

Taj Mahal was built in Agra by Shah Jahan as a mausoleum for his deceased wife Mumtaz Mahal. Taj Mahal was the apogee of the evolutionary architectural process in medieval India.

The sublimity of the building comes from its orderly, simple plan and elevation, amazingly perfect proportions or symmetry, the ethereal quality marble has lent to it, the perfect setting of *bagh* and river and the pure outline of the tomb silhouetted against the sky. The patina the Taj has lends it a different hue at various times of day and night.

The Taj complex is entered through a monumental red sandstone gateway the opening arch of which beautifully frames the mausoleum. The tomb is laid out in a Chahar Bagh, criss-crossed with paths and water courses, interspersed with pools and fountains. The structure is placed on the northern extremity of the *bagh* instead of the middle to take advantage of the river bank.

A straight path through the bagh reaches the plinth of the tomb from where is accessed the floor terrace of the edifice. At the corners of the terrace stand four tall. tapering minarets, one hundred and thirtytwo feet high. The main body of the building is topped with a drum and dome and four cupolas forming a beautiful skyline. The plinth, the walls of the structure and the drum-dome are in perfect proportion to one another. Towards the west of the white marble-faced tomb lies a red sandstone mosque and a similar construction in the east to maintain balance. Marble for the building was quarried from the Makrana mines in Rajasthan and this white edifice is contrasted with the red sandstone of the surrounding structures.

The tomb structure is a square with chamfers forming eight sides, recessed with deep arches. This structural stylisation produces in the elevation of the building a variety of contrasting planes and shade and solids and voids effects. All sides of the building, the twin elevations of floor to roof and roof to pinnacle, atop the foliated crest of the dome, measure 186 feet each.

The interior arrangements of the mausoleum consist of a crypt below and a vaulted, octagonal tomb chamber above, with a room at each angle, all connected with corridors. Light to every part of the building is obtained by means of carved and perforated *jalis*, set in the arched recesses of the interior. The ceiling is as high as the façade creating a void with the help of a double dome.

Four types of embellishments have been used with great effect for the interior and exterior surfaces of the Taj Mahal. These are stone carvings in high and low relief on the walls, the delicate carving of marble into jalis and graceful volutes (spiral ornament on the pillar), and the creation of arabesques with pietra dura (yellow marble, jade and jasper) on walls and tombstones and geometric designs with tessellation. Lastly, the art of calligraphy is used with the inlay of jasper in white marble to write Quranic verses. Calligraphy provided a decorative element on the walls and a continuous connection with the Almighty.









Gumbad is situated in Bijapur in the Bijapur District of Karnataka. It is the mausoleum of Muhammad Adil Shah (1626–1656), the seventh Sultan of the Adil Shahi Dynasty of Bijapur (1489–1686). Built by the ruler himself, it is a striking edifice in spite of being unfinished. The tomb is a complex of buildings such as a gateway, a Naqqar Khana, a mosque and a sarai located within a large-walled garden.

The Gumbad is a monumental square building topped with a circular drum over which rests a majestic dome, giving the building its nomenclature. It is built of dark gray basalt and decorated plasterwork. Each wall of the tomb is one hundred and thirty-five feet long and one hundred and ten feet high and ten feet thick. With the drum and the dome, the building rises to a height of over two hundred feet. The tomb has only one square chamber and the dome, with a diameter of one hundred and twenty-five feet, it covers an uninterrupted floor space of 18,337 square feet, the second largest in the world.

The tomb chamber contains the burial place of the Sultan, his wives and other relatives, while their real graves lie perpendicularly below in a vault, accessed

by stairs. The hemispherical masonry dome over a square base was constructed with the help of pendentives. These pendentives not only lent shape to the dome but also transferred its weight to the walls below. New vaulting systems consisting of arch-nets or stellate forms in squinches were created to cover angles formed by intersecting arches.

The building has an amazing acoustical system. Along the drum of the dome there is a whispering gallery where sounds get magnified and echoed many times over.

At the four corners of the building are seven-storeyed octagonal spires or minaret-like towers. These towers house staircases leading to the top dome. The drum of the dome is decorated with foliation. A heavily bracketed cornice resting on corbels is a distinctive feature of the facade.

