The image is a collage of three photographs. On the left is a white, tiered architectural structure with arched openings. In the center is a view of the Taj Mahal through a large, ornate archway. On the right is the Qutub Minar tower, also viewed through an archway. The entire image has a warm, golden-brown color palette.

The Golden Triangle

POST STUDY TOUR REPORT
2022

[SUBMITTED BY-BATCH 2023-24]



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13. Tiloni Ladukar
14. Vaishnavi Kamble



PLACES VISITED



JAIPUR

- JANTAR MANTAR
- HAWA MAHAL
- CITY PALACE
- JAIGARH FORT
- NAHARGARH FORT
- AMER FORT



FATEHPUR
SIKRI

- TAJ MAHAL
- AGRA FORT

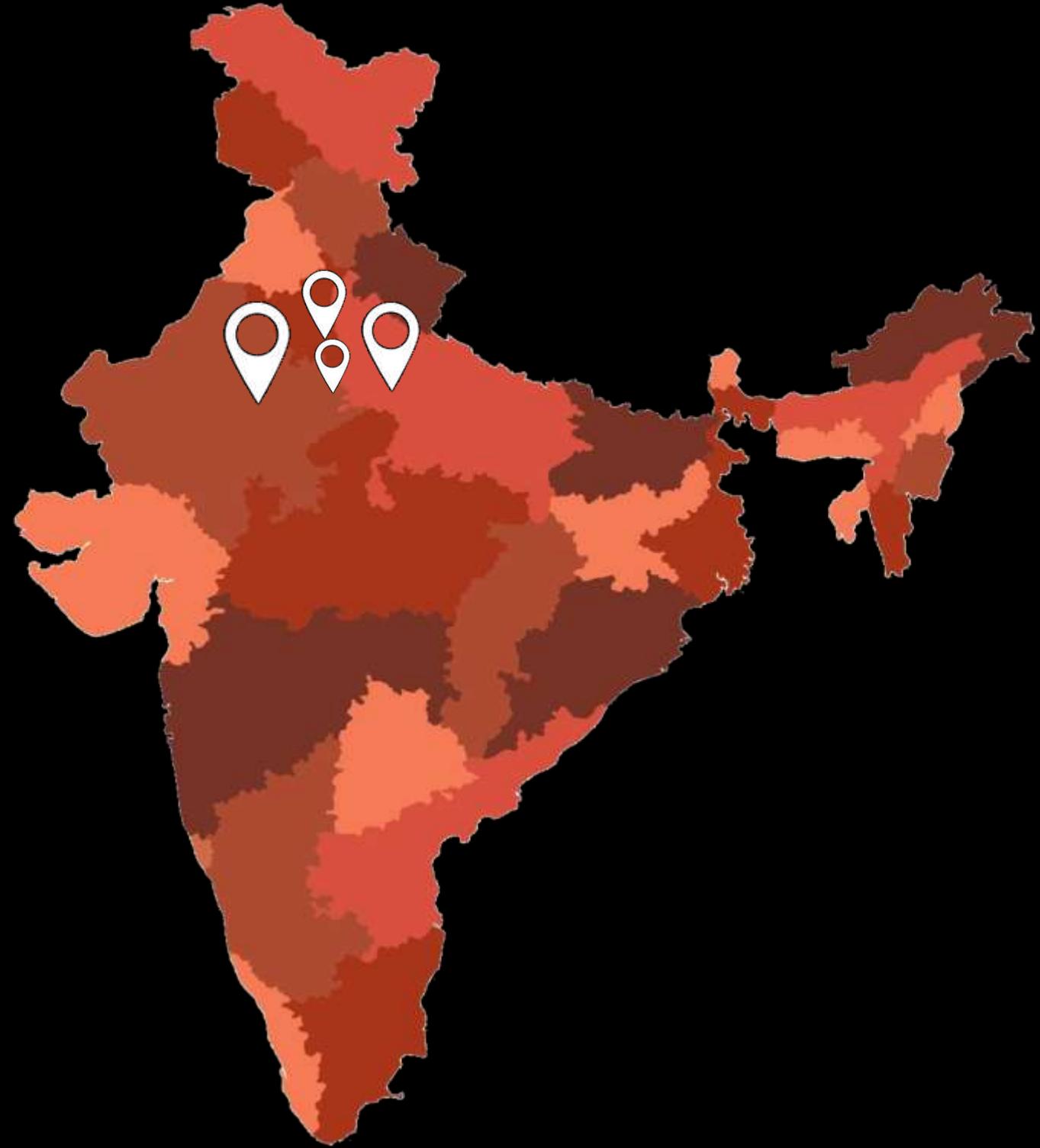


AGRA

- RASHTRAPATI
BHAVAN
- QUTB COMPLEX
- ASIAD VILLAGE
- HUMAYUN'S
TOMB



DELHI



OBSERVATION

- Total site area is 10.97 acres (44,385 sqm)
- The site has direct accessibility from the main road.
- Four trees present on the site including wild shrubs.
- No major level variation on-site.
- Bhawani Niketan School in the north.
- Army area in south of the site.
- Triton mall in the south west.
- Also space for future expansion in the west.
- Surrounded by residential, commercial, institutional buildings.



SATELLITE IMAGE

SITE STUDY

LOCATION : SIKAR ROAD, OM SHIV
COLONY, JAIPUR, RAJASTHAN
DATE: 3rd AUG 2022

INFERENCE

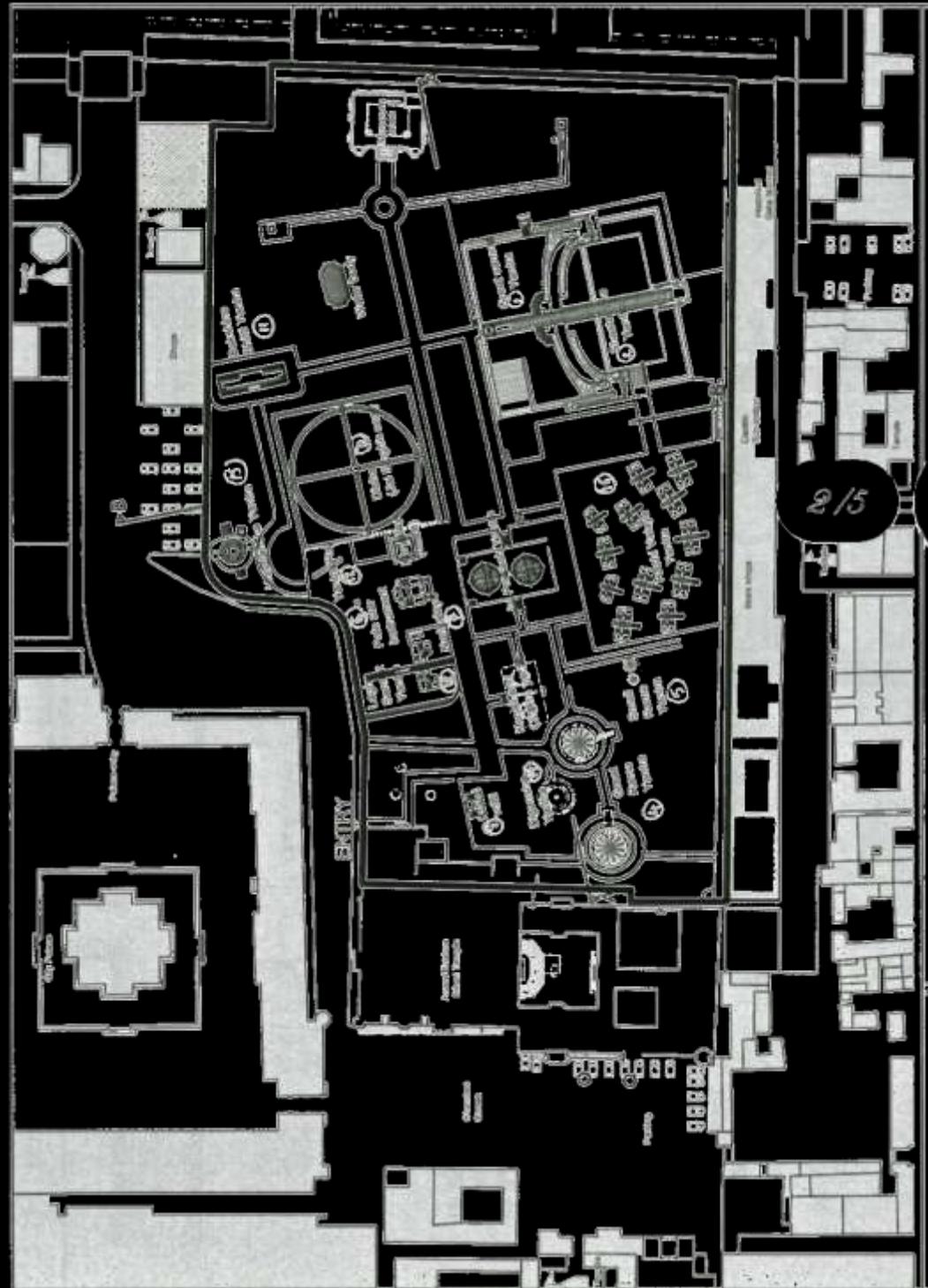
- Site is located apart from the congested area.
- Site has large area which is suitable for housing.
- Perfect site location for artisans housing as it is located in Jaipur which is famous for their handmade works.
- Site is in the city area, near the Jaipur road, can cause disturbance due to traffic.

SITE STUDY



OBSERVATION

- The name 'Jantar Mantar' is derived from Sanskrit language which means 'Calculating Instrument'.
- The Jantar Mantar monument is a collection of nineteen architectural astronomical instruments.
- It features the world's largest stone sundial, and a UNESCO World Heritage site.
- It is located near City Palace and Hawa Mahal.
- The instruments allow the observation of astronomical positions with the naked eye.
- Each instrument carries an astronomical scale, generally marked on the marble inner lining.
- Bronze tables, bricks and mortar were also employed in building the instruments in the monument spread over about 18,700 sq.m.
- It was used as a filming location.



JANTAR MANTAR

LOCATION : JAIPUR, RAJASTHAN

DATE: 3rd AUG 2022

BUILT BY :- KING SAWAI JAI SINGH II

BUILT:- 1734

AREA: 4.6 acres

INFERENCE

ARCHITECTURAL STYLE :

- It is a technical campus , of coming together of observation of the universe , society & beliefs .
- It provides an outstanding testimony of the ultimate culmination of the scientific & technical conception of the great observation devised in the medieval world.

PURPOSE :

- The observatory consists of nineteen instruments for measuring time , predicting eclipse ,tracking location of major stars as the earth orbits around the sun , ascertaining the declinations of planets , & determining the celestial altitudes & related ephemerides .
- Also, it was used to measure time.

MATERIALS USED:

- Built from local stone and marble, each instrument carries an astronomical scale, generally marked on the marble inner lining.
- Bronze tablets, bricks & mortar were also employed in building
- It was in continuous use until about 1800, then fell in disuse and disrepair.



DESCRIPTION OF YANTRAS -

CHAKRA YANTRA

Four semicircular arcs on which a gnomon casts a shadow, thereby giving the declination of the Sun at four specified times of the day. This data corresponds to noon at four observatories around the world.



RAMA YANTRA

An upright building used to find the altitude and the azimuth of the sun.



LAGHU SAMRAT YANTRA

The smaller sundial at the monument, inclined at 27 degrees, to measure time, albeit less accurately than Vrihat Samrat Yantra.



DIGAMSHA YANTRA

A pillar in the middle of two concentric outer circles, used to measure azimuth of the sun and to calculate the time of sunrise and sunset forecasts.



NADIVALAYA YANTRA

Two sundials on different faces of the instrument, the two faces representing north and south hemispheres; measuring the time to an accuracy of less than a minute.



JAYA PRAKASH YANTRA

Two hemispherical bowl-based sundials with marked marble slabs that map inverted images of sky and allow the observer to move inside the instrument; measures altitudes, azimuths, hour angles, and declinations



VRIHAT SMARAT YANTRA

(The Huge Sundial)

The smaller sundial at the monument, inclined at 27 degrees, to measure time, albeit less accurately than Vrihat Samrat Yantra.

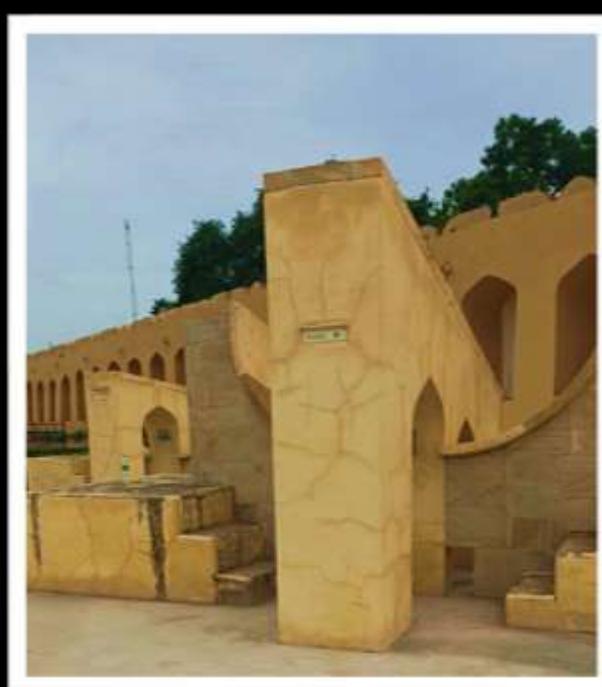


KARNTI VRITYA

Kranti Vritta Yantra (measures longitude and latitude of celestial bodies.



JANTAR MANTAR



Kapali Yantra



Yantra Raj



OBSERVATION

- City Palace Jaipur is one of the most popular monuments in the Pink City
- It was built by Maharaja Sawai Jai Singh
- It is known for its marble pillars, the carefully carved interiors as well as its lattice work that make it truly remarkable.
- The architect has managed to combine Rajput, Mughal as well as European architectural wonder.
- The entrance is through Tripola Gate which leads to Mubarak Mahal.
- This is the 'Auspicious Place' and it forms the Sawai Man Singh II museum.
- It houses a wide range of textiles that include the Kashmiri Shawls, silk sarees besides the various Royal costumes.
- Once you cross the huge brass gateway of the Mubarak Mahal, you will reach the courtyard where the Maharaja met his private audience. This is Diwan-I-Khas.
- Out here are the world's largest vessels made of silver displayed.
- Going further would take one to the hall of public audience or the Diwan-I-Aam. This chamber is well decorated with rugs and carpets.
- The Sabha Niwas of that time today houses the Art gallery. This hall is marked by two huge paintings of Lord Krishna playing Holi.
- The main reason of visiting the City Palace Jaipur is to have a look and understand the royal splendour that was enjoyed by the royalty of that era.



CITY PALACE

LOCATION : JAIPUR, RAJASTHAN.

DATE: 3rd AUG 2022

ARCHITECT: SAWAI JAI SINGH-II

ARCHITECTURAL STYLE: RAJPUT,
MUGHAL & EUROPEAN ARCHITECTURE

CLIENT: SAWAI MAN JAI SINGH II

BUILT: 1727-1732

INFERENCE

- Occupying the 'heart of Jai Singh II's city', the City Palace has been home to the rulers of Jaipur since the first half of the 18th century.
- The sprawling complex is a superb blend of Rajput and Mughal architecture, with open, airy Mughal-style public buildings leading to private apartments.
- The opulence and exquisite craftsmanship is a tribute both to the wealth of the former maharajas and their lavish patronage of the arts.
- Today, part of the complex is open to the public as the Maharaja Sawai Man Singh II Museum, popularly known as the City Palace Museum, but the beautiful Chandra Mahal remains the residence of the erstwhile maharaja.



Jaipur's Coat-of-Arms



Lotus Gate



Peacock Gate



Leheriya Gate



Rose Gate



Chandra Mahal

Each floor of this seven-storeyed palace is extravagantly decorated and has a specific name according to its function. The palace is closed to the public.



Sileh Khana

The erstwhile armoury houses the museum's collection of weapons, some lavishly decorated, and is considered among the finest in India.

Crafts demonstration area



Pritam Chowk

The "Court of the Beloved" has four delicately painted doorways representing the seasons.

Riddhi Siddhi Pol

Silver Urns

Two giant silver urns in the Diwan-i-Khas, listed in the Guinness Book as the largest silver objects in the world, carried sacred Ganges water, for Madho Singh II's visit to London in 1901



Shops

Transport Gallery



Mubarak Mahal

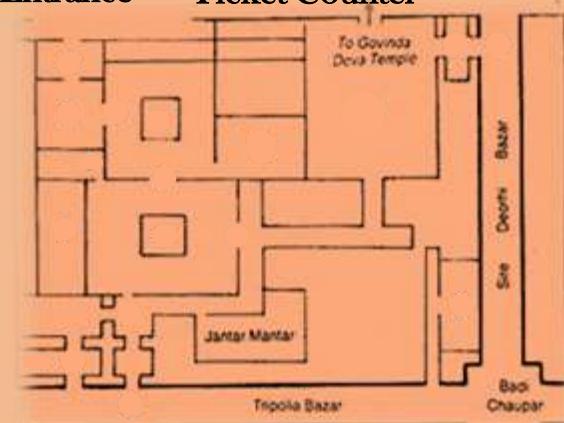
This sandstone "Welcome Palace" was built in 1900 by Madho Singh II to receive guests, hence the name. It is now the costume and textile gallery.

Entrance

Ticket Counter

Diwan-I-Aam

In the Art Gallery is this "Golden Throne" (Takh-E-Rawan) on which the maharaja sat when he appeared in public. It was either put on an elephant's back or carried by palanquin bearers.



