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Imambara complex -The monument of Awadh architecture

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1. OVERVIEW

Architecture is the art and science of designing and constructing buildings, spaces, and environments that fulfill both functional and aesthetic needs. Its primary purpose is to create spaces that enhance the quality of human life, facilitate various activities, and respond to cultural, social, and environmental contexts. Architecture has a rich history that spans millennia from ancient civilizations like the Egyptians and Greeks to the Renaissance and modern architecture, the field has evolved significantly. Different regions and periods have produced distinct architectural styles. These styles are characterized by specific design elements, construction techniques, and cultural influences.

History refers to the study of past, encompassing all records human events, societies, cultures, and civilizations. history of Islamic Architecture opens in the same region where some four thousand years ago the Indus valley folks had built the earliest known civilization. An episode in the history of India and Islam, a triumph without result. Here is a very significant example of history as well as architecture Known as Bara Imambara.

The term “Imam Bara” typically refers to a type of Shia Muslim Congregation Hall and shrine, and one of the most famous Imam Baras in India is in Lucknow, Uttar Pradesh. The Bara Imambara is a significant historical and architectural landmark in Lucknow, Known for its

Fig 1

grandeur and historical importance. The Imam Bara complex is an excellent example of



Mughal architecture with a blend of **Indo-Islamic style(Fig 1)**. It is renowned for its central

hall, which is one of the largest arched construction without support beams. The main hall also known as “Asfi mosque”. The Bara Imambara serves as a place of worship and for Shia Muslim during religious ceremonies, especially during Muharram. Especially when processions are organized. Efforts have been made to preserve and maintain the historical integrity of the Bara Imambara. It has been designated as a protected monument by the archaeological survey of India. The Bara Imambara stands as a testament to the architectural prowess of its time and continues to be an important cultural and historical landmark in Lucknow, attracting visitors from all over the world.

CHARACTERISTICS OF BARA IMAMBARA

Bara Imambara located in Lucknow is a historical monument known for its architectural beauty and cultural significance. Here is the history timeline of Bara Imambara-

Construction Commences (1784): Asaf-ud-daula, the Nawab of Awadh, commissioned the construction of Bara Imambara in 1784. He initiated this project as a part of a famine relief program during the 18th century.

Construction of Bara Imambara: The main architect behind the construction of Bara Imambara was Kifayat-ullah, a renowned architect of the time. The construction of the complex took seven years to complete, from **1784 to 1791**.

Purpose of Construction: The Bara Imambara was primarily built to provide employment to the famine-stricken population of Awadh during a severe famine. The Nawab wanted to offer employment to people and provide them with food in exchange for their labor.

Unique Design: The Bara Imambara is known for its unique architectural features, including the central hall that is one of the largest arched constructions in the world without any support beams and pillars.

Historical Significance: The Bara Imambara is not only a marvel of architecture but also holds historical importance. It served as a place for religious and social gatherings, especially during Muharram and other Islamic festivals.

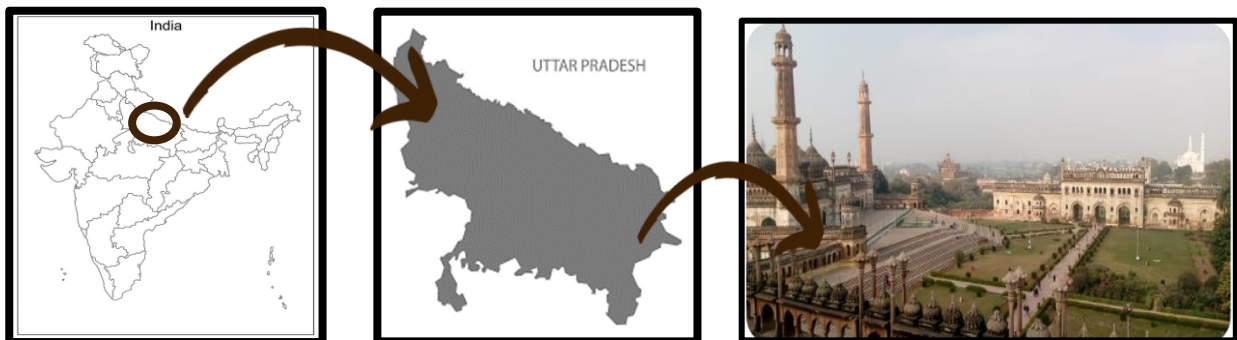
Continued Use: Despite its historical significance, the Bara Imambara continues to be used for a religious and cultural event. It is a popular destination for tourists and devotees alike.