Gol Gumbad is a fine convergence of many styles located in medieval India. Monumentality, majesty and grandeur, integral aspects of the architectural experience in India, are associated with buildings of Bijapur. While its structural particularities of dome, arches, geometric proportions and load bearing techniques suggest Timurid and Persian styles, it is made of local material and is decorated with surface embellishments popular in the Deccan. Four towers at the corners are reminiscent of turrets attached to mosques such as Qila-i Kuhna Masjid and the Purana Qila in Delhi.



Drum of the Dome



Whisper Gallery

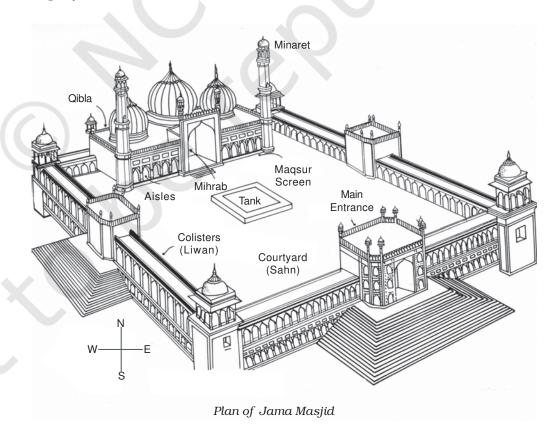


Jama Masjid, Delhi

#### JAMA MASJID

Large mosques, spanning huge spaces, also dotted the landscape of the Indian sub-continent in medieval times. Congregational prayers were held here every Friday afternoon which required the presence of a minimum of forty Muslim male adults. At the time of prayers (on Fridays) a *Khutba* was read out in the name of the ruler and his laws for the realm were also read out. In medieval times, a city had one Jama Masjid, which along with its immediate surroundings became the

focus of the lives of the people, both Muslim and non-Muslim. This happened because a lot of commercial and cultural exchanges were concentrated here besides religious and indirect political activity. Generally, such a mosque was large with an open courtyard, surrounded on three sides by cloisters and the *Qibla Liwan* in the west. It was here that the *mihrab* and the *mimbar* for the *Imam* were located. People faced the *mihrab* while offering prayers as it indicated the direction of the *Kaaba* in Mecca.



### EXERCISE

**PROJECT** 

F. Materials used

for construction

of the structure

- 1. What do you understand by the term 'Indo-Islamic' or 'Indo-Saracenic' architecture? Can you think of another nomenclature? How did this architecture evolve in India?
- 2. What types of buildings were added in India in the thirteenth century?
- 3. Name four styles of Indo-Islamic architecture.
- 4. What was the significance of a fort in medieval India? What were the strategic devices adopted in the construction of forts to confuse or defeat the enemy?
- 5. Which forms of secular architecture evolved during medieval times? What significance did these buildings have in the socio-cultural lives of contemporary people?
- 6. How does Mandu showcase the fact that humans adapt to their environment?
- 7. In spite of being unfinished how does Gol Gumbad symbolise the grandeur and majesty of Indo-Islamic architecture?
- 8. Which are the places where the dead are buried? How do these differ from each other?
- 9. Why is the word 'perfection' associated with the Taj Mahal?

#### A. Period-Region-B. Typology of the H. The present Political Association structurelocation and Secular/Religious status of the structure. Have you visited any medieval structure in your locality/ G. Is it conserved? C. Purpose of Should it beregion/country? the structure conserved? Document the following aspects of the structure:

E. Decorative forms

on the structure

D. Architectural

forms located

in the structure



### GLOSSARY

Agate A fine-grained variegated chalcedony, its

 $colours\ arranged\ in\ stripes,\ blended\ in\ clouds,$ 

or showing moss like forms

Amalaka Ribbed, lenticular or globoid part resembling the

amala (Indian gooseberry fruit) crowning the top

of the North Indian style shikhara

Anda Semi-circular structure typically used for

Buddhist stupa

Arabesque An ornamental design consisting of intertwined

flowing lines, leaves and flowers, a feature of

the Indo-Islamic architecture

Ardhmandap Semi-hall in front of garbhagriha of the temple

Ashtadikpalas Guardians of the eight directions

Ayudhas Weapons

Batter Slope in the wall

Bodhisattva In Buddhism, Bodhisattva refers to the previous

births of Gautam Buddha

Bosses Circular embossed decorations, usually in stone

of contrasting colours located on either side of

an arch and within the spandrels

Buddhism A religion originated in the sixteenth century

BCE with the preachings of Buddha

Burin A pointed tool of flint or stone with a transverse

edge made by the removal of one or more flakes. Used for working bone, antler and ivory, and,