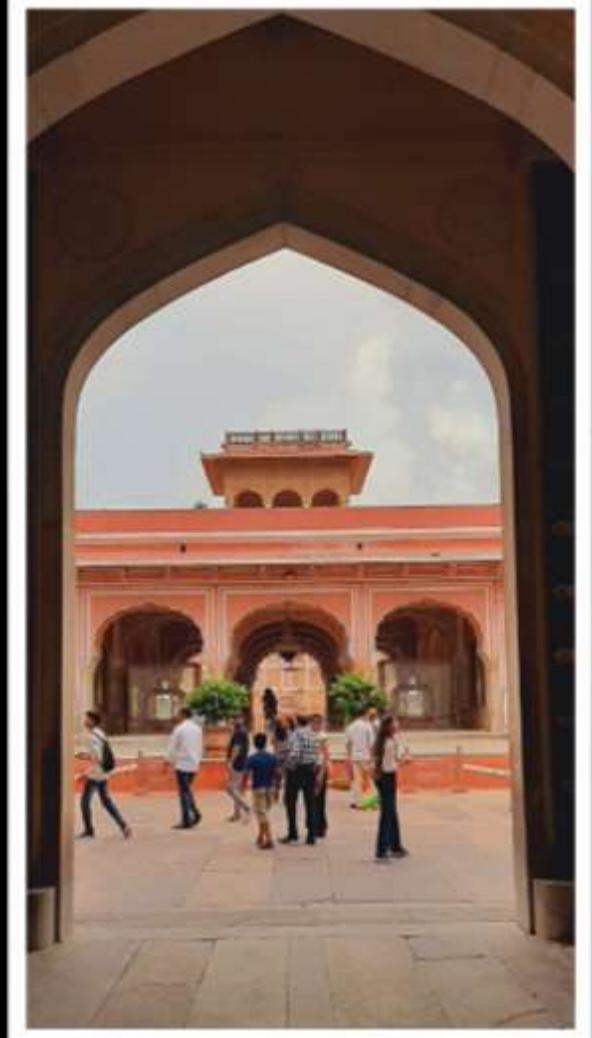
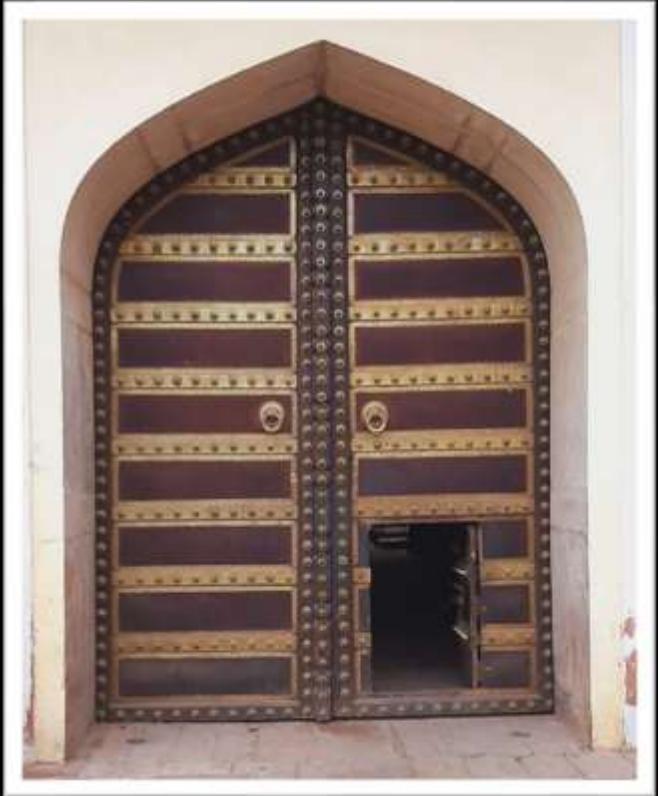
Rajendra Pol

Flanking the gateway are two large elephants, each carved from a single block of marble.



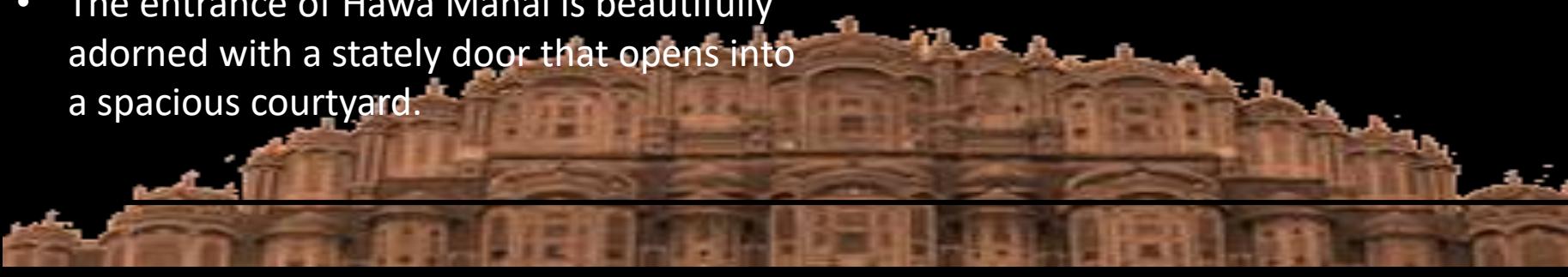
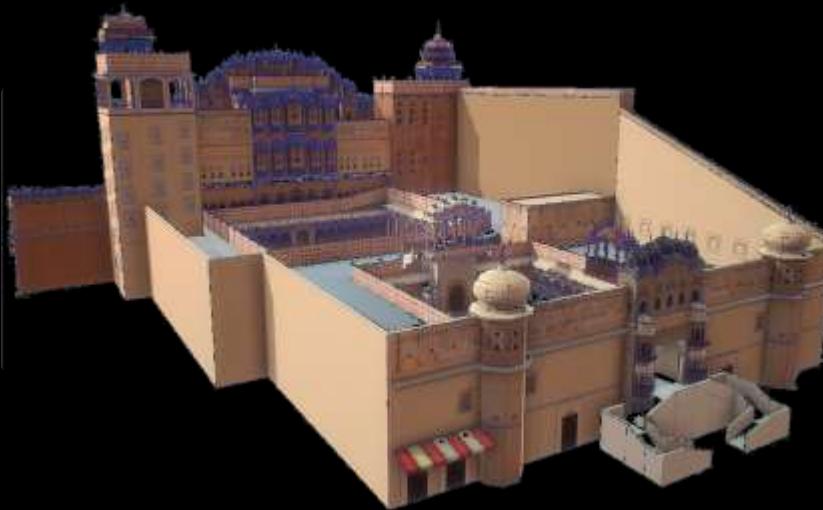
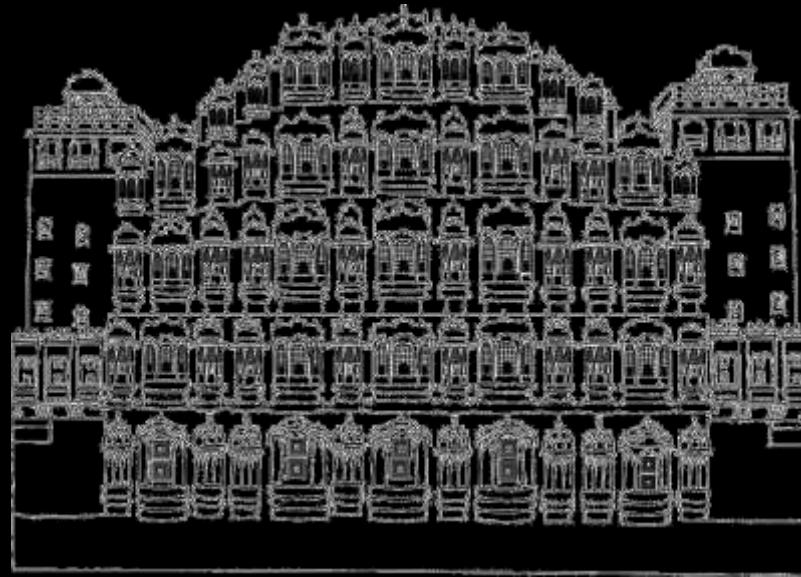
STAR FEATURES

- ★ Pritam Chowk
- ★ Mubarak Mahal
- ★ Rajendra Pol
- ★ Silver Urns



OBSERVATION

- Hawa Mahal is also known as “The Palace of Winds” or “The Palace of Breeze”
- He was a great devotee of Lord Krishna and he dedicated this mahal to the lord.
- The exterior wall of Hawa Mahal looks like a Mukut (crown), which adorns Lord Krishna’s head.
- The main motive behind the making of Hawa Mahal was to enable ladies of the royal household to watch the everyday life and royal processions of the city.
- Constructed in Pink Sandstone, it is intricately carved and borderd with white motifs.
- Motifs and carvings designed on the walls of the Hawa Mahal are prove of the efforts dedication and skillfulness of the artists of that period.
- This 5 storey pyramid shaped structure endorses 953 small peepholes.
- Each peepholes has tiny lattice worked (jail) pink windows and arched roofs with hanging cornices. The uppermost three stories are just a single room thick but at the base are two courtyards.
- The interior of Hawa Mahal are stark and plain with a mass of pillars and passages that lead to the top storey.
- The upper floors are reached through a ramp rather than the regular stairs, a device to facilitate movement of palanquins carried by servant which is a less tiresome way.
- The entrance of Hawa Mahal is beautifully adorned with a stately door that opens into a spacious courtyard.



HAWA MAHAL

LOCATION: JAIPUR RAJASTHAN

DATE: 4TH AUG 2022

ARCHITECT: LAL CHAND USTAD

BUILT BY: MAHARAJA SAWAI PRATAP SINGH

BUILT: 1799

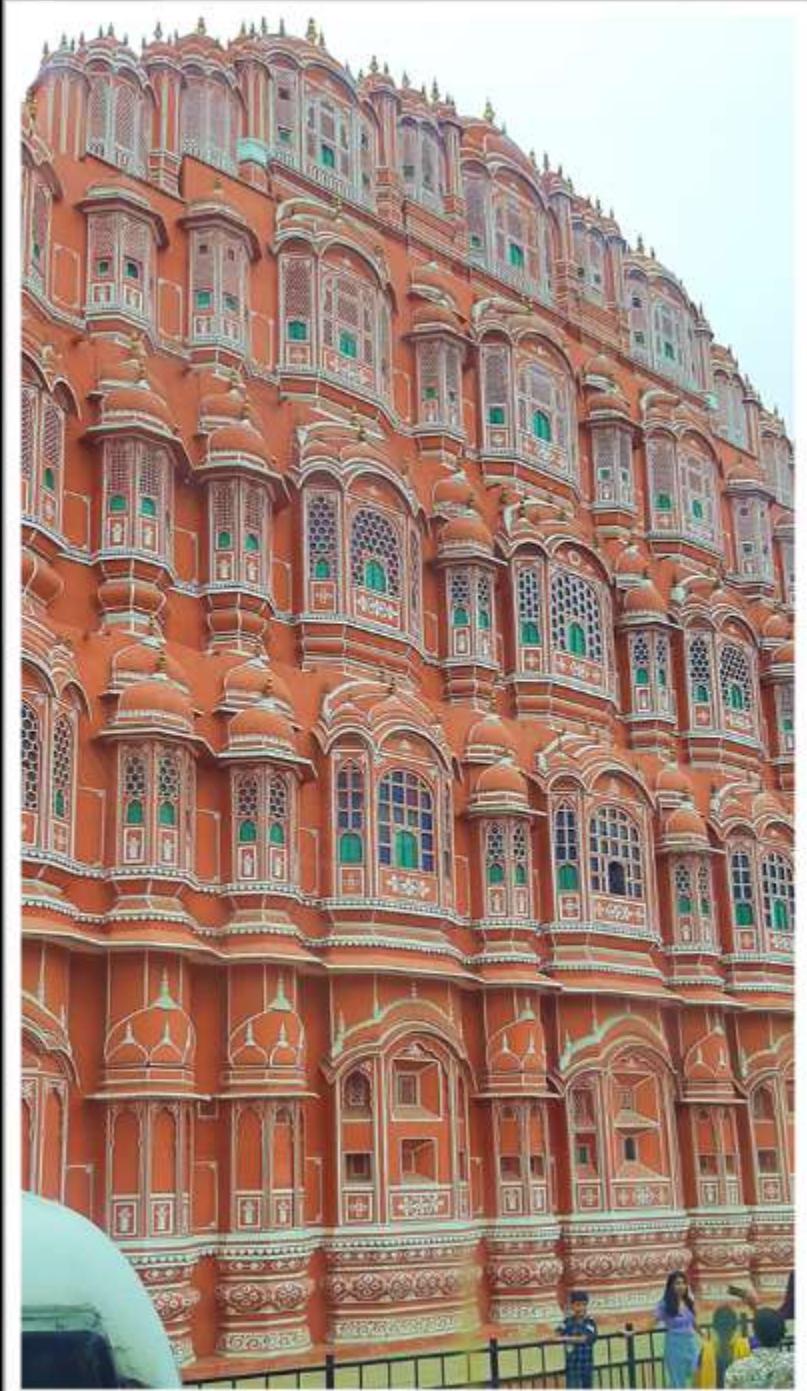
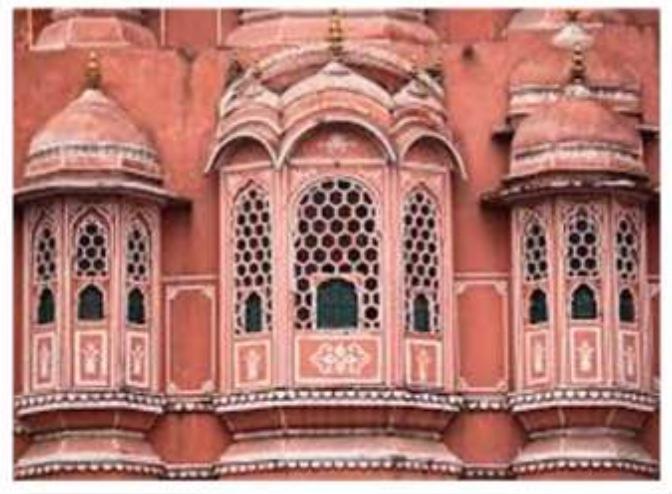
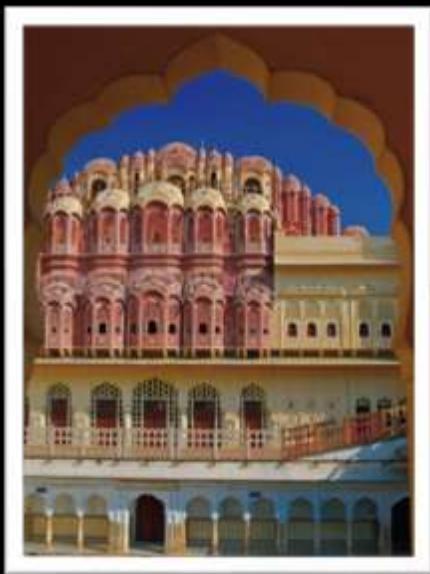
ARCHITECTURAL STYLE:

HINDU, RAJPUT AND MUGHAL ARCHITECTURE

INFERENCE

- Hawa mahal is one of the major attractions in Jaipur.
- This unique five-storey structure with small latticed windows (called Jharokhas) is a blend of Hindu and Islamic architecture.
- Hawa mahal keeps the wind blowing inside the palace.
- It was a summer retreat for many Rajputs families during olden times.
- Its five-floor exterior is akin to a honeycomb with its 953 small windows called Jharokhas decorated with intricate lattice work.
- This architectural feature also allowed cool air from the venturi effect to pass through, thus making the whole area more pleasant during the high temperatures in summer.
- Many people see the Hawa mahal from the street view and think it is the front of the palace, but it is the back.

HAWA MAHAL



OBSERVATION

- Situated on the Cheel ka teela of the Aravalli range.
- Built with the purpose of protecting Amer fort .
- The red sandstone is used in Jaigarh fort .
- The amer fort and Jaigarh fort is connected through a secret subterranean passage .
- The tunnel is used for queens to escape the fort at the time of attack or war .
- The Jaigarh fort is famous for the Jaivana canon , considering the largest canon in the world .
- The cannon was never used in any battle.
- The fort is highly fortified with thick walls of red sandstone and is spread over a layout plan with a length of 3 kilometres and a width of 1 kilometre it has an impressive square garden (50 metres within it)
- The water supply facilities in the fort was met by creating water harvesting structures in the vicinity in the Aravalli catchment.
- And conveying water through a canal on the west side of the fort over a 4 kilometres to be stored in three underground tanks below the central courtyard. 3 The largest tank had a capacity of 6 million gallons of water.



JAIGARH FORT

LOCATION : JAIPUR, RAJASTHAN.

DATE: 4th AUG 2022

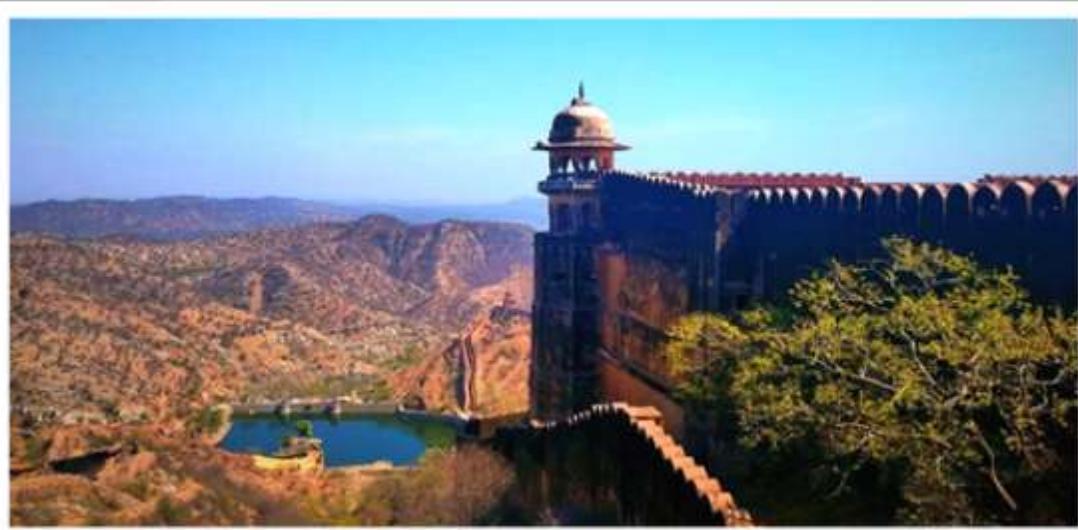
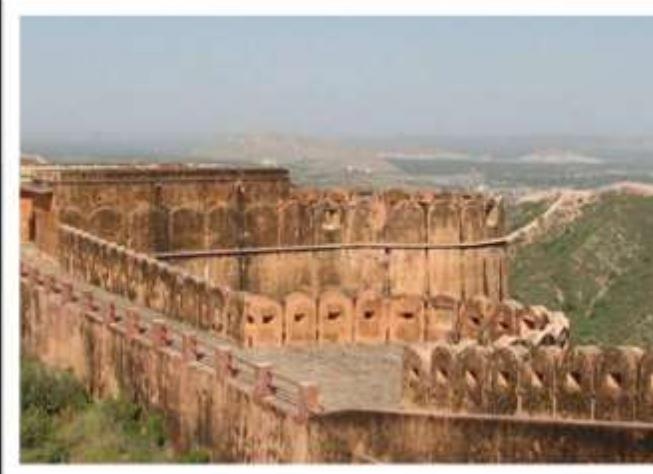
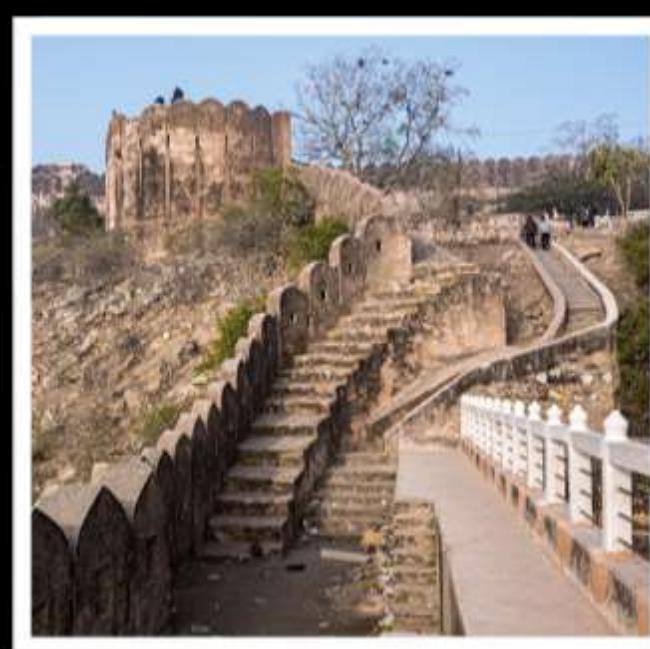
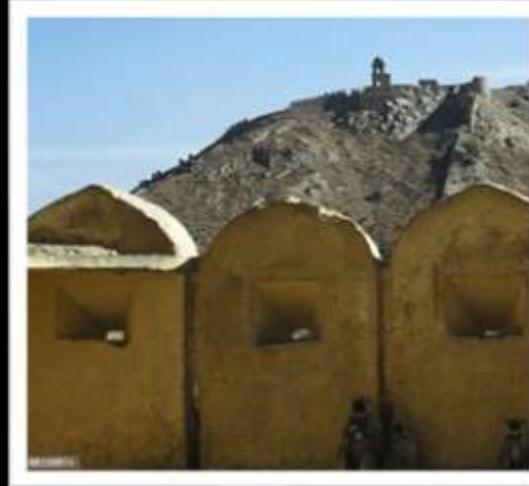
ARCHITECT: MAHARAJA SAWAI JAI SINGH-II

BUILT: 1726

INFERENCE

- The fort is highly fortified with thick walls of red sandstone
- The water supply facilities in the fort was met by creating water harvesting structures in the vicinity in the aravalli catchment .
- to be stored in three underground tanks below the central courtyard.
- It is the highest fort present in the jaipur
- The fort has windows which are made of lattices. These windows allow a complete view of the exteriors, but nothing can be observed from the outside.