Maintenance & Restoration: Over the years, there have been efforts to maintain and restore the Bara Imambara to preserve its architectural beauty and historical significance.

HISTORY OF AWADH

Awadh & Awadh Architecture:

Asafuddaula the fourth nawab of Awadh shifted his capital to Lucknow (fig 2). Under his patronage and direction, Lucknow became the center of a poetic school, a sophisticated lifestyle, and also a religious expression that's surpassed most of the developments that had hitherto occurred in the subcontinent at that time. He was keen to develop Lucknow as new cultural center.



Source: - Map of India

Source: - Map of India Fig 2

Source: - Author

In the second half of the eighteenth century the rulers of Awadh created a full-fledged court and capital at Lucknow. It rivalled and even surpassed the Mughal capital for its political pretensions and the wealth and vitality of its artistic worlds. The cultural elite of the Awadh court both cultivated the existing forms of court life and also created new schools of poetry, music, dance, drama and art. Many of the styles and forms of the Mughal court were adopted and enriched with regional variations.

The year 1784 might have passed as any other year in the history of Awadh (in present-day Uttar Pradesh) if not for a terrible famine that struck the region that year. So severe were its effects that not only the common people, but even most of the noblemen were reduced to penury. People had no jobs and no food to eat. At that time, the Nawab of Awadh, Asaf-ud-Daulah, came up with a brilliant way of generating employment for the rich and the poor alike. He did not want to give out free doles to jobless workers and believed that people needed to earn a living and not depend on charity, so he decided to build the biggest prayer hall in the country, an imam bara. The imam bara would need many workers and all the people working on it and their families would be fed by the Nawab. The Nawab employed more than 20,000 men for the construction of the complex. Soon, they started their work — digging, laying bricks, carving stone, and wood, carrying earth. It is said that the common people would erect the walls during the day, and on every fourth night, the noblemen would bring down whatever

was constructed. For their efforts, the nobility also received payments. This ensured that the work lasted and common people did not starve while the unskilled aristocrats were also employed and their much-needed anonymity thoroughly maintained — this was the Nawab’s way of making sure that no one in his kingdom was ever out of work. (Yes, quite ingenious and generous this Nawab was!)

The famine lasted eleven long years. And to continue to generate employment, the construction also continued for the period the famine lasted. Despite the repetitive building and breaking, the Bara Imambara, also called the Asafi Imambara after the Nawab, turned out to be magnificent. It was neither a mosque nor a mausoleum, but was meant to be a prayer hall where the community could congregate for mourning during Muharram. It rivalled Mughal architecture, and even today, the imambara is thronged with crowds who get mystified by the grandeur and exquisiteness of this mega monument

This Imam bara is also known as Asafi Imam bara and it is the most important religious monument of Shia Muslims of Lucknow. BaraImambara, Romi Gate, Daulat Khana and Bibiyapur Kothi are the most prominent constructions done by him. Gradually the Imambaras became the primary religious and social centers of the Shias. It is also part of the Shia’s religious as well as social performances. The Shia kings and nobles built many large Imambaras for public use. Some of these are very small while others are large monumental buildings and complexes. The building took many years in its completion. Near about two hundred laborers’, masons and skilled men worked for years on this building. It cost one and a half crore rupees. Kifayatullah Shah Jhanadabadi was the main architect of the Imambaras.