perhaps, for engraving

CE Common Era, replacing AD or Anno Domini

(Era of the Lord)

Calligraphy The art of producing decorative handwriting

Caturasra Square

Chhatra Umbrella-like structure on top of the *stupa* 

Chhatri Cupola resting on four pillars with a dome or

pyramid-shaped roof

Chahar Bagh A square, walled garden divided into four by

intersecting water channels

Chaitya Arch Semi-circular arch with pointed tip in the centre

towards the top

Chaitya Place of congregation and worship

Chakra Wheel, a symbol used for Buddha's first sermon

at Sarnath

Chamfer To cut off the edge or corner, thereby, increasing

the number of sides

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Chert A flint-like material, usually black or dark

brown in colour. Although it has a conchoidal fracture like flint it is not so fine-textured

Chevron Patterning V-shaped patterns

Corbel The stone or wooden bracket laid horizontally

to support a cornice or an arch

Cornice A moulded roof-line

Crystal A high quality, clear, colourless glass or an

object, especially a vessel or ornament, made

of such glass

Dado panel Lower part of the interior wall when it is finished

differently from the rest of the wall. Some excellent examples are Hoyasal temples of Halebid, Jamali Kamali tomb in Mehrauli and Turkish Sultan's palace in Fatehpur Sikri, Agra

Dargah Shrine of a Sufi saint, where the saint's grave

called mazar is located

Dhammachakrapravartan First sermon by Buddha at Sarnath near

Varanasi

Dravid Normally used for people, culture, language and

architectural style of South India

Dressed stone Stone which is cut to size and polished

Faience Blue-coloured artificial glass-like material.

Faience was used in a variety of ornaments and

pieces of jewellery

Gahapati Big land-owner or big farmer involved in farming

and trade

Garbhgriha Sanctum sanctorum

Gopuram Main gateway; the storeyed structure over the

entrance or entrances through the enclosing

walls to the premises of a temple

Harmika Small square fencing atop the anda or

semi-circular dome of stupa

Imam The person who leads a Muslim congregation

in prayers. Over a passage of time, this position

became hereditary

Intaglio The process of cutting a design into the surface

of a small hard stone or gem

Jagmohan Rectangular or square hall in front of a

sanctuary or main temple — a term used for

temple architecture of Odisha

Jainism One of the most ancient religions, it is a path of

victory (jina) over life's stream of rebirths through ethical and spiritual practices.



Jali Ornamental, perforated lattice screens with arabesques, star motifs and other geometric designs such as pentagons, hexagons, octagons

and circles

Jasper A variety of quartz that may be red, yellow or

brown; long used for jewellery and

ornamentation

Jataka Stories of the previous births of Buddha

Jati Caste

Kalash Wide-mouthed pot; ornamental pot-design

decorating the *shikhara* of a temple

Keystone A central stone at the summit of an arch

Kos minar Distance marker or milestone in the shape and

size of a tower

Kuta A shrine of square plan

Lapis lazuli A rich blue semi-precious stone. The main

source in the ancient world was the mountains of Badakshan, northern Afghanistan, from where it was traded widely. Lapis lazuli was used as inlay in ornaments, jewellery,

seals, etc.