JAIGARH FORT



OBSERVATION

PURPOSE :

The palace was initially constructed as a peaceful retreat for the king and the royal family, overlooking the crest of Jaipur city.

- It was originally named 'Sudarshangarh fort' and was later changed to Nahargarh, which means 'Abode of Tigers'.
- It is located on the oldest mountain range of the world, aravalli hills, and presents an eclectic view of the entire city, glittering with modern lights.
- The fort underwent a renovation by the maharaja of jaipur in the year 1868.
- In the palace the walls are adorned with traditronal motifs and floral designs.
- The interesting part of the fort is the madhavendra bhawan
- The nine wives of the king has got separate section that was two stories high.
- The queen's quarter occupied the three sides of the rectangular courtyard while the fourth side had the king's apartment.



MADHVENDRA BHAWAN

A palace mentioned above was built by Sawai Madho Singh II consisting of nine chambers for the concubines or as the records put it, queens.



SHEESH MAHAL

Mirror-work has long played a significant role in all types of decor, and Rajasthan takes the credit for introducing the world to novel ways of Utilising mirrors.



There is a section for the king too. It is astoundingly beautiful with painted chambers.

BAORIS/ STEP-WELLS

- There are two Baoris or step-wells at Nahargarh fort which are water storage systems.
- Both these Baoris are the most famous step-wells of Jaipur. While the smaller of the two is near the Madhvendra Bhawan, the most popular one is near the Nahargarh entrance from the city

NAHARGARH

FORT

LOCATION : JAIPUR, RAJASTHAN.

DATE: 4th AUG 2022

BUILT BY: MAHARAJA SAWAI JAI SINGH-II

BUILT: 1734

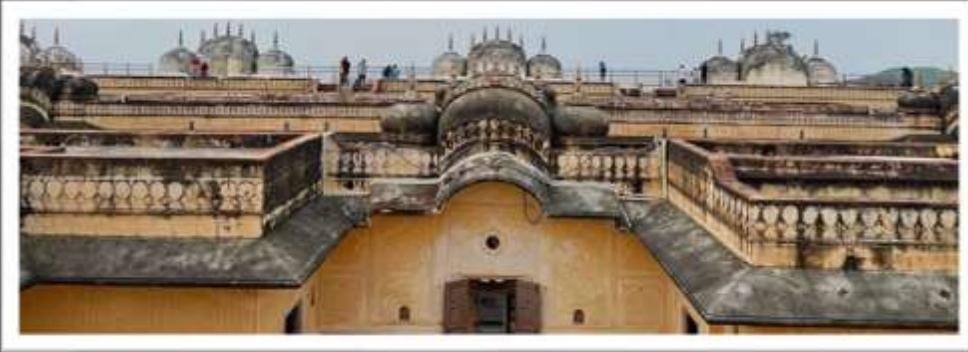
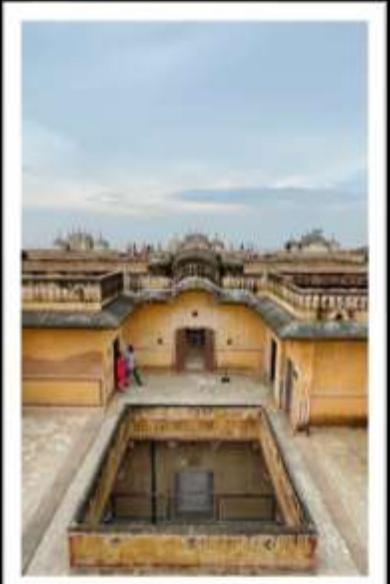
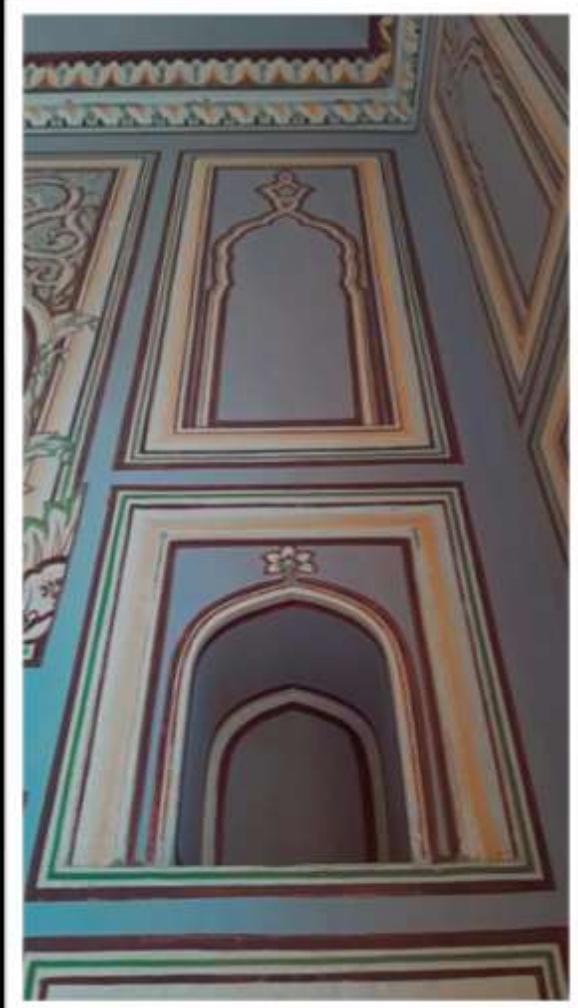
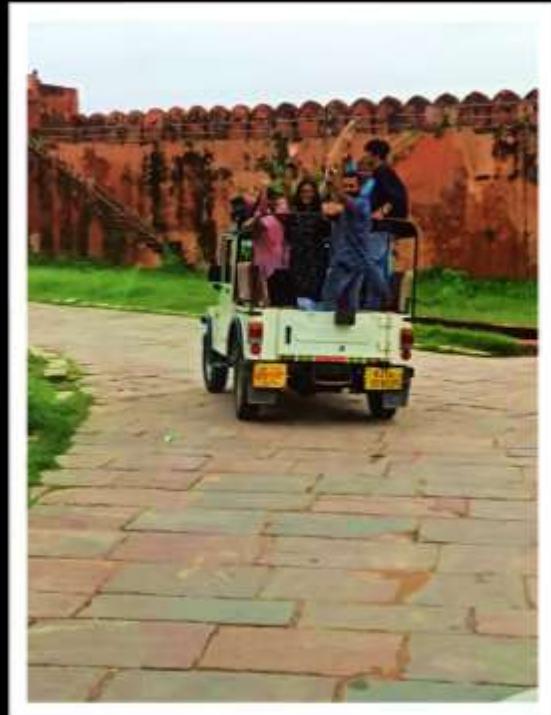
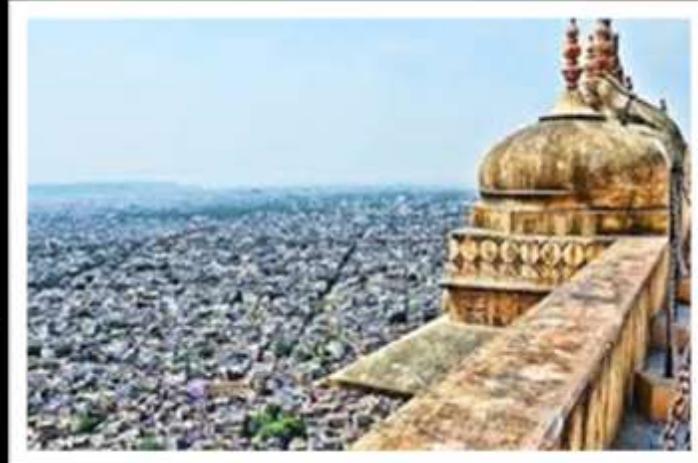
ARCHITECTURAL STYLE:

INDO- EUROPEAN ARCHITECTURE

INFERENCE

- The fort is built in a typical Rajput pattern that one finds across hill forts of Rajasthan.
- Beautiful wall fresco painting in Nahargarh fort Jaipur
- The fort was built as a defense system and therefore it has 2 step wells or water storage systems.
- The water system in the Nahargarh fort forms an important part of its architecture.
- Each of these sections of the fort is radiantly best part of the Rajputana architecture and their taste for luxurious life.

NAHARGARH FORT



OBSERVATION

- Amer is a town with an area of 4 square kilometres and located 11 kilometres from Jaipur, the capital of Rajasthan.
- Amer fort is known for its artistic style elements. With its large ramparts, series of gates and cobbled paths, the fort overlooks maota lake, which is the main source of water for the Amer palace.
- The fort has the world's third longest wall going around it after Kumbhalgarh & great wall of China.
- Fortification style : Rajput Architecture and mughal architecture .
- Material specification : Red Sandstone and Marble.



• **COBBLED PATHS**

• **RAMPS**



• **MAOTA LAKE**

AMER FORT

LOCATION : JAIPUR, RAJASTHAN.

DATE: 4th AUG 2022

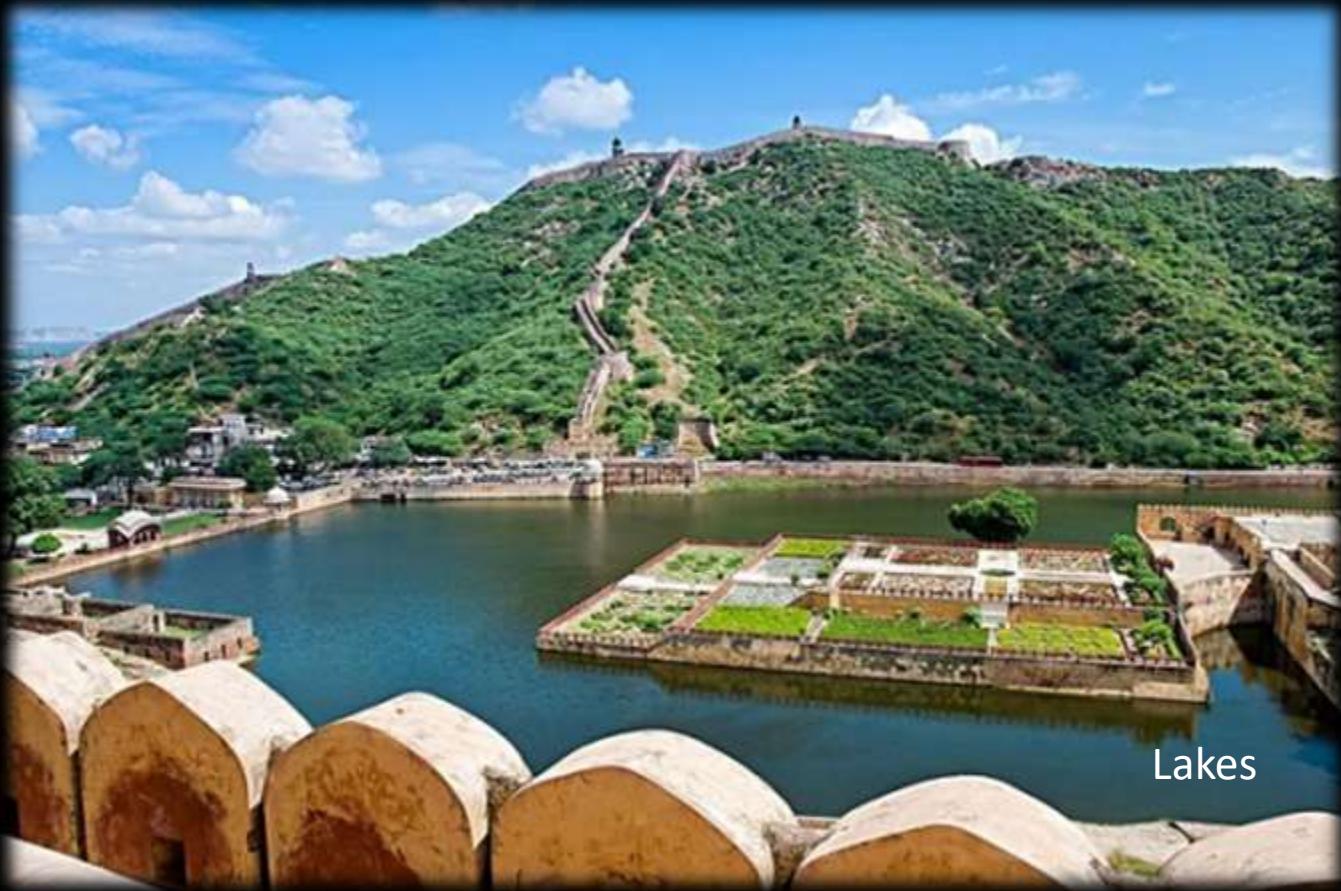
BUILT BY: RAJA MAN SINGH & SAWAI JAI SINGH

BUILT : 1592

INFERENCE

- The Amer Fort is consist of small lakes which gives fresh and cold air in the environment.
- The Diwan-i- Am have total 48 pillars of which 16 pillars are made of marbles and rest are of red sandstone.
- At the top of the pillars elephants are made which is part of Hindu culture and at bottom of pillars lotuses are made which is part of Muslim culture, therefore they tried to represent a architecture style bond between Mughal and Hindu through carved design.
- Some part of Amer Fort is painted with gold water which give aesthetic as well as a reflective wow element.
- The Sheesh Mahal is also called as winter palace, because the mirror are heated by the used of lamps so that the room would feel warm during winter.
- The amber fort is also consist of a Mughal Style chimney which they used to boil the water in a traditional way.
- The palace have a ac room in which they used the water to transfer cool air through windows to the room and to trap that cool air in room they used khas khas net on windows / doors.
- The fort have a secret tunnel which connect the Amer Fort and Jaigard Fort for the protection of kingdom.