PLACES IN IMAMBARA

6.1 Asfi Imam Bara Complex:

The “BARA” means Big so we called Baraimam bara and it known as bhul bhuliya in local language. The great or bada imambara is enclosed with the decorative gateways. the Imambara complex is full of beauty and art. It gives the best example of the sustainable architecture and the Lucknowi architecture. Sustainability reflected in buildings of the Imambara complex like these building made by the all local and food material. The hue forecourt shows the greenery and hall widows made such as, that they gave natural lighting.

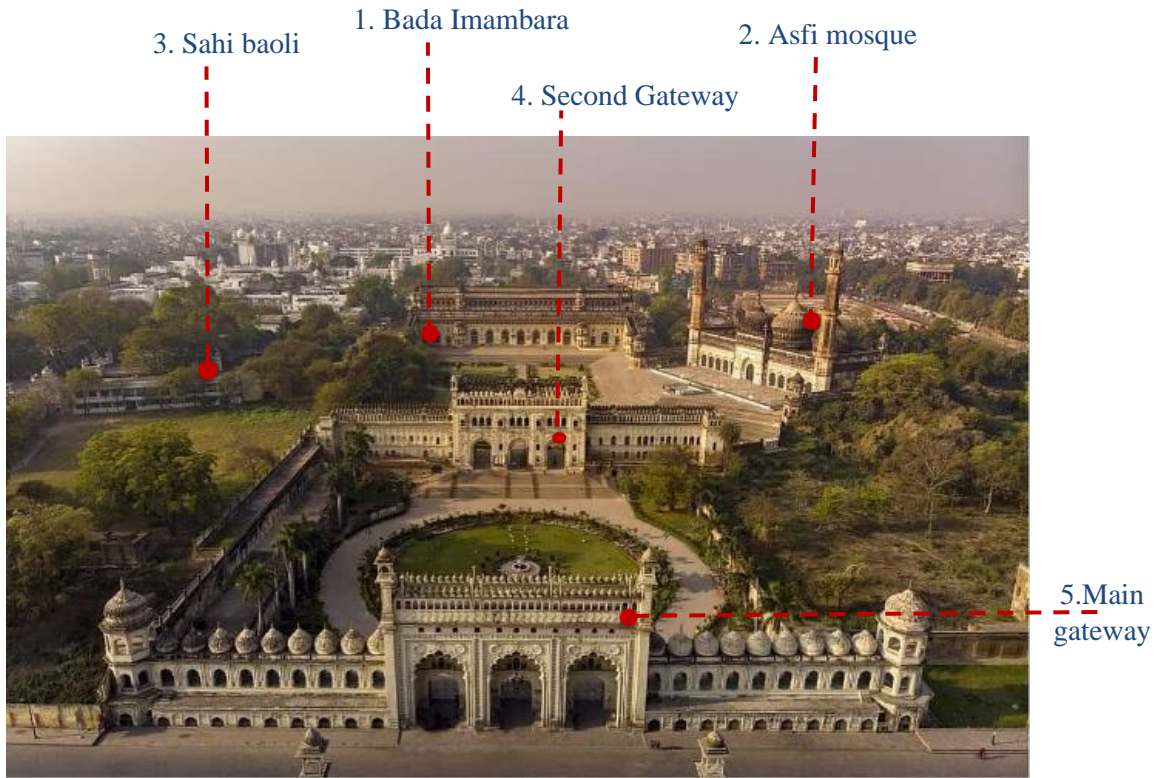


Fig - Bada Imambara complex view

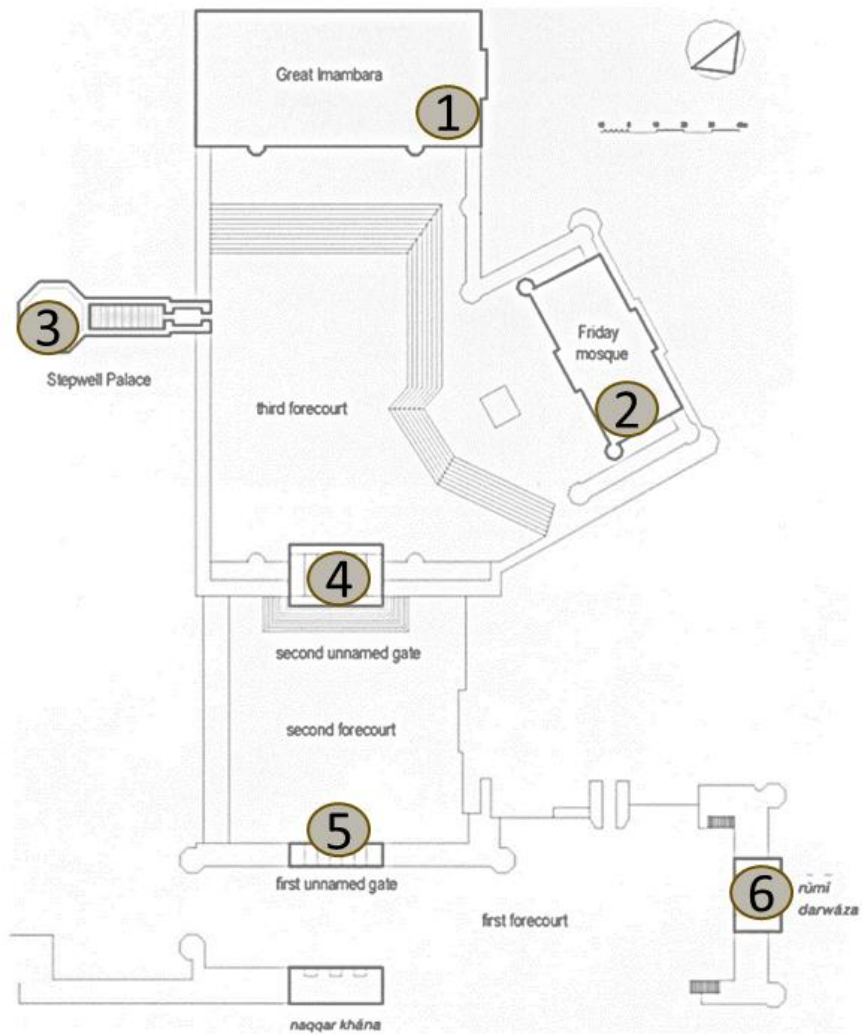


Fig - Bada Imambara complex Plan

The historian writer **P.C.Mukherje**, said *“On the whole, the building art of Lucknow as of Indo -Saracenic in general, has some principles of its own...they aim to produce not only useful, but ornamental and tastefully regulated buildings which while filling all the wants of native life have such a margin left as to allow the means of luxury and to supply a beautiful sight.”*

Fig 3 of plan and the view of the Imambarara complex shows the full planning of the complex. The two-entrance gateway located in center which are very decorative. In the complex of Imambarara there is one Asfi mosque, Sahi Baoli, center hall and the Bhul Bulaiya. The entry point of Bhool Bhulaiya is from the left side of the main building. On the east of the main building is a three-storey building, which is called the summer house. The western gate of Asifi Imambararas is called Romi Darwaza or Turkish Gate and it is said that it is a copy of one of the gates of Constantinople (Qustuntunia). **“Bara imam bara is complex with many architecture Awadhi monuments.”**

The monumental buildings such as tombs, Imambaras, and mosques reflect the traditional elements of architecture. The ethnicity of ancient architectural elements used in religious monuments has stayed the same over the years. In this style of architecture, the buildings have intricate details within the domes, tall minarets with cupolas, fish as a decorative element in the entrance gate, a high plinth base, cloisters, arches, arcades, and kiosks. The architectural confetti of the Mughal empire in Lucknow came from 1775 to 1800 under the Nawabs-Asaf - Ud-Daulla and Sadat -Ali- Khan.

Entrance gateway

In imam bara complex there have two entrances gateway on North-south axis (Fig 4). Gateways have triple arched and 9 cups. The entrance gateways carry each other like this the first gateway leads form the first courtyard to the second.