Linga Phallus, the form in which Lord Shiva is being

worshipped

Mahamandapa Big hall in the temple

Mahaparinibban Death of Lord Buddha — liberating him from

the cycle of life and death

Mandap Hall

Magbara Mausoleum or tomb

Medallion Circular discs in the spandrels of arches

decorated with motifs or calligraphy

Mihrab Prayer niche indicating the direction of Mecca

Mimbar Stepped pulpit in the Jama Masjid or Friday

mosque from where the Khutba was read

Mukhlinga Phallus with face

Multiple foliations Many curves in an arch

Mural Paintings made on the walls of caves, buildings

or temples in Fresco or any other style

Nagara North Indian style temple architecture

Naqqar khana Drum house from where ceremonial music was

played which was usually situated over the gate. It was a popular feature in Mughal palace-

complexes

Natyamandapa Dancing hall in front part of the temple

or Rangmandapa

Panchayatana Main temple surrounded by four sub-shrines

in each corner

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Pendentive A triangular bracket in the angle of two walls,

connecting the base of the dome to its

supporting arches

Phamsana A buildings/ temple which tends to be broader

and shorter than Latina type

Pietra-dura Pictorial mosaic work using semi-precious

stones. Found on walls, cenotaphs and marble  $\,$ 

*jalis* in the Taj Mahal

Polychrome An object or a work composed of or decorated in

many colours

Pradakshina Circumambulation

Qibla Liwan The wall of the mosque in the direction of Mecca

Qila-i Kuhna Masjid Built by Humayun or Sher Shah between 1530

and 1545, it is located inside Purana Qila in

Delhi

Quartz A variety of stone found in many parts of the

world and variously used for toolmaking and in ceremonial contexts. Varieties of quartz include agate, chalcedony, chert, flint, opal and rock

crystal

Rekhaprasad or

Latina

This type of temple has square *shikhar* at the base and its walls curve slowly inward towards

the top

Rupkar/Shilpi Artisan

Sabha Mandapa Assembly hall

Saracenic A style of architecture popular with Muslims in

West Asia particularly from the eleventh to the

fourteenth century

Sarai Dharamshala or a traveller's lodge

Shala ayatasara Elliptical

Shikhar Superstructure above the garbhagriha in the

north Indian style of temple

Shilpa texts Ancient Indian texts/manuals describing the

elements and principles of art and architecture

to be practised by artists

Shraman A Buddhist or Jain sect, whose followers used

to wander from place to place

Sovereignty The authority of a ruler/state to govern himself/

itself absolutely independently

Spandrels The almost triangular space between two sides

of the outer curves of an arch and a rectangular

enclosure

Squinch An arch spanning the corners of a square

chamber and acting as support for a dome

Steatite A greyish or greenish stone, which is generally

soft and can easily be worked to make figurines,

vessels, seals and other objects



Varna

Stellate Arch nets arranged in a radiating pattern like

that of a star

Sthapati Architect

Stupa A mound-like structure containing relics of

Buddha or Buddhist monks worshipped by

Buddhists

Stucco A fine plaster used for coating wall surfaces

Suzerainty A sovereign/state having some control over

another ruler/state who/that is internally

autonomous

Tablet A regularly shaped, separate panel, or a

representation thereof, often bearing an

inscription or image

Terracotta Literally, 'baked earth' mainly used to refer to

fairly coarse, porous clay that, when fired, assumes a colour ranging from dull ochre

to red

Tessellation Decoration on walls and floors with mosaic

Torans Carved, serpentine-shaped ceremonial

gateways

Trefoil Three curves in an arch

Turquoise A semi-precious stone, sky blue to pale green

in colour, highly prized for its use in jewellery

by many ancient cultures

Valabhi Sub-type of nagara temple

Vanga Ancient name of the Bengal region

Four-fold division of the society based on profession i.e. *Brahmana*, *Kshatriya*, *Vaishya*,

Shudra during ancient India

Vesara Term used for the independent style of the

temple during the time of the Chalukyas of Karnataka. It consists of a combination of the northern (*nagara*) and southern (*dravida*) styles

Vihara Place of residence of Buddhist monk

Vijanain Temples having a rectangular building with a

roof that rises into a vaulted chamber

Viman Superstructure over the garbhagriha of shrine

in the south Indian temples

Volute A scroll or spiral ornament on a pillar

Voussoir A wedge-shaped or tapered stone used to

construct an arch

Vritta Circular

Yakshas/Yakshanis Demi-gods and demi-goddesses — protectors of

nature and resources

# Notes



# Notes