Lakes



Diwan-i- Aam



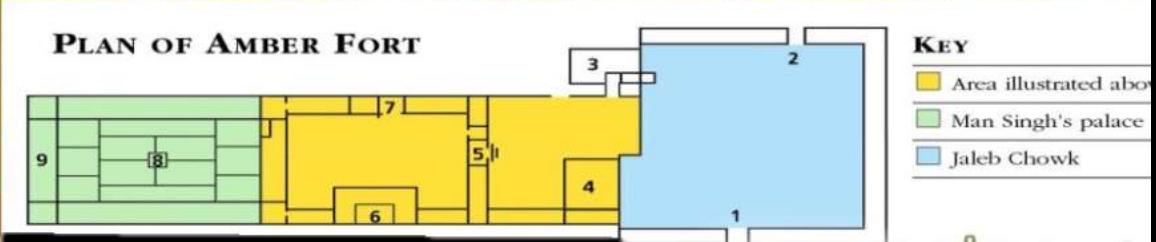
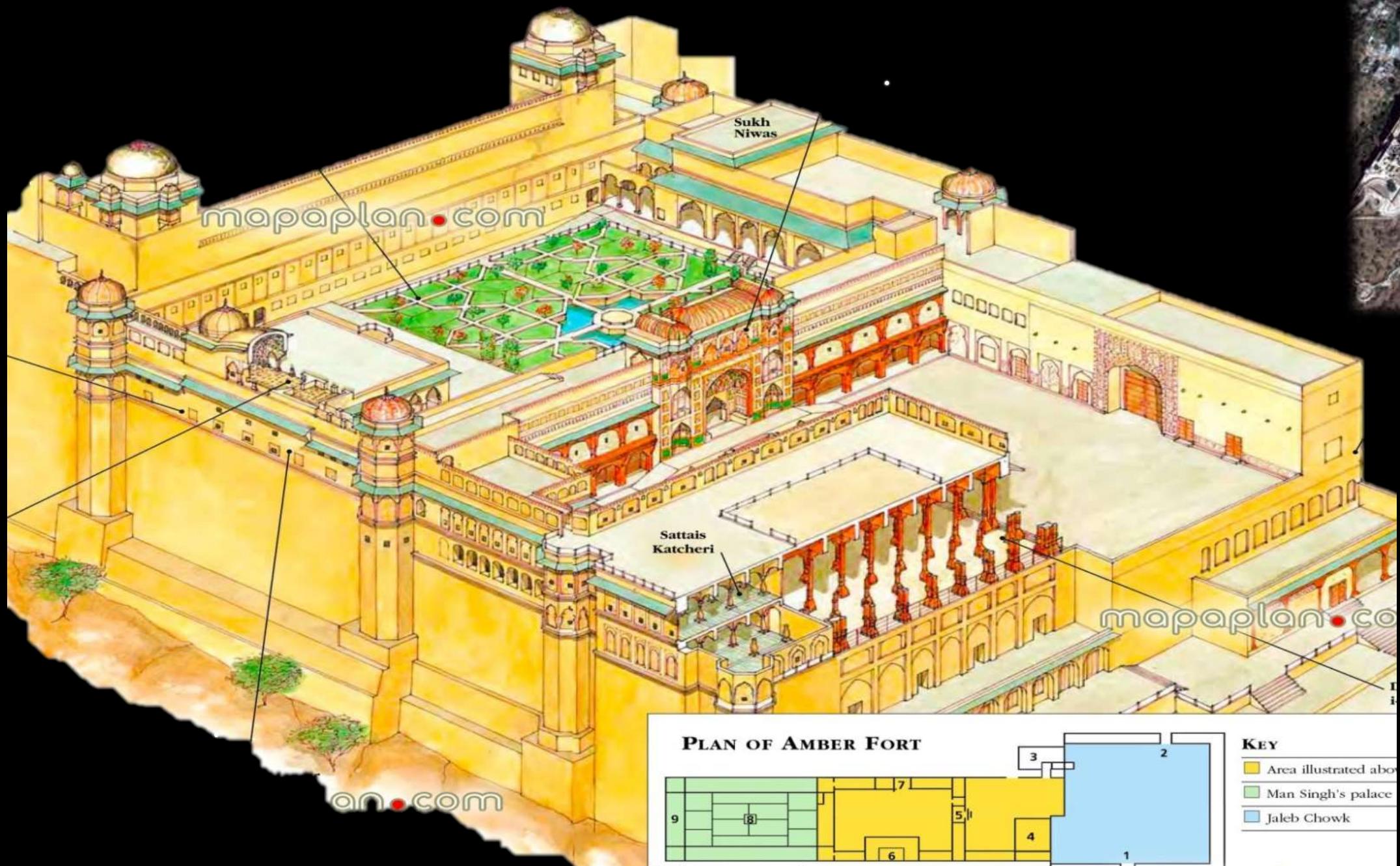
Golden Water Paint



Sheesh Mahal



1. Suraj Pol	4. Diwan-I-Am	7. Suk Mandir
2. Jaleb Chowk	5. Jas/Jai Mandir	8. Baradari
3. Shila Devi Temple	6. Ganesh Pol	9. Zenana



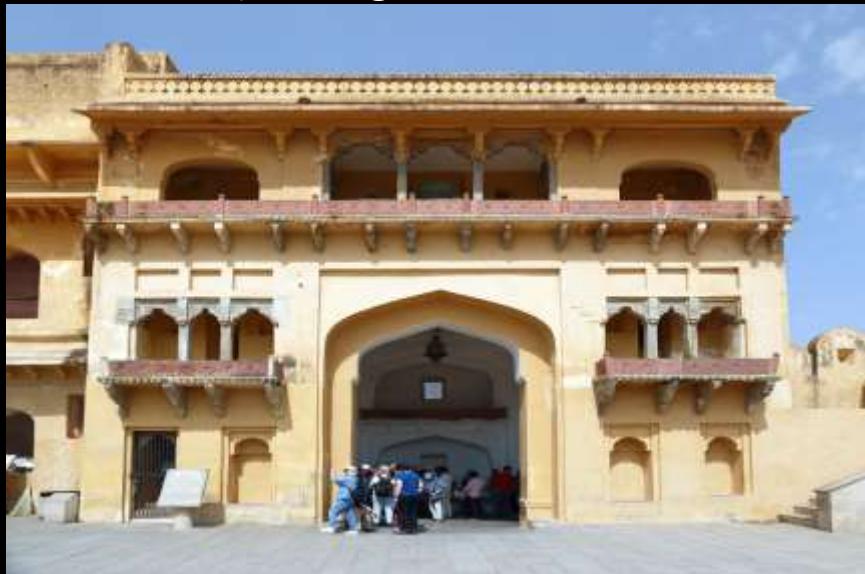
First courtyard - Jaleb Chowk (Jaleb = soldiers, Chowk = courtyard, or in this case parade ground or assembly area)



- Elephant parade, showing the Suraj Pol (lit. Sun Gate), facing east.



- Steps to go from first courtyard to second, through the Singh Pol or Lion gate



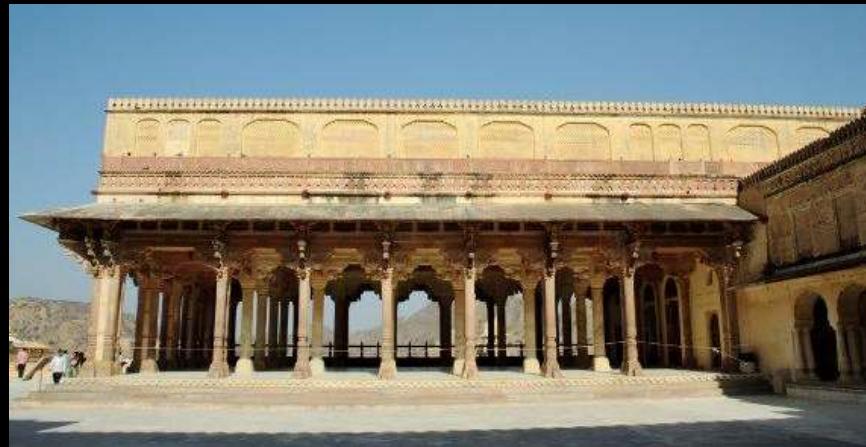
- Facing west to the Chand Pol (lit. Moon Gate), through which we entered the courtyard.



- View of the Jaleb Chowk.



Second courtyard The second courtyard is of the Diwan-i-am, the Hall of Public Audiences, and the Ganesh Pol



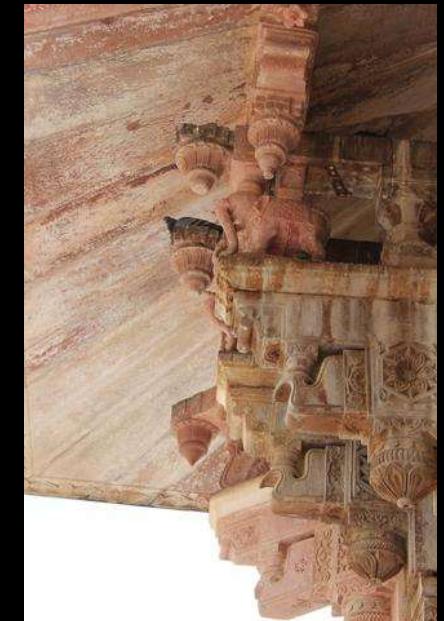
- **Diwan-i-am** : or Hall of Public Audience, viewed from the south, looking north



- **Ganesh Pol** : every Indian house or palace will have Ganesh at the front door.



- Elephants and lotus flowers adorn the columns of the Diwan-i-am



- More elephants and lotus flowers

- The pillars have been elaborately carved from marble and red sandstone.

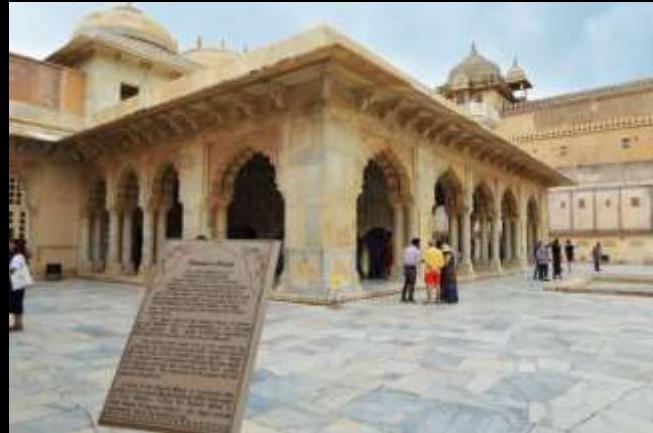
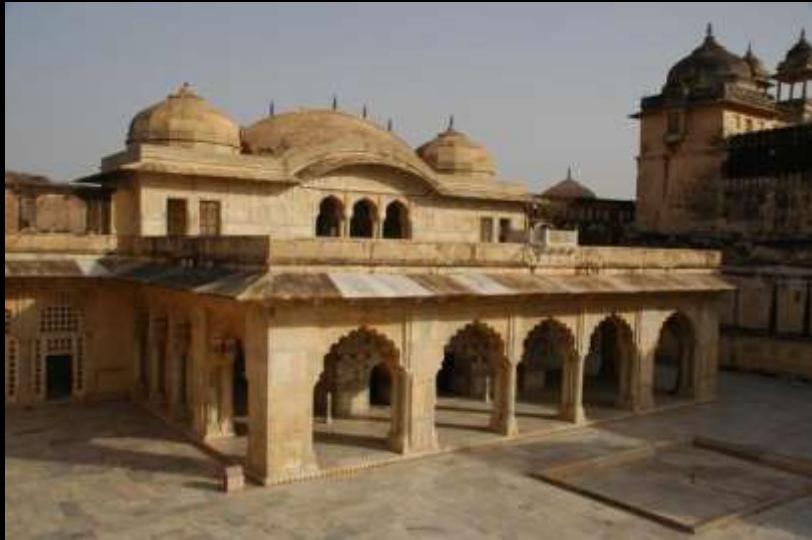


- Suhaag Mandir which is above the ganesh pole



- view from Suhaag Mandir window.

Third courtyard The private quarters of the Maharaja, his family and attendants.



• Diwan-i-Khas



• The bas relief/inlay work with this rather gorgeous beetle (ladybird) at the centre top.

• A great elevated view of the **Diwan-i-Khas** (aka Jai Mandir = hall of victory)



• Interior of the diwan-i-khas.



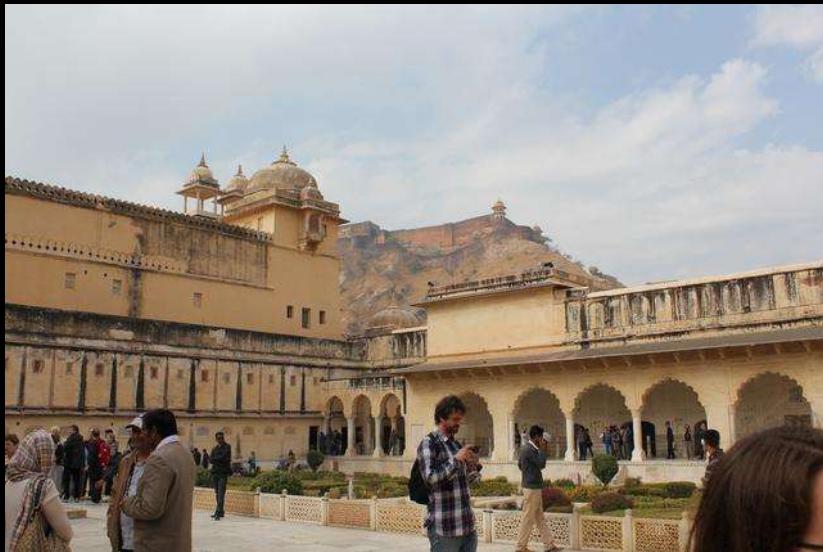
• **Mughal Gardens, Char-bagh**
• The low wall that surrounds the sunken garden is made up of a series of carved marble lattice screens, each a different geometric pattern.

• **Walls and ceiling** of the colonnade of the diwan-i-khas.



• Those are little tiny mirrors everywhere

Third courtyard



- Third courtyard - centre, the Char-bagh (gardens), to the left (west) the Sukh Niwas, and to the right (south), the wall separating the Zenana, or women's quarters & Jaigarh Fort is in the background.



- The Suhaag Mandir
- Details of the gorgeous marble screens, overlooking the Diwan-i-am.



- The Sukh Mandir
- I think this was the large open colonnaded area, which faced the Hall of Mirrors across the Mughal Garden



Wall with screens through which lower-ranked ladies of the household could view proceedings in the diwan-i-am. note : each screen is a different geometric pattern.

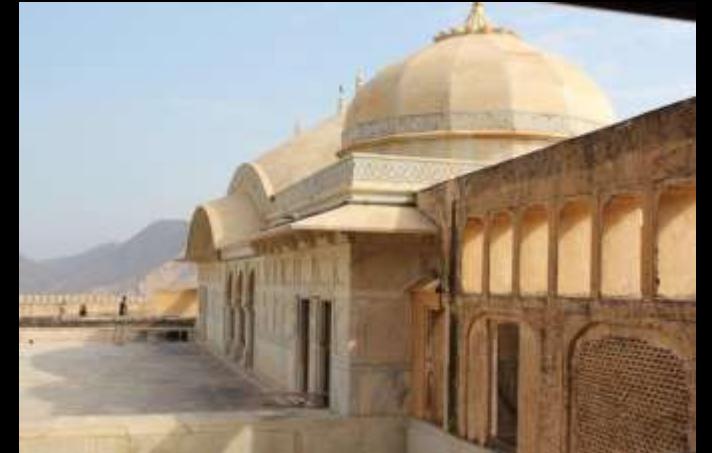
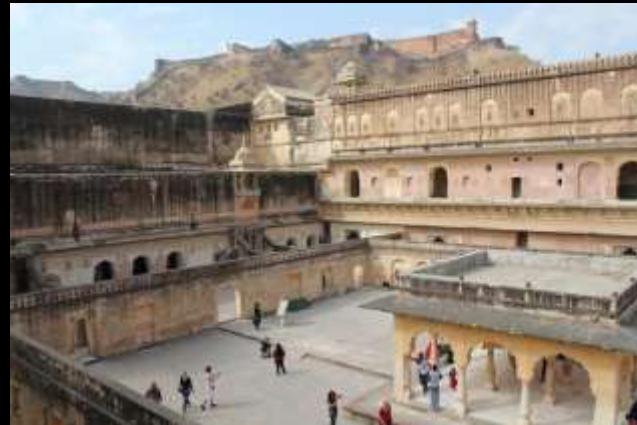


- the walls are decorated with gorgeous frescos, unretouched, coloured with vegetable dyes.



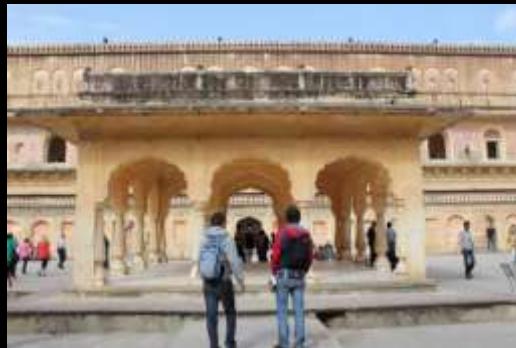
The stained glass windows are made with imported Belgian glass, the walls decorated with frescos and inlay, and the ceilings inlaid with a mosaic of mirrors.

Fourth courtyard : The fourth and final courtyard is also the oldest. It is also the least restored. It was initially the whole palace, but when the palace was expanded, it became the women's quarters.

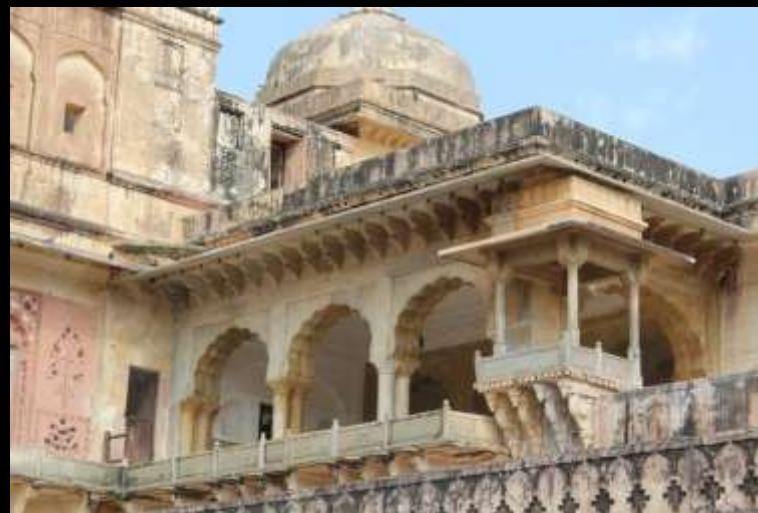


- These large simple arches are centrally placed along each of the four walls bounding the courtyard.

- On the north upper wall of the courtyard



- The courtyard has twelve separate apartments, although they are interconnected by a series of labyrinthine corridors and stairways and antechambers.

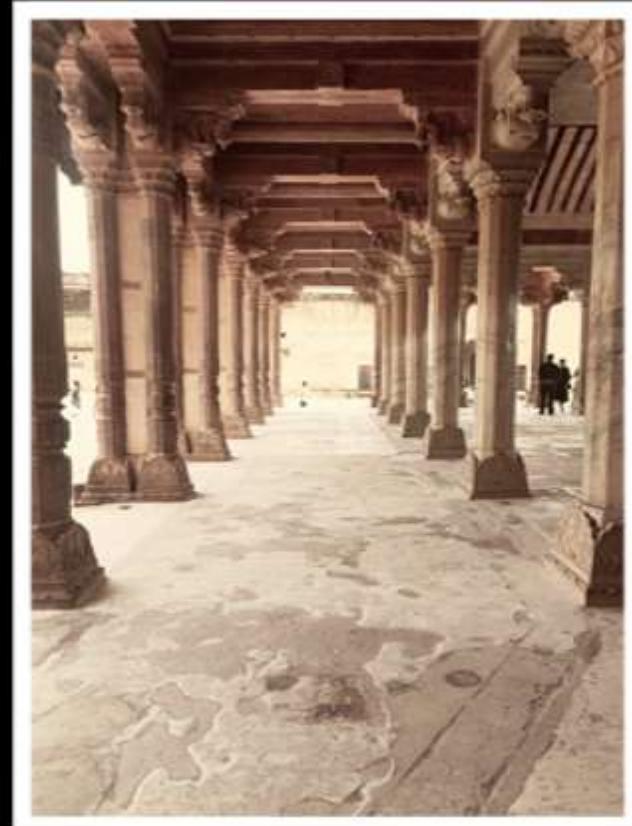
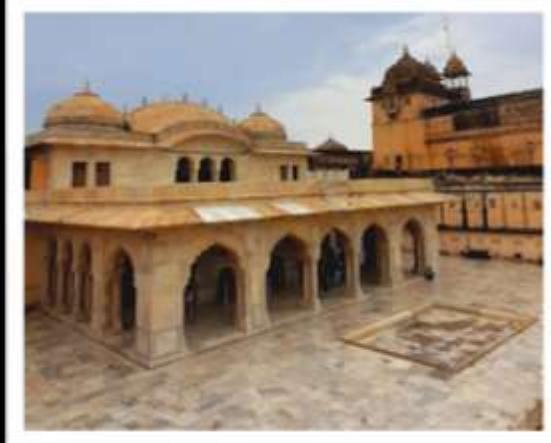


- In the NW corner of the fourth courtyard, upper level



- On significant occasions, the palace would provide a grand feast for all the villagers. You need big pots when cooking for that many people.