Source: - Author

Front side of main entrances gateway

In imam bara complex there have two entrances gateway on North- south axis (Fig 4). Gateways have triple arched and 9 cups. The entrance gateways carry each other like this the first gateway leads from the first courtyard to the second. Second courtyard is square in plan. Second gateway is like first, lead to the main court with the Imam bara placed on the south end of the quadrangle.



Source: - Author

Front side of main 2nd entrances gateway



Fig: Back side of Second entrances gateway

Source: - Author

The image of the entrance gateway shows the beauty of the gate in which we see the art and artists work together. The entrance gateways use for safety propose. The triple arched gateway protects the entire complex as the soldier were standing at top of the gateway and look after the place.

Halls



Source: - Google image

Fig 6

The main building of the imambara is a three-storeyed building constructed on a raised platform that one can enter through one of the two arched gateways separated by a grassy courtyard. It is one of the architectural wonders of that era. There are three halls under the one roof - **China dish, Perisan hall and Khrbooza Hall or Melon Hall also known as Indian hall**. The Persians Hall known as central hall; it is said to be the largest vaulted chamber in the world. Except for the galleries in the interior, there is no woodwork in the entire structure. It is now used by Shia Muslims for the purpose of Azadar.

Central hall - The central hall (Fig 9) is the largest. The hall has the length of 50m and width of 16m. The ceiling is constructed at the height of 15m. The main feature of the ceiling is that there are no columns to support it. Also, no beams, iron rods or a girder were used to support the ceiling. The eight other halls are small and surround the central one. Bara Imambara has one of the largest halls in the world, with a unique feature being that it does not have any external support of wood, iron, or stone beams. In fact, the roof of its central hall is a result of interlocking bricks without any beam or girder for prayer purposes, it was decided that a big central hall would be built without any columns or pillars! It is a very large structure, and building it by conventional means would have required columns to bear the load of the ceiling, including the mammoth dome.

- For such a massive structure, the absence of pillars sounded almost impossible. But then the great architect who was working on the imambara had a brainwave and he decided to create eight chambers in such a way that all of them have different roof heights and lend support to each other.

- The space above and below these chambers is like a magic maze that supports the massive dome on top of the Imambar.
- The famous Idioms – “**Diwaro ke bhi Kaan Hote Hai,**” this idiom is famous because the center hall walls in second floor are such that the voice whisper at one corner heard at another corner of the wall. the acoustic is equally marvelous of the hall.

6.3.2 China hall (Fig 7): It is square in plan became octagonal at in mid-level and 16 sides at top level. It is one of the standing places for queen. This hall made as such that queen was saw every person or function but the persons did not see the queen. **6.3.3 Khabooza hall or Indian Hall (Fig 8):** This hall roof look like watermelon and the decoration also



Source: - Google image Fig 7



Source: - Google image Fig 8

reflects like Kharbooza. The roof of halls is common and flat and one piece. In this hall the entrance is big or larger than the others hall.



Source: - Google image Fig 9

Central or Perisan hall

- c ← The decorative ceiling
- ← The cantilever balcony with wooden railing is built in all four sides of the hall.
- ← The arch entrance gives aesthetic look to the hall and provide full sunlight into the hall. No need to the artificial light.

Construction techniques and Materials for halls:

Bara Imambar is primarily constructed using bricks and lime mortar. The massive central hall is also constructed with bricks. It is said that no wood or iron was used in the construction

of main hall. The central hall is one of the most striking features of Bara Imambara. This is the largest arched construction in the world without any supporting beams or pillars. The central arch is known as basket of flowers due to its unique design. The central hall's arches and domes are constructed in a way that they support each other through their weight and design, creating a self-supporting structure. The interiors of the Bara Imambara are adorned with intricate stucco work, which is a plaster based decorative technique. Stucco was used to create elaborate designs and patterns on the walls and ceilings. The construction of the Bara Imambara is considered an architectural marvel due to its innovative techniques that allowed for the creation of large, open spaces without the use of conventional supports like beams or columns.

