niches (mihrab) pointing toward Mecca.
• Synthesis of Craftsmanship: Local Hindu and Jain artisans contributed traditional techniques, resulting in intricate floral motifs, decorative calligraphic inscriptions from the Qur'an, and geometric latticework screens (jālis).
• Structural Examples: The 15th-century Jama Masjid in Ahmedabad displays yellow sandstone construction blending temple-style pillars with Islamic arches and minarets. Similarly, Delhi's 17th-century Jama Masjid built by Shah Jahan incorporates red sandstone, white marble domes, and vast courtyards.
• Integration of Regional Styles: In Rajasthan and Central India, Indo-Islamic buildings adopted local features like overhanging balconies (jharokhās) and domed pavilions (chhatrīs).

• Tomb & Palace Complexes: Structures such as Humayun's Tomb and the Taj Mahal showcase symmetrical charbagh garden layouts, marble inlay work (pietra dura), and grand double-domed mausoleums.

3. Examine the historical significance, strategic design, and environmental cooling mechanisms incorporated in Indian fort and palace complexes.

Answer:

Forts and palaces fulfilled dual military defense and administrative roles across Indian regions:

• Strategic Location & Defense: Forts like Mehrangarh in Jodhpur were built atop steep hills commanding expansive views of surrounding plains, featuring thick red sandstone ramparts, heavy fortified gates, and defensive bastions.

• Interior Layout & Functionality: Complex interiors accommodated royal living quarters, audience halls (Divan-i-Aam and Divan-i-Khas), military barracks, staff quarters, and stables. Separate quarters were designed for men and women.

• Artistic & Regional Synthesis: Complexes like Orchha Fort-Palace exhibit a seamless blend of Rajput and Mughal styles, adorned with painted murals, stone carvings, and riverside cenotaphs (chhatrīs).

• Traditional Cooling Systems: Palaces implemented ingenious eco-friendly cooling methods. At Agra Red Fort, water from the Yamuna River was lifted using Persian wheels into overhead tanks, flowing through terracotta pipes to power interior fountains and marble pools that acted as natural air conditioners.

• Climate-Responsive Residential Features: Fort residences featured open courtyards, thick masonry walls, underground chambers, and latticed stone screens (jālis) to maintain comfortable indoor temperatures in arid regions.