AMER FORT



OBSERVATION

BULAND DARWAZA

- To the south of the court is an imposing structure, Buland Darwaza (lofty gate), with a height of 40 m, and 54m from ground.
- Completed in 1575 to commemorate the victory of Gujarat in 1572.
- Made of red and buff sandstone, decorated by white and black marble. Symmetrical, topped by large free-standing kiosks, i.e. chhatris
- 15-storied high gateway, approach to the gate consists of 42 steps

JAMA MASJID

- Constructed on the summit of the ridge, completed in 1571-72.
- Incorporates the tomb of Saikh Salim Chisti, sculpted decoration completed in 1580-81
- Constructed southeast of an artificial lake, on the sloping levels of the outcrops of the Vindhyan hill ranges, known as the "city of victory", made capital by the Mughal emperor Akbar.
- Consist administrative, residential, and religious buildings.
- Total area 60.735 ha, with a buffer zone of 475.542 ha.

DIWAN –I KHAS

- Also known as the 'jewel house'.
- Intricately carved central pillar, carving representing every religion.

DIWAN –I AM

- A series of porticos broken up at the west by the insertion of the emperor's seat in the form of a small raised chamber separated by perforated stone screens and provided with pitched stone roof.

PALACE OF JODHABAI

- Largest building of the residential complex.
- Richly carved interior pillars, balconies, perforated stone windows.

PANCH MAHAL

- Entirely columnar five-storey structure disposed asymmetrically on the pattern of a Persian Badgir, or wind-catcher tower.

FATEHPUR SIKRI

LOCATION : FATEHPUR SIKRI

DATE: 5th AUG 2022

ARCHITECT: TUHIR DAS

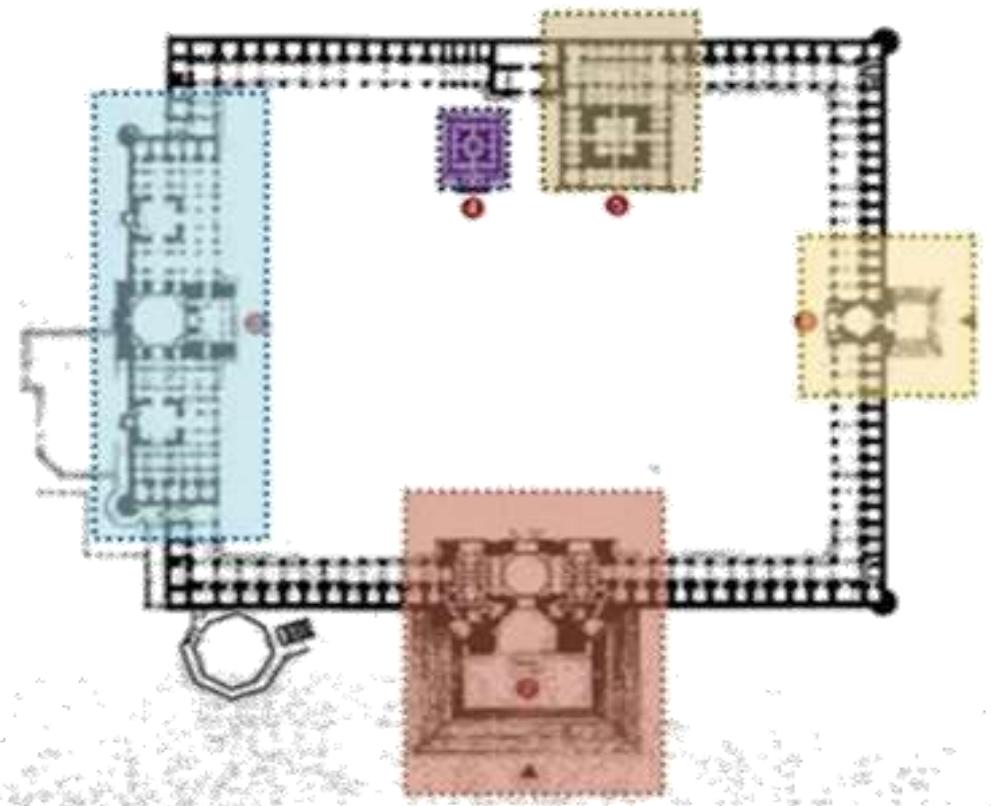
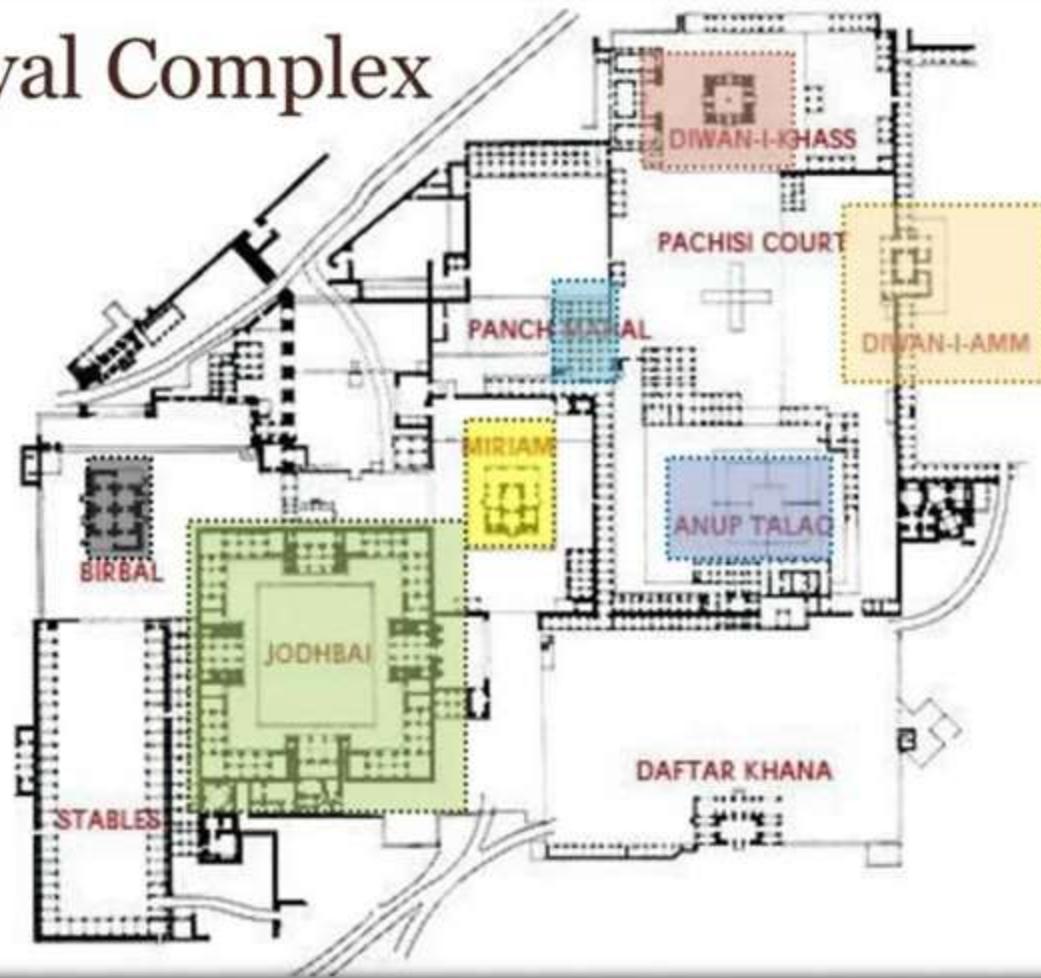
BUILT: 1571

INFERENCE

- It featured an efficient drainage and water management system.
- The existing natural levels of the land chosen was maintained, adjoining structures were linked together by means of ramp, platforms and staircase.
- Visual unity was ensured through various strategies such as use of red sandstone as building material with bands of expensive white marble or at the times by blue glazed tiles.
- Every building has a discernible graphic link with another through a series of axes at right angles to each other.
- Buildings were conceived as a part of a carefully built up visual and spatial sequence, spaces enclosed by cloisters and corridors became meticulously designed envelopes for free standing structure.

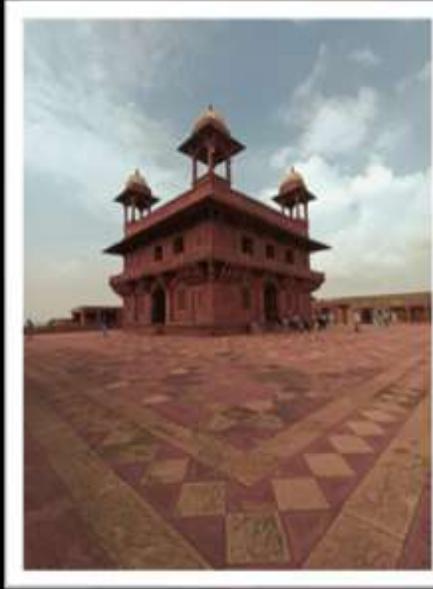
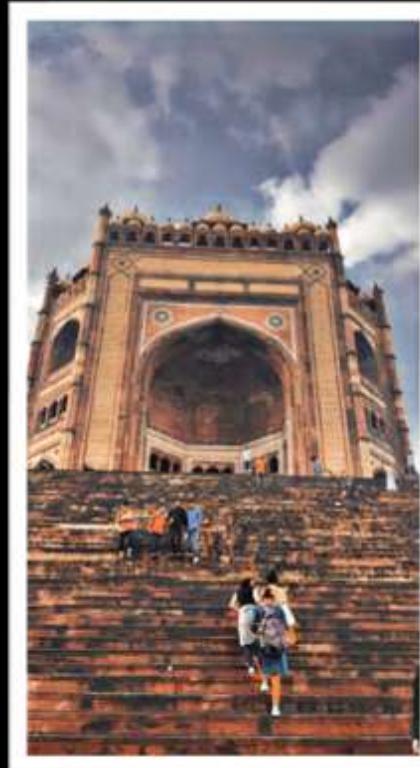


The Royal Complex



1 Badshahi Darwaza 2 Buland Darwaza 3 Prayer room of the Friday Mosque 4 The tomb of Salim Chishti 5 Islam Khan Mausoleum

FATEHPUR SIKRI



OBSERVATION

IN PERSIAN, IT MEANS THE
"CROWN OF THE PALACES"



- **Built for** : mumtaz mahal
- **Burials** : shah jahan ,mumtaz mahal
- **Function** : monument,mousole um
- **Total area**:-22 acre (17 hectare)
- **Material use** : pristine,red sanstone and white marble.
- **Special feature** : masterpiece of architectural style in conception, and has unique aesthetic qualities in balance, symmetry and harmonious element.

PURPOSE :

To perpetuate the memory of his favourite wife, mumtaz mahal, who died in 1631, had this funerary mosque built



- **Cenotaph** of the emperor and his wife lie in the centre of the room
- Theirs jali around the octagonal cenotaph
- Made of marble



- The taj gateway is of 100 ft high and 150 ft spread over a width
- It has inscripted calligraphy of holy quran on walls
- Symmetrical, starting from the main gateway all the way up to the mausoleum.
- They are called the *charbagh*, or the four-way gardens, with two main walkways
- The taj mahal palace is the construction with five domes and four minarets in the corners.
- The height of the dome is 73 meters.
- With three red stone walls bordering three sides.

TAJ MAHAL

LOCATION : AGRA, UTTAR PRADESH

DATE: 6th AUG 2022

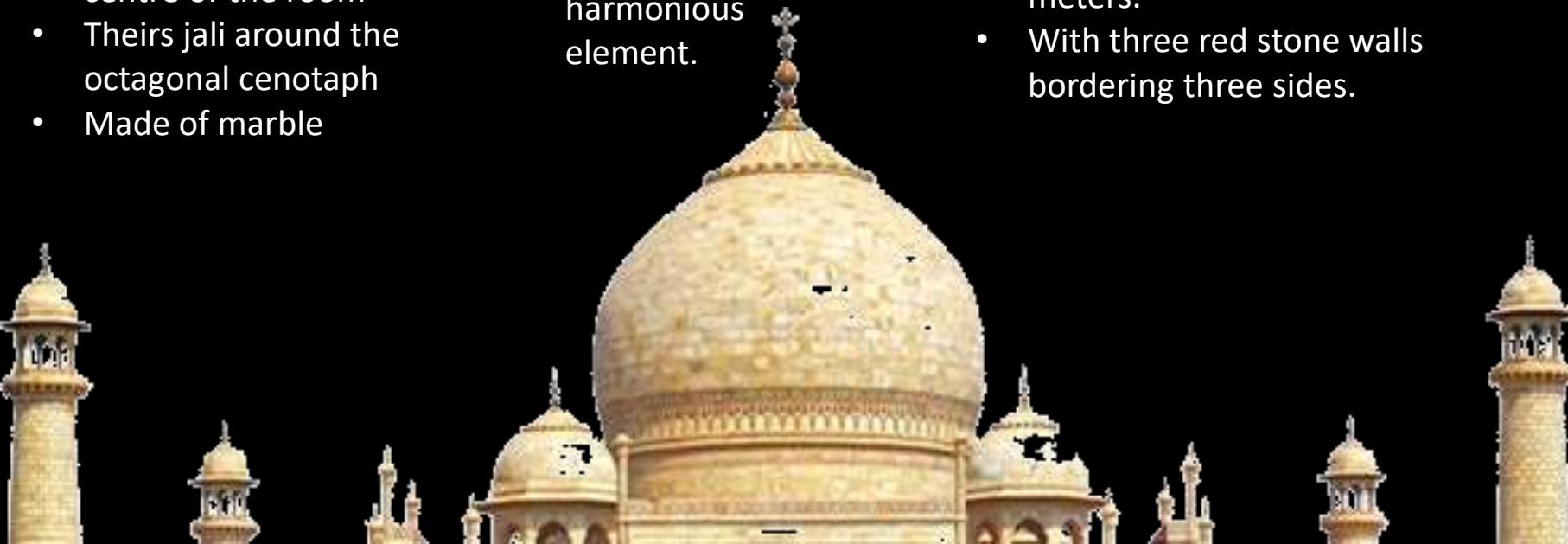
ARCHITECT: USTAD AHMAD LAHORI

ARCHITECTURAL STYLE: MUGHAL,
INDIAN, PERSIAN & ISLAMIC

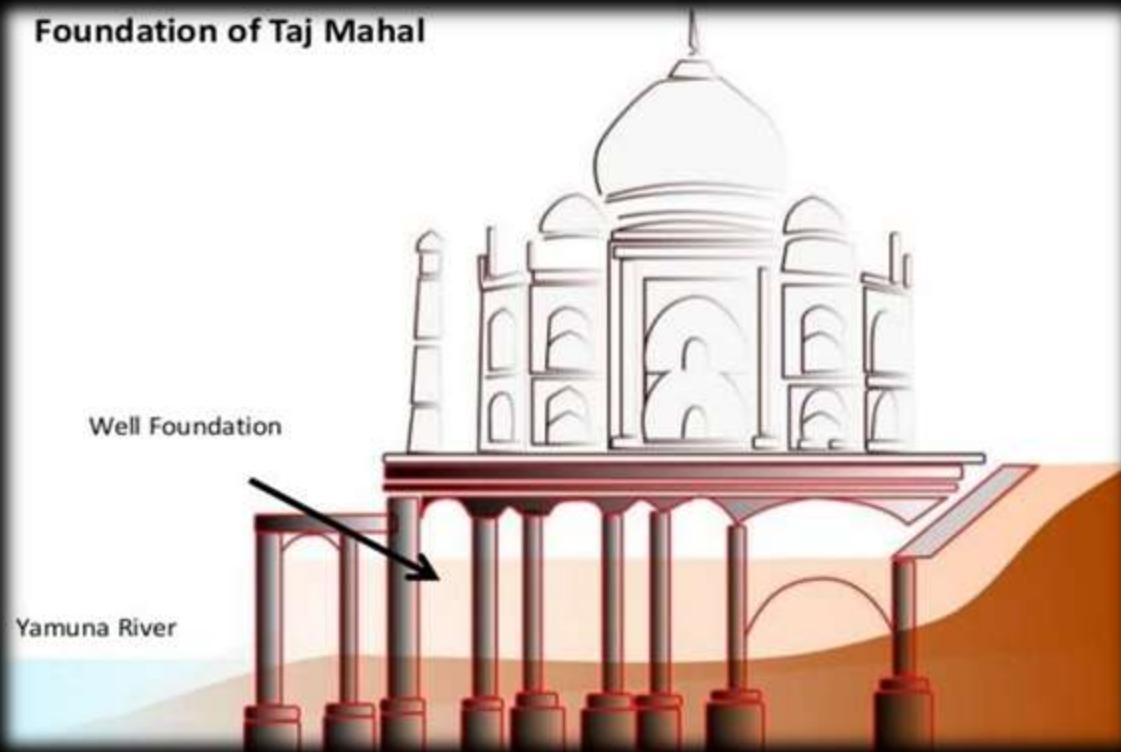
BUILT : 1653

INFERENCE

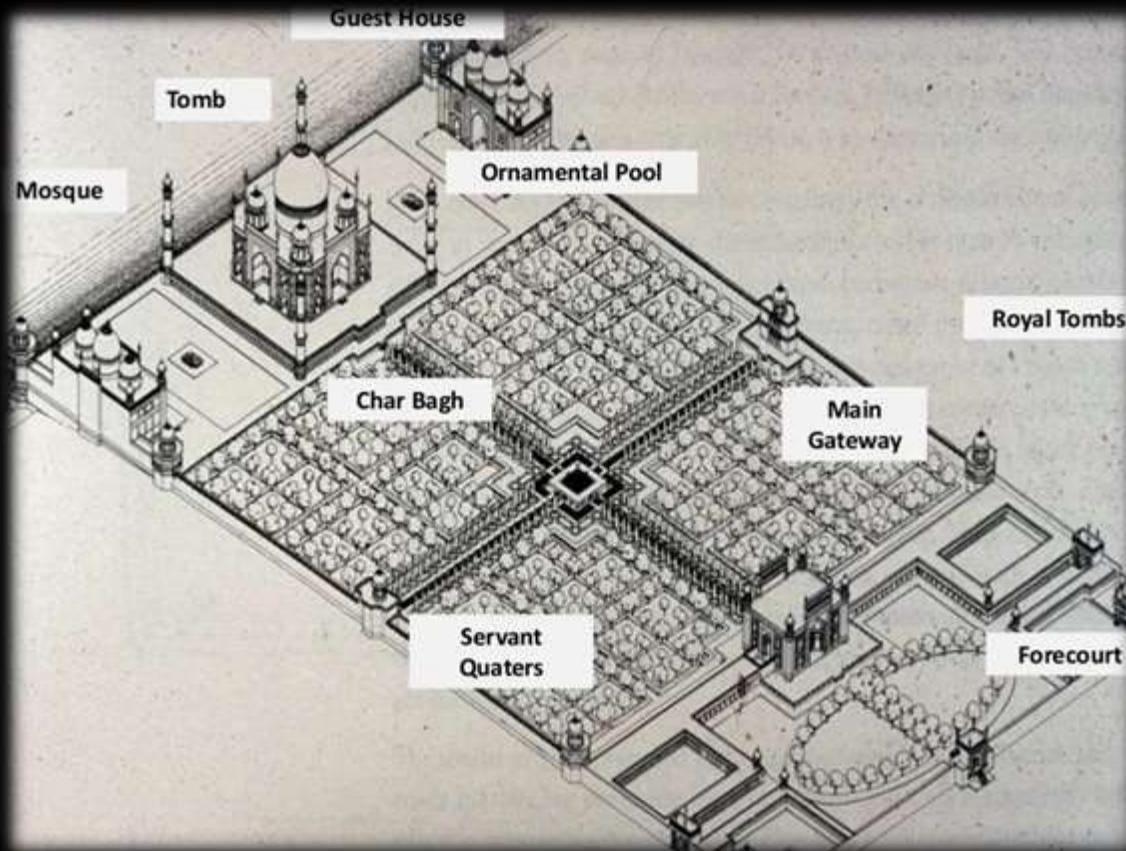
- Indeed, the inadvertent emission of sulfuric oxide, due to road traffic, causes acid rain. This rain colors the taj mahal yellow, tarnishing it, and, worse, it erodes it, attacking what is most fragile at first: the sculptures and incrustations of stone.
- They use clay pack treatment 5 times to reduce yellowness from it.