Bhool Bhulaiya

This unique architectural design gave birth to the famous Bhul Bhulaiyya (Fig 10 & 11), which is a network of narrow passageways that, when negotiated correctly, wind their way to the upper floor, leading eventually to the rooftop balcony. This strange labyrinth has about a thousand passageways and 489 identical doorways. Some passages have dead-ends, some have steep drops and some others lead to the entrance of exit points.

Only one passageway leads to the rooftop balcony. If one gets into the labyrinth, it would be easy to get lost in its numerous passageways and it might take a while before one has figured the way out! Thus, one of the largest existing mazes in India, the Bhul Bhulaiyya, though created for practical purposes, has become the showstopper of the Imambara!

Within three huge halls named China Hall, Persian Hall, and Kharboza Hall lies the highlight of Bara Imambara, a series of labyrinths known as Bhul Bhulaiya. Bhul Bhulaiya (Labyrinth), an amazing maze of 20 feet thick walls.

Picture below show the gate or entry pattern in the internal side at bhul bhuldiya . the below picture shows the gallery of the bhul bhulaiya .



Source: - Author



Source: - Author fig 11

Construction Techniques and Materials

Like the rest of Imambara complex, Bhool Bhulaiya is primarily is constructed using bricks and lime mortar. The maze's walls and partitions are made of brick, and the layout is designed with a high degree of precision.

Complex Layout is main construction technique of Bhool bhulaiya. This layout is also very confusing and that is the interesting fact about it. The passageway is designed to intersect, double back on themselves, and lead to dead ends, making it extremely challenging for visitors to find their way out without assistance.

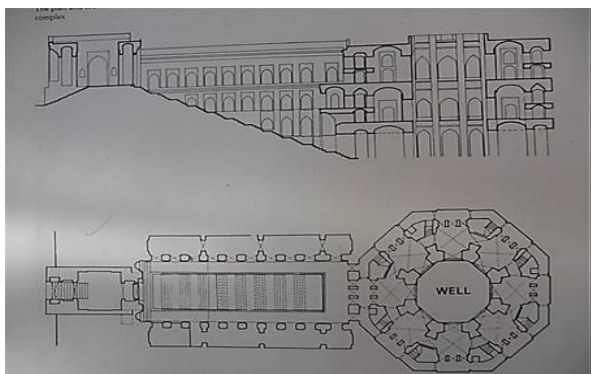
Traps doors and false passage are incorporated into the maze to add to the confusion.

The Bhool Bhulaiya have multiple levels or stories, with staircase connecting them. Visitors may move up and down without even realizing it. The maze intentionally kept dimly lit, with minimum natural light entering through small windows. The construction includes features that enable sound to carry across different parts of the maze. While the primary material that was used in Bhool bhulaiya is brick but the decoration in the bhool bhulaiya was done by stucco on the walls and the ceilings. The design of the maze is carefully orchestrated to ensure that it remains a challenging and perplexing experience. The passage are designed to loop back on themselves, have hidden junctions, and include optical illusions.

Sahi Baoli

The monument has a five-storey Baoli or step well and is also known as Shahi Hammam. The step well is directly connected to Gomti. On the left of the main building is the exquisite seven-level Shahi Baoli, out of the five storeys, three are submerged in water while two are above. Initially dug as a well during the construction. As it was a perennial source of water, a guest house was built around it later. During the days of the nawabs, the heat-stricken citizens of Lucknow went to Shahi Baoli in the summer months for its cool breeze. The baoli is at an angle of 45 degrees to the main gate of the imambara. What is interesting is that it offers a secret view of the visitors! Because of the angle in which it was constructed, and the alignment of one of the windows of the building, the water of the Baoli reflects the shadow of the visitors. When the British came to India, the guards of the Nawab could see the red uniforms of the British soldiers at the main gate reflected in the clear water of the baoli — much like the CCTVs that watch over people's gates these days.