Foundation of Taj Mahal



- Plinth of taj mahal is of 6m
- Taj complex is ordered by grid concept



The taj mahal iwan with an ornate "Pishtaq"

TAJ MAHAL GARDEN



- The garden is inspired by persian style, divided into 4 parts.
- At the centre, between tomb & gateway, where 4 water channels meet is a raised marble lotus tank called "al-kuthar" i.e celestial pool of abundance.
- Water channels is provided by neat geometric paving.
- It may have been built as a watch tower or place where the "muzzein" calls for prayers.
- Balcony is enriched by geometric pattern & floral motifs.

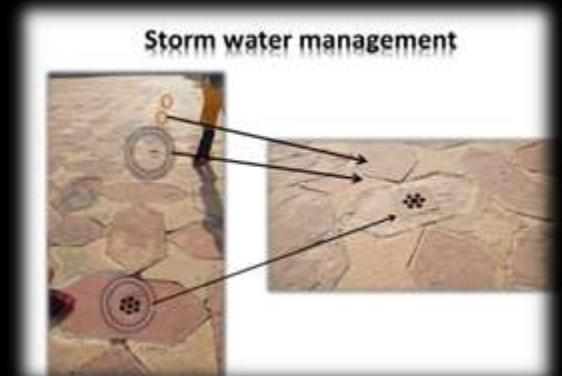


All across the mausoleum, semi-precious stones including lapis lazuli, turquoise, crystal, etc. Were laid in intricate designs.

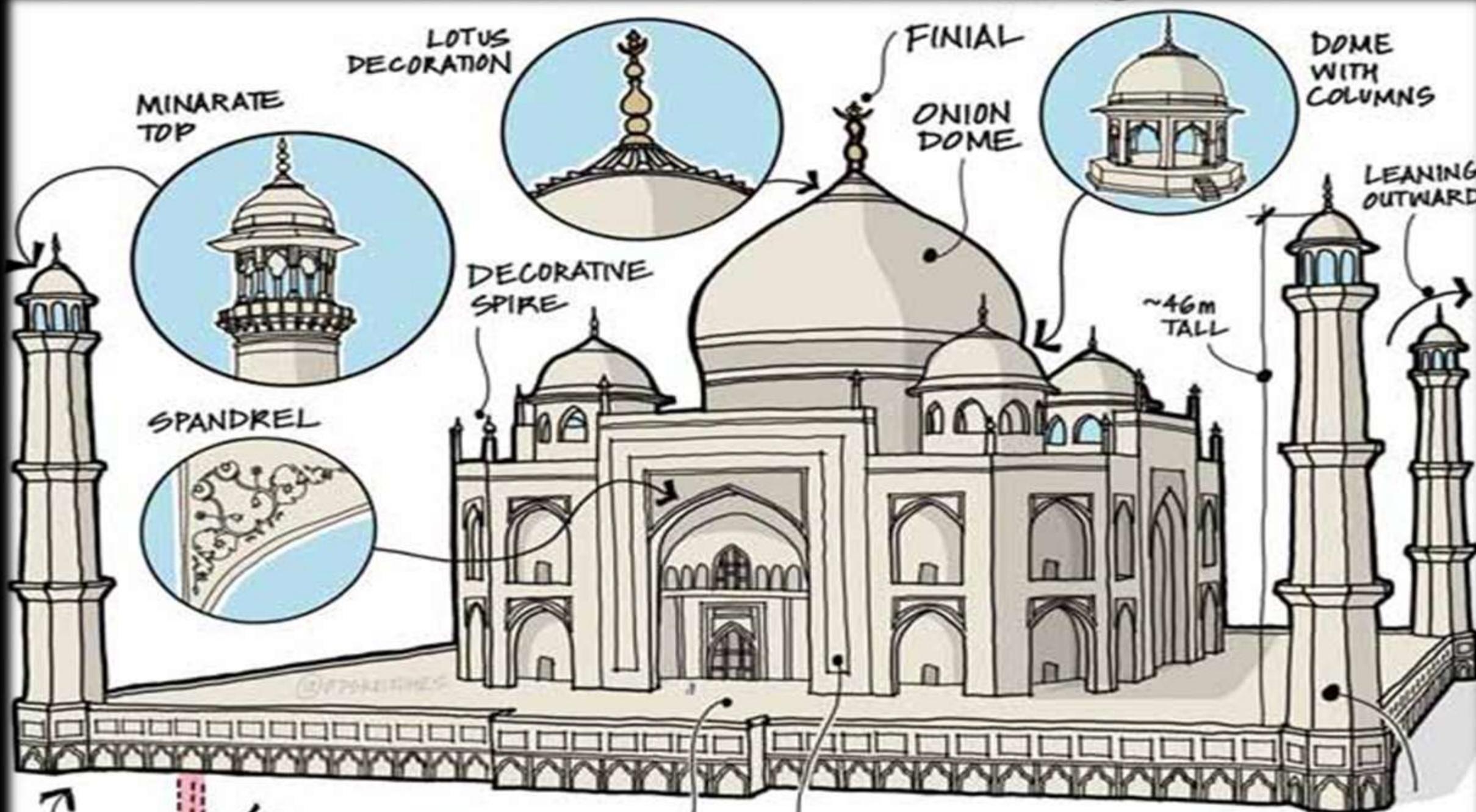
MOSQUE



- The mosque is left to the tomb, built of red sandstone, structure compliments pristine white mausoleum.
- Spread over 190 feet in length & 90 feet in width.

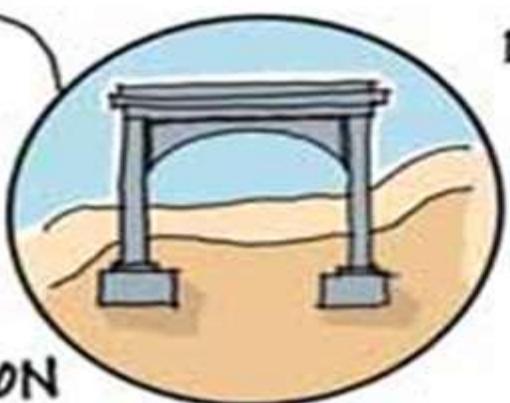


Tomb of Mumtaz Mahal
Height: 210 ft
Width: 90



MUGHAL ARCHITECTURE

FOUNDATION



BASE
CALLIGRAPHY WITH JASPER GEMSTONE



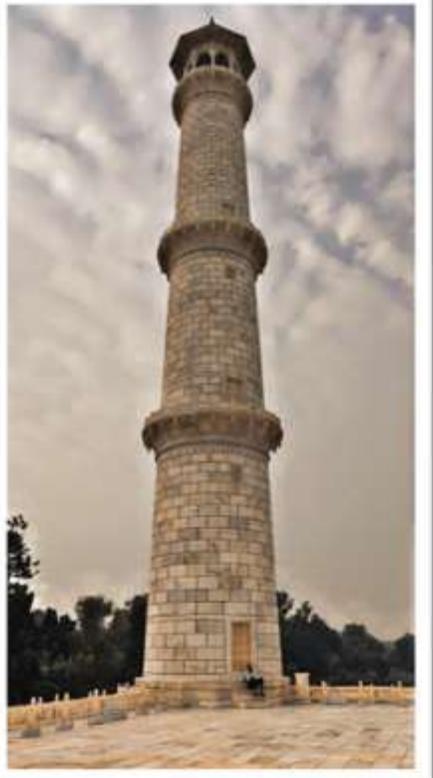
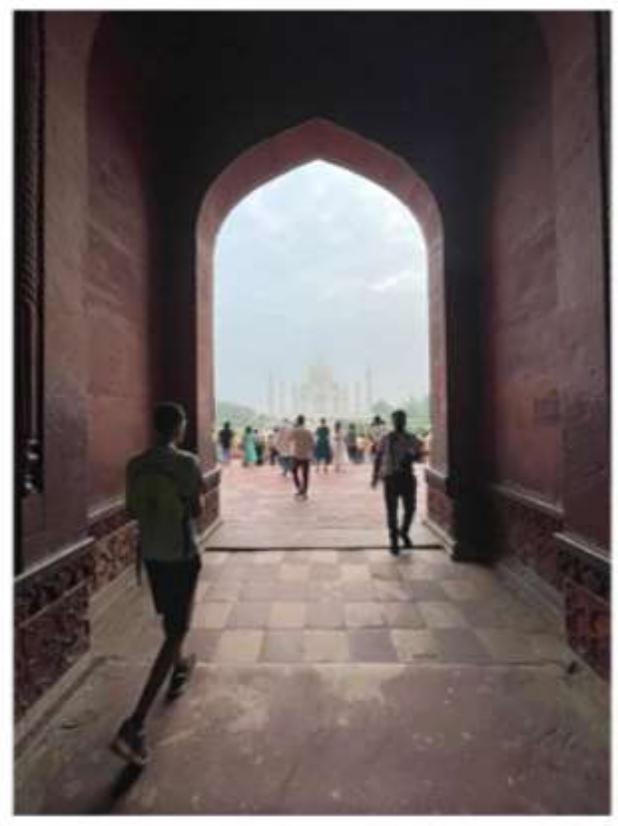
DESTROYED!!!



MINARATE
✓ TOWERS LEANING OUTWARD

✗

T AJ M AHAL



OBSERVATION

HISTORY OF AGRA FORT

It was the main residence of the emperors of the mughal dynasty till 1638.

- After the first battle of Panipat in 1526, Babur stayed in the fort, in the palace of Ibrahim Lodi.
- His successor, Humayun, was crowned in the fort in 1530.
- He was defeated at Bilgram in 1540 by Sher Shah Suri.
- The fort remained with the Suris till 1555, when Humayun recaptured it.
- Realizing the importance of its central situation, Akbar made it his capital and arrived in Agra in 1558.
- It was in a ruined condition and Akbar had it rebuilt with red sandstone from Barauli area Dhaulpur district, in Rajasthan.
- Some 4,000 builders worked on it daily for eight years, completing it in 1573.
- The fort was under the Jat rulers of Bharatpur for 13 years. In the fort, they built the Ratan Singh ki haveli.
- The fort was invaded and captured by the Maratha empire in the early 18th century.



TIME PERIOD:

- Lodhi dynasty (1504–1526)
- Mughal empire (1526–1540)
- Suri dynasty (1540–1555)
- Mughal empire (1556–1761)
- Bharatpur state (1761–1774)
- Mughal empire (1774–1785)
- Maratha empire (1785–1803)
- British empire (1803–1947)
- Government of India (1947-present day)

AGRA FORT

LOCATION : AGRA, UTTAR PRADESH

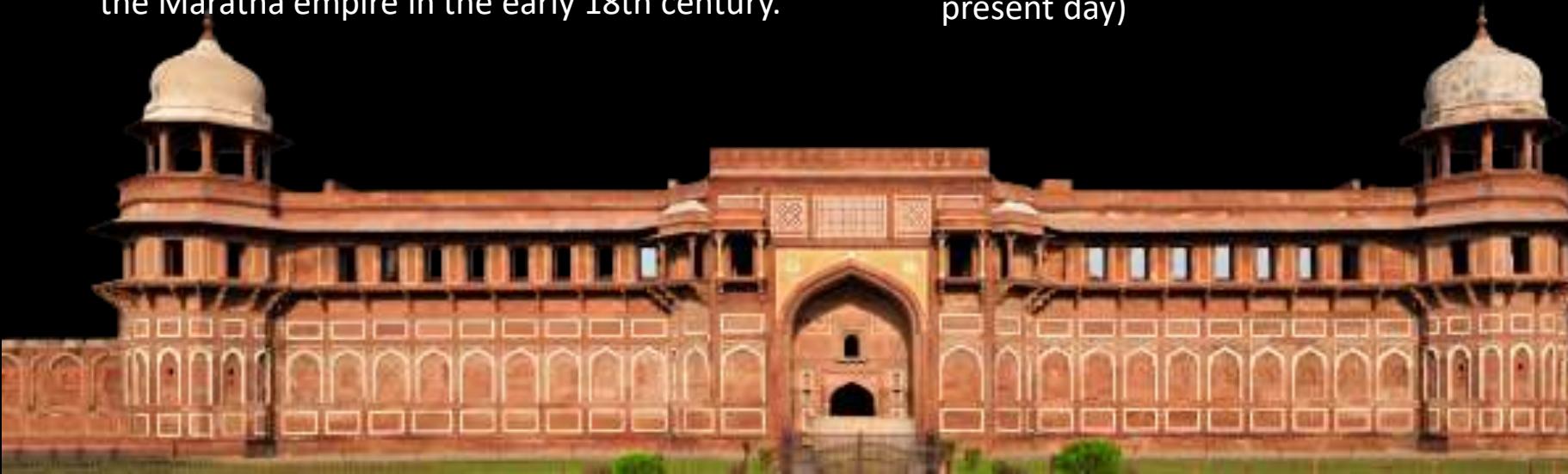
DATE: 6th AUG 2022

ARCHITECTURAL STYLE: MUGHAL
ARCHITECTURE

BUILT: 1573

INFERENCE

- The fort houses numerous impressive structures like the Jahangir mahal, Khas mahal, diwan-i-khas, diwan-i-am, Machchhi Bhawan and Moti Masjid.
- The base of the fort faces the bank of the river Yamuna.
- It has four gates (one on each side). Out of the four gates, the Delhi gate and Lahore gate are the most prominent ones.
- At the base of the fort, a secret passage was dug in an attempt to access it with ease, during times of emergency.
- The fort is surrounded by moat.
- Tai mahal is visible from Musamman Burj.



LAYOUT:

- The 380,000 m² (94-acre) fort has a semicircular plan, its chord lies parallel to the river Yamuna and its walls are seventy feet high.
- Four gates were provided on its four sides. Namely, Delhi gate, Hathi pol, Lahore gate and Ghazni gate.
- The monumental Delhi gate, which faces the city on the western side of the fort, is considered the grandest of the four gates and a masterpiece of Akbar's time.
- A wooden drawbridge was used to cross the moat and reach the gate from the mainland; inside, an inner gateway called Hathi pol.
- The drawbridge, slight ascent, and 90-degree turn between the outer and inner gates make the entrance impregnable.
- During a siege, attackers would employ elephants to crush a fort's gates. Without a level, straight run-up to gather speed, however, that thing is prevented by this layout.



ARCHITECTURE:

- Bricks formed the base of Agra fort's structure.
- Red sandstone was brought all the way from Rajasthan and that was laid on the external surfaces.
- Back then, the entire fort was built using the red sandstone.
- Shah Jahan was smitten by the beauty of white marble.
- Hence, he destroyed many structures within the fort, only to rebuild them using white marble.
- Shah Jahan was smitten by the beauty of white marble.
- Hence, he destroyed many structures within the fort, only to rebuild them using white marble.

MATERIAL:

Red sandstone and marble



IMPORTANT STRUCTURES INSIDE THE AGRA FORT:

- **JAHANGIR'S HAUZ** – This is a monolithic tank, and was built by jahangir. The tank was initially used for bathing. It is now a part of akbar's bengali mahal.
- **SHAHJAHANI MAHAL** – The shahjahani mahal is probably one of the earliest attempts of emperor shah jahan to turn a red sandstone palace into a palace of white marble.
- **BABUR'S BAOLI (STEP WELL)** – Babur built a stone step well which took care of the water needs in the ancient fort of agra
- **NAGINA MASJID** – Nagina masjid is a mosque which was built by shah jahan. The mosque was built using white marble only and was considered a private place of worship.
- **DIWAN-I-AM (HALL OF PUBLIC AUDIENCE)** – This hall was built by shah jahan. Interestingly, the hall was first built using red sandstone but was later shell-plastered, giving it a look of white marble.
- **GHAZNIN GATE** – The ghaznin gate actually belongs to the tomb of mahmud of ghazni, one of the rulers of the ghaznavid empire. The gate was moved into the fort by the british for political reasons.
- **BENGALI MAHAL** – This palace was built by akbar and was later modified by shah jahan. An interesting aspect of this palace is it is said to be housing secret buildings hidden underneath the palace.
- **AKBAR'S MAHAL** – Akbar breathed his last in this very palace. The entire palace was built using red sandstone.



**JAHANGIR'S
HAUZ**



**NAGINA
MASJID**



**DIWAN-I-AM (HALL OF
PUBLIC AUDIENCE)**



DIWAN-I- KHAS



JAHANGIR MAHAL



VIEW OF TAJ MAHAL FROM MUSAMMAN BURJ.

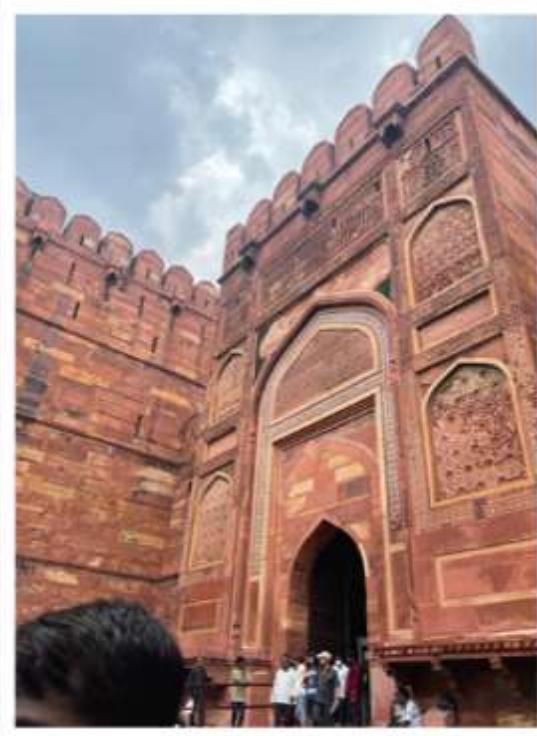
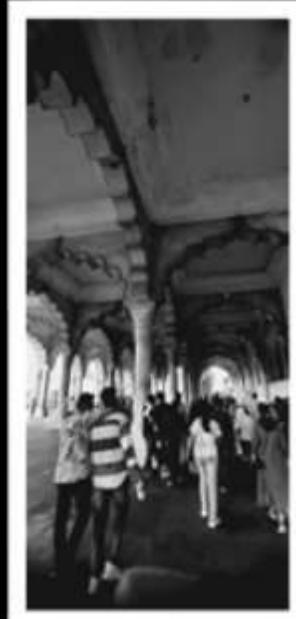
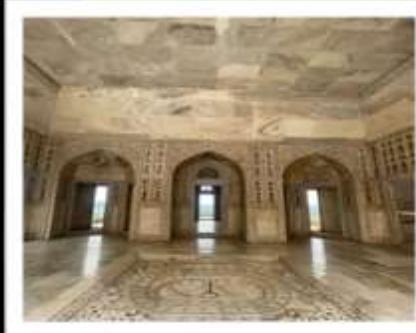
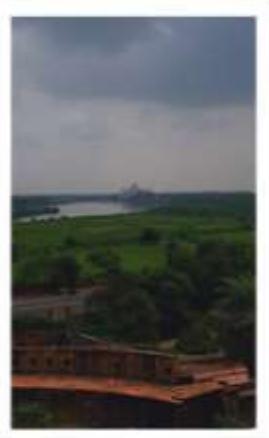
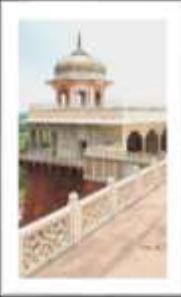


MUSAMMAN BURJ INSIDE

DETAILS OF FORT



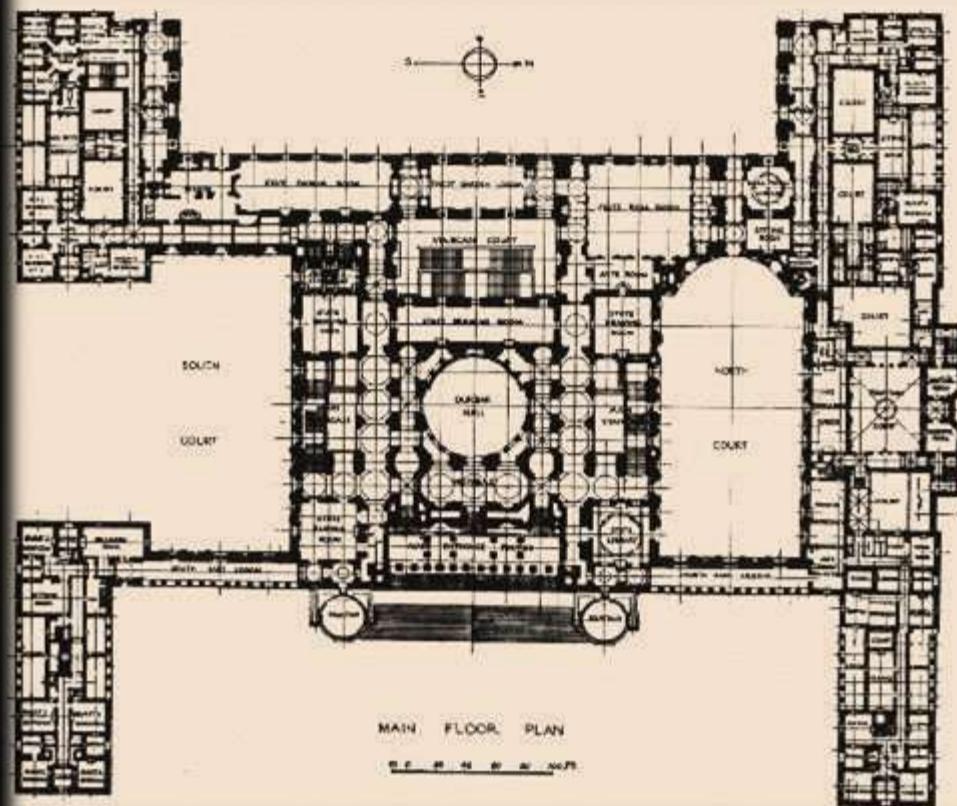
AGRA FORT



OBSERVATION

PURPOSE :

- Rashtrapati Bhavan is the official residence of the rashtrapati or the president of india.
- Rashtrapati bhavan is the biggest residence of the head of the state in the world.
- The structure is built using 700 million bricks and 3 million cubic ft of sand stones.
- Rashtrapati bhavan has buddhist railings, chajjas, chhatris, jalis and temple bells in its pillars.
- Dome of the building is said to have been influenced by roman architecture , it indicates an influence of the famous sanchi stupa .



RASHTRAPATI BHAVAN

LOCATION : DELHI

DATE: 8th AUG 2022

ARCHITECT: SIR EDWIN LANDSEER LUTYENS

BUILT: 1913- 1980

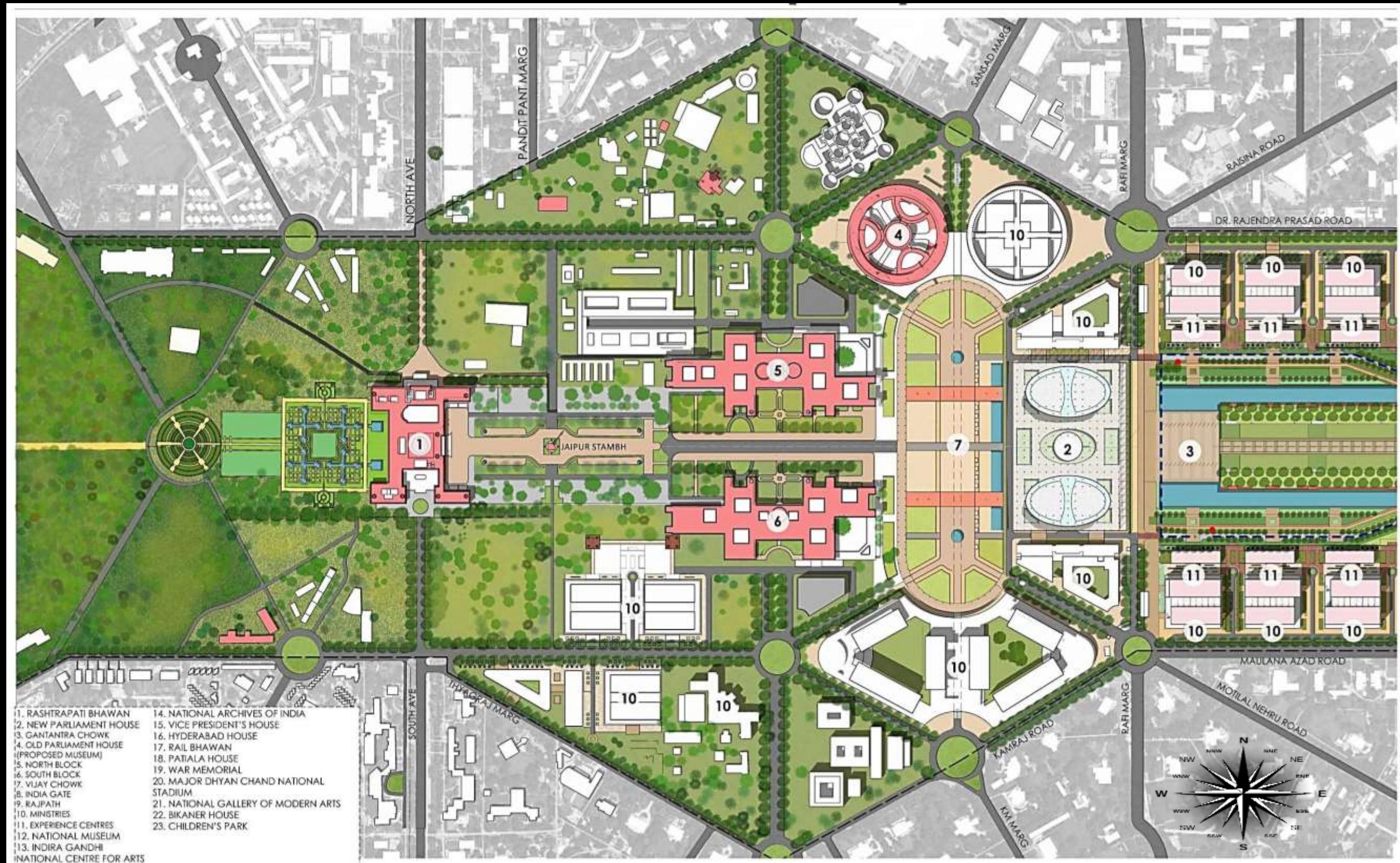
ARCHITECTURAL STYLE: MUGHAL
ARCHITECTURE, PERSIAN ART FORMS,
INDIAN DESIGNS AND EUROPEAN
ARCHITECTURE

INFERENCE

- The layout of the palace is designed around a massive square with many courtyards and open inner areas within.
- There are separate wings for the viceroy and another wing for guests. The viceroy's wing is separate four-storey house in itself, with its own court areas within.
- At the center of the main part of the palace underneath the main dome, is the darbar hall.
- Jaipur column placed in the front of the main building in east side.
- Mughal gardens located in the backside of the façade on west side.
- There is also an open area in a room to the sky, which lets in much of the natural light.



MASTER PLAN



RASHTRAPATI BHAVAN



OBSERVATION

- The **Qutb Minar complex** are monuments and buildings from the Delhi Sultanate at Mehrauli in Delhi, India.

WHAT THE COMPLEX INCLUDES?

- Many subsequent rulers, including the Tughlaqs, Alauddin Khalji and the British added structures to the complex. Apart from the Qutb Minar and the Quwwat ul-Islam Mosque,
- Other structures in the complex include the Alai Darwaza gate, the Alai Minar and the Iron pillar.

ALAI DARWAZA

- The Alai Darwaza is a main gateway from southern side of the Quwwat-ul-Islam Mosque.
- It was built by the second Khalji Sultan of Delhi, Ala-ud-din Khalji in 1311 AD, who also added a court to the pillared to the eastern side.

QUTB MINAR

- The Qutb Minar is inspired by the Minaret of Jam in Afghanistan, it is an important example of early Afghan architecture.
- The Qutb Minar is 72.5 metres (239 ft) high, making it the tallest minaret in the world built of bricks.
- It has five distinct storeys, each marked by a projecting balcony carried on muqarnas corbel and tapers from a diameter 14.3 metres at the base to 2.7 metres at the top, which is 379 steps away.

TOMB OF ILTUTMISH

- The tomb of the Delhi Sultanate ruler, Iltutmish, a second Sultan of Delhi (r. 1211–1236 AD), built 1235 CE, is also part of the Qutb Minar Complex in Mehrauli, New Delhi.
- The central chamber is a 9 mt. sq. and has squinches, suggesting the existence of a dome, which has since collapsed.
- The main cenotaph, in white marble, is placed on a raised platform in the centre of the chamber.
- The facade is known for its ornate carving, both at the entrance and the interior walls.

QUTB COMPLEX

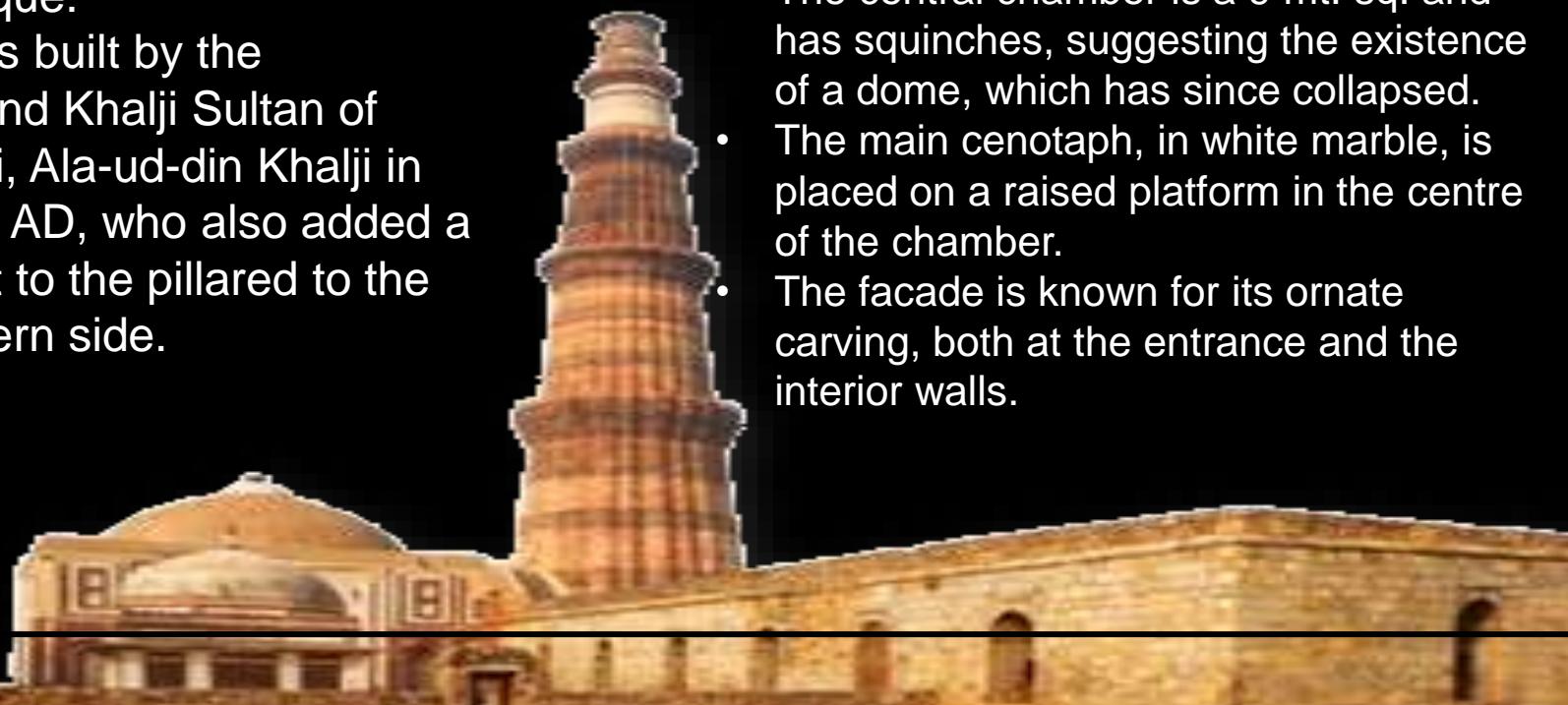
LOCATION : DELHI

DATE: 7th AUG 2022

ARCHITECTURAL STYLE: INDO-ISLAMIC
ARCHITECTURE

INFERENCE

1. The architectural style depicted by all the monuments in the qutub complex is majorly of the indo-islamic style.
2. The monuments are decorated with red sandstone and inlaid white marble decorations, inscriptions in Naskh script, latticed stone screens which showcases the remarkable craftsmanship of the Turkish artisans who worked on it.
3. The Indo-Islamic style of construction incorporated not only certain new modes and principles but also reflected the religious and social needs of the Muslims.
4. Traditions of the Prophet were interspersed with floral and geometric patterns.
5. Cloistered courtyards were added in a form, which maintained the overall stylistic symmetry of the complex



THE TOMB OF IMAM ZAMIN

- The Tomb of Imam Zamin is a 16th-century tomb located in the Qutb Minar complex, Mehrauli, Delhi in India.
- It houses the tomb of Mohammad Ali (popularly known as Imam Zamin), an Islamic cleric who migrated from Turkestan to India during the reign of Sikandar Lodi.

ALAI MINAR

- Alauddin Khalji started building the Alai Minar, after he had doubled the size of Quwwat ul-Islam mosque built before 1300AD.
- He conceived this tower to be two times higher than Qutb Minar in proportion with the enlarged mosque.

IRON PILLAR

- The iron pillar is one of the world's foremost metallurgical curiosities.
- The pillar, 7.21-metre high and weighing more than six tonnes, was originally erected by Chandragupta II Vikramaditya.

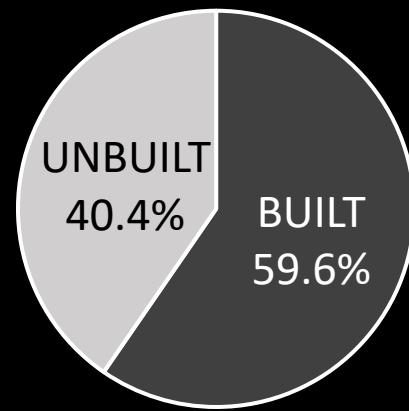


QUTB COMPLEX



OBSERVATION

- Building type: Multi Family Housing
- Construction system: concrete
- Context: Urban
- Style: Modern
- Site area: 35 acres (141640 sq m)



ASIAD VILLAGE

LOCATION : DELHI

DATE: 7th AUG 2022

ARCHITECT: RAJ REVAL

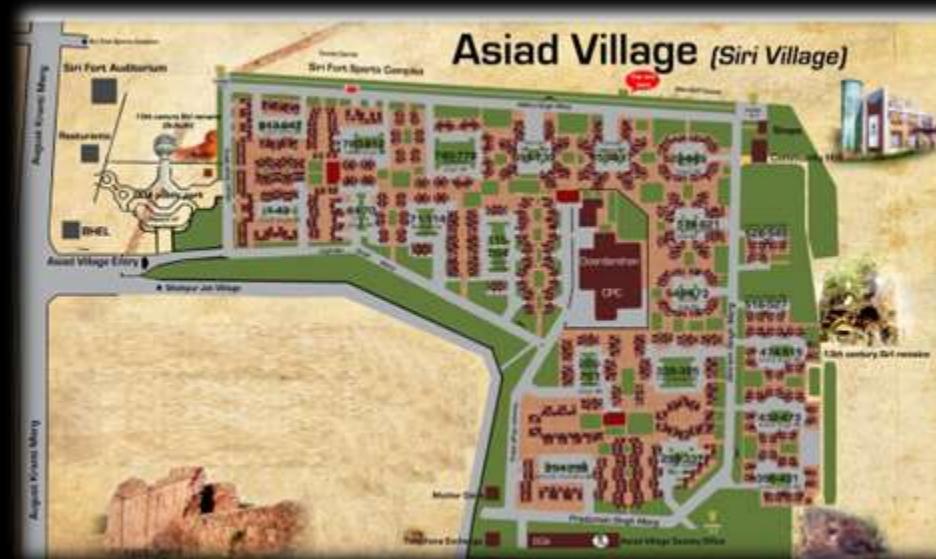
LANDSCAPE ARCHITECT: MOHAMMAD

SHAHEER

BUILT:

DESIGN FEATURES

- Clustering of buildings
- Courtyard - public space within the building.
- Scattering of terraces - interactive space.
- Streets are narrow, shaded broken up into small units creating pauses, points of rest, and changing points.
- Green areas and courtyards are spread all over the site which can be accessed from almost all sides of the site.
- Terraces - semi-private space which obviously reminds the characteristics of houses of Jaisalmer.
- In all, there are some 700 housing units, comprising 200 individual town houses and 500 apartments in two floors to four floors with each unit type has variations according to areas.
- Crushed Delhi quartzite stone was applied to the surfaces of the buildings as a kind of plaster.

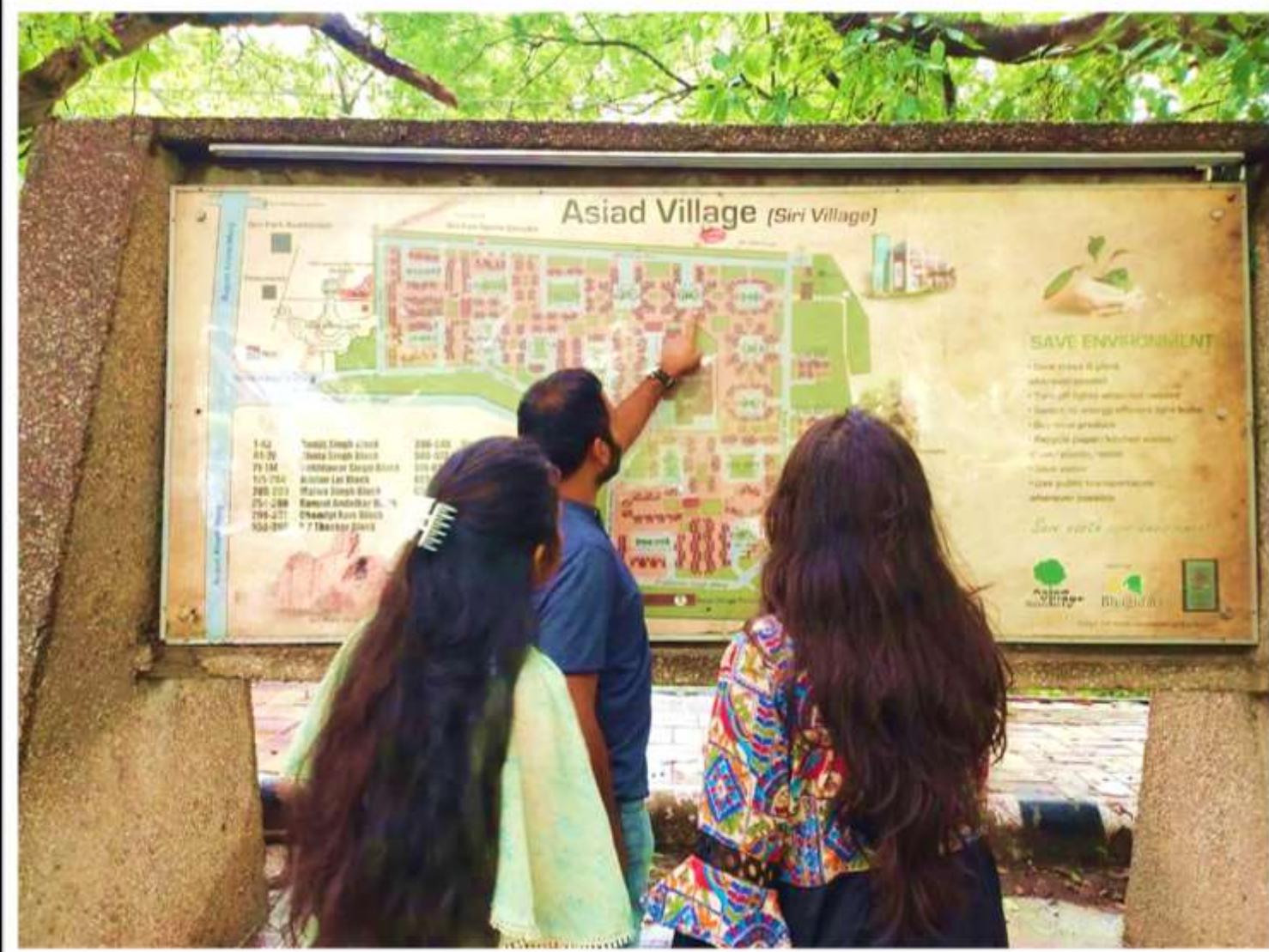


INFERENCE

- The sequencing and layering of public , semi-public spaces which offers variety of activity that can be held at different level amongst the residents
- The cluster formation by adding on to unit layout is interesting to look at as it not only segregate the cluster and provide privacy by screens and punctures but also opens up them into the central courtyard.
- Vehicular parking is well organised and connected to the peripheral roads which serves as the medium of connectivity to the city
- The streets are consciously broken up into visually comprehensible unit often with gateways , so there are pauses , point of rest and changing vistas
- A sequence of open spaces, interlinked with narrow pedestrian streets shaded and mix with the recreational and communal area.
- The buildings are unified by means of similar facade treatment.
- The most of the housing unit were built around the courtyard such that it could have proper light and ventilation for each unit.

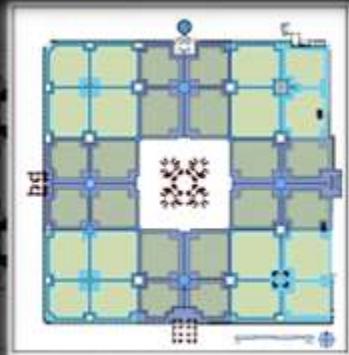


ASIAD VILLAGE

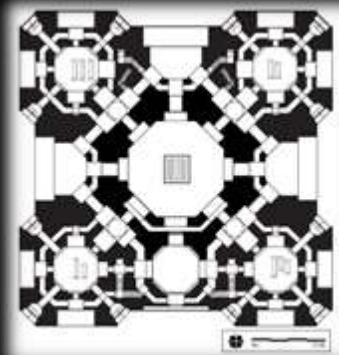


OBSERVATION

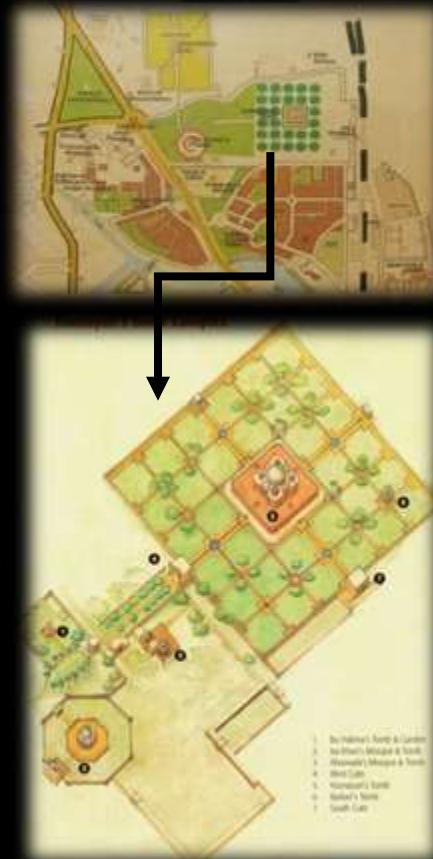
- **PURPOSE** : Built by the orders of empress bega begum in the memory of her husband humayun.
- **AREA** : 27.04 hectares (66.8 acres)
- **HEIGHT** – 47m plinth – 91m wide
- **ROOF**: First Indian building to use the **persian double dome** on a high neck drum, and measures 42.5 metres (139 ft), and is topped by 6 metres (20 ft) high brass finial ending in a crescent, common in Timurid tombs.
- **MATERIAL**: Built of **rubble masonry** and **red sandstone** uses **white marble** as a cladding material and also for the flooring, jalis, door frames, chhajjas ,and the main dome.



GROUND FLOOR



UPPER FLOOR



VICINITY PLAN

SITE LOCATION

The site was chosen on the **banks of Yamuna river**, due to its proximity to **Nizamuddin Dargah & Purana Qila**.

- The **central octagonal chamber** have **cenotaph of humayun**
- Central chamber have **eight alcoves**, one on either side , divided into a double storey elevation.
- **Third storey above them** has **jali openings**, followed by double storey dome.
- **Three emphatic arches** dominates on each side , of which central one is the highest.



HUMAYUN'S CENOTAPH

HUMAYUN'S

TOMB

LOCATION : DELHI

DATE: 8th AUG 2022

ARCHITECT: MIRAK MIRZA GHIYATH & SAYYED MUHAMMAD

ARCHITECTURAL STYLE: PERSIAN & INDO-ISLAMIC ARCHITECTURE.

BUILT IN : 1565-1572

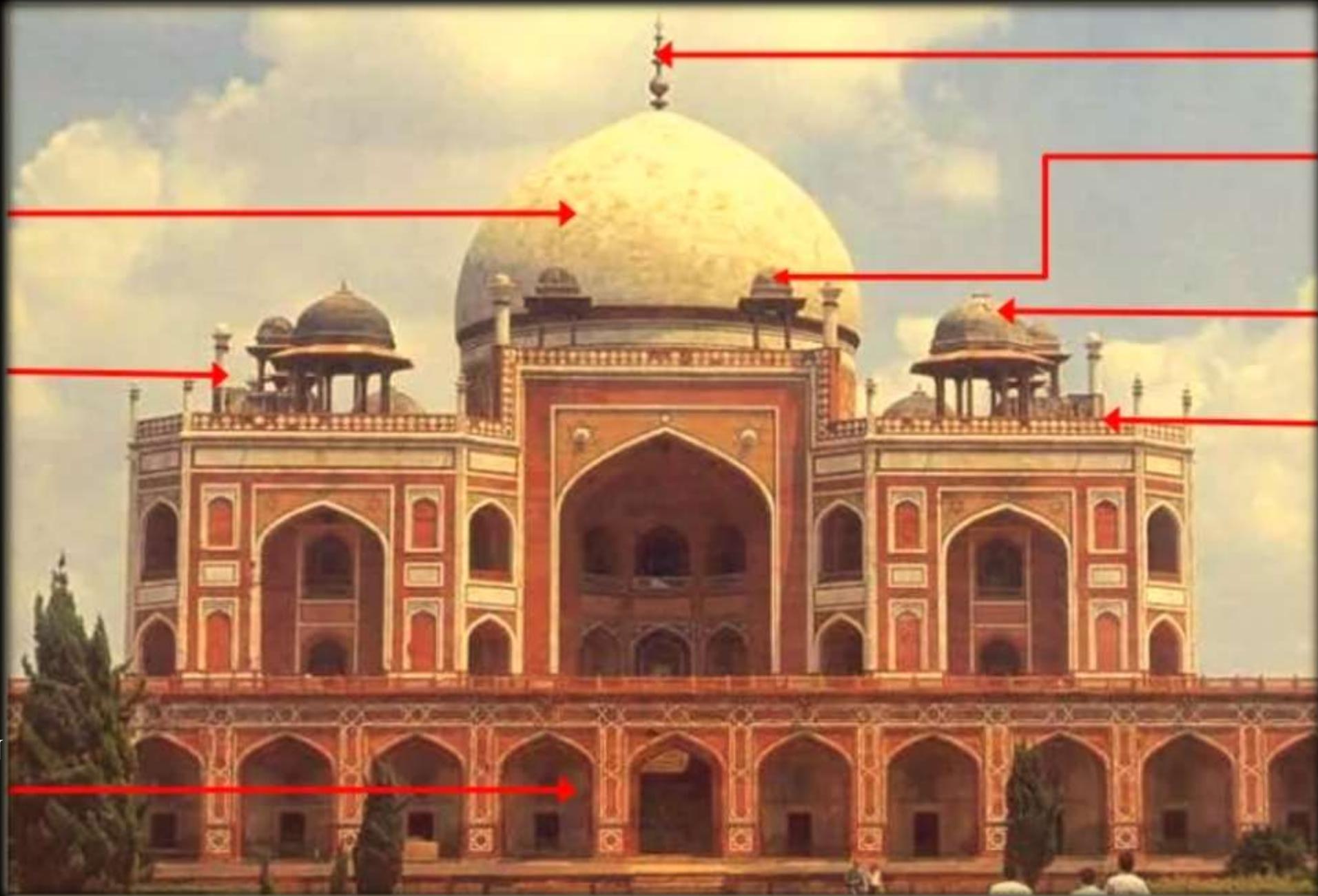
INFERENCE

- Humayun's tomb is both a refinement of the Indo-Islamic architectural style and the first monument of its kind to be built on such a massive scale.
- The tomb's formal symmetry - Persia
- The bulbous dome - Islamic
- Material - the native white marble & red sandstone
- Roof crowne - small domed kiosks from Indian tradition
- The symmetrical and simple design on the exterior is in sharp contrast with the complex interior floor plan, of the inner chambers.

PLAN :

- **The first garden tomb** in Indian subcontinent with Persian style inspired Charbagh garden .
- Square **nine fold plan**, symmetrical ground floor with total 124 chambers.





METAL FINIAL

CHHATRI TYPE
KIOSK

KIOSK
WITH
CUPOLAS

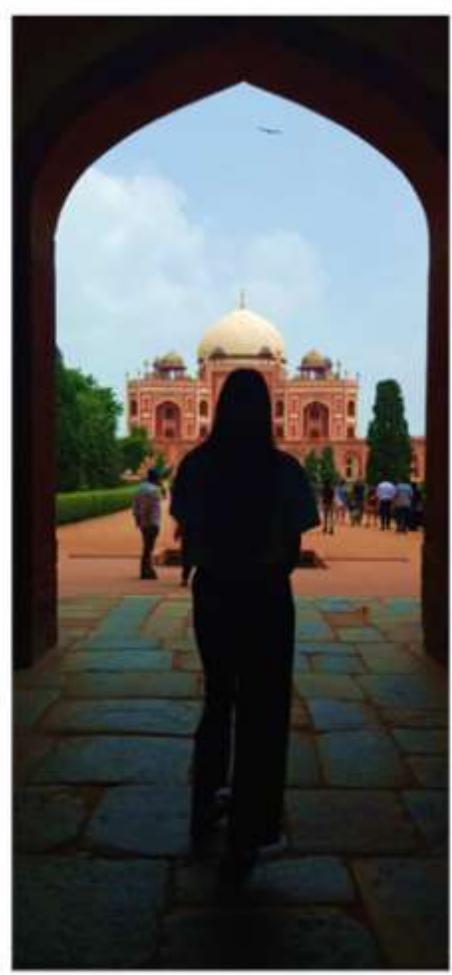
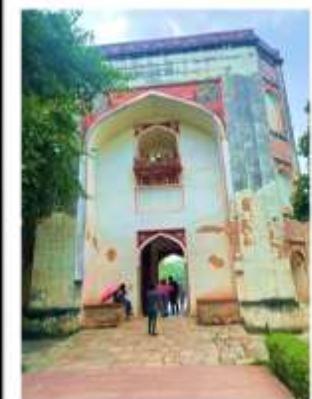
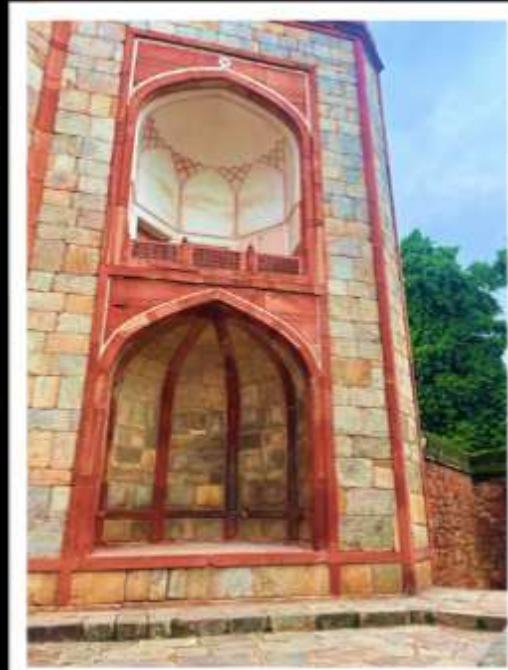
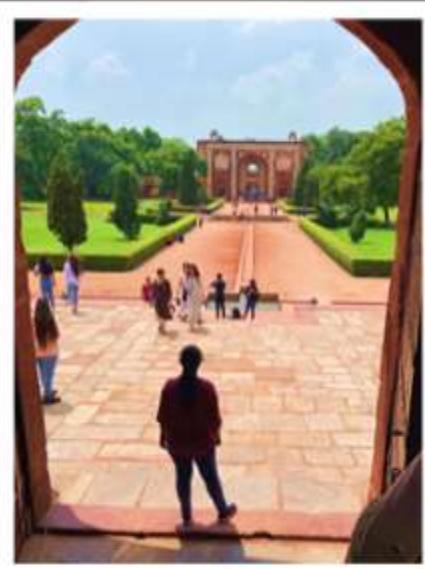
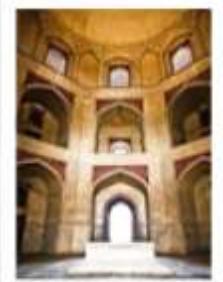
PARAPET

PERSIAN
DOUBLE
DOME

TURRET
WITH
CROWNING

ARCHED
ALCOVE IN
THE
FRONT
FACADE

HUMAYUN'S TOMB



Thank You