In fig 12 the plan and section of the Sahi Baoli, which shows that the plan of shi baoli is in octagonal and the well as surrounded by the void halls, in both side the chenaging rooms or rest room for sahi peoples. the section (Fig 12) represents the all floors of sahi baloi and shows the details of its arches. Fig 13 shows the material and the one-point perspective of the Shai



Source: - Google image Fig 12

Plan and section of tsahi baoli .



Source: - Author Fig 13

Perspective View of Sahi Baoli

Brick is the primary construction material used for Shahi Baoli like other elements of Imambara complex. It is a step well that means it consist of a series of steps that leads to down to water reservoir. It was designed to allow to access water during the hot days of the year. This Baoli is symmetrical and organized manner. It has arch openings in walls. These arches was not designed only for aesthetical or architectural purpose but to support the structure. There is a

well chamber at the bottom of the Baoli to store enough amount of water for the usage in hot days. It may have a system to drawing water such as pulley or winch. Shahi Baoli have some decorative elements in it. It has intricate stucco work, carvings, ornamental designs on the arches and walls that adds aesthetic appeals to the structure. The stepwell as name suggested includes steps that provide access to the water at the bottom. For the maintenance they use stucco, lime plaster to enhance and maintain its appearance over the time.

Asafi Mosque

On the right side of the main edifice is a flight of stairs that leads to a plinth on which stands the three-domed Asafi mosque (Fig 14). Surrounded by intricate minarets, the mosque has two large prayer halls and eleven arched doors. The mosque faces Mecca, the holiest city in Islam. It was also built as part of relief



The Asfi Mosque

Source: - Author fig 14

measures. With sculptured domes and minarets, the mosque provides a most splendid look and many thousands of people of Lucknow come here on Friday to offer namaz.

There is also a story about how a secret tunnel was created in the mosque, which goes all the way to Delhi. It is believed that this secret tunnel was later sealed by the British after some of their soldiers went looking for royal treasure there and never came back.

Asafi Masjid was constructed inside the bara imambara by Nawab Asaf-ud-Daulah..No iron material was used in the construction of the mosque. The mosque is located to the right of the bara imambara gate.

Construction techniques and Materials for Mosque

Rumi Darwaza

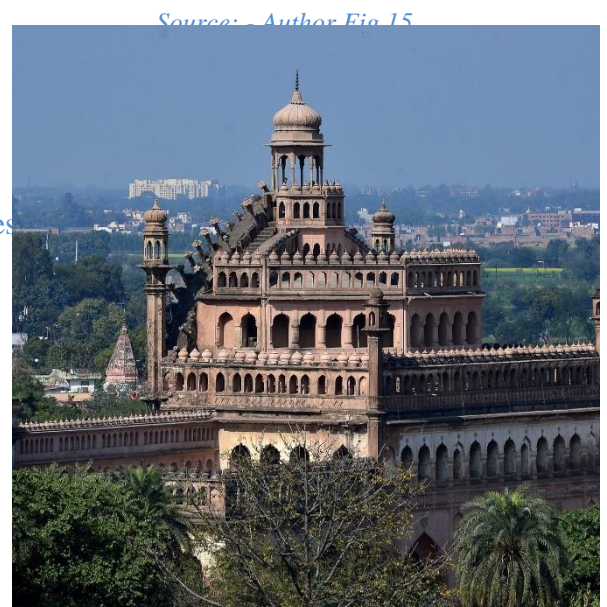
The Rumi Darwaza (Fig 15) known as Turkish Gate, The Rumi Darwaza, which stands sixty feet tall. The darwaza is distinct from the Mughals in terms of architectural style and materials used. The design consists of a big arch and on top of that, there is a half-spherical dome resting on half-octagonal plan. The gate is built using thin burnt clay bricks and lime-crushed brick aggregate mortar (Lakhori and Surkhi respectively, which was prevalent during the rule of Nawabs in the 18th century). The gate boasts of intricate carvings of flowers.

The 60-foot-tall gateway has a close resemblance with the Sublime Porte, Bab-i-Humayun in Turkey and is referred to as The Turkish Gate.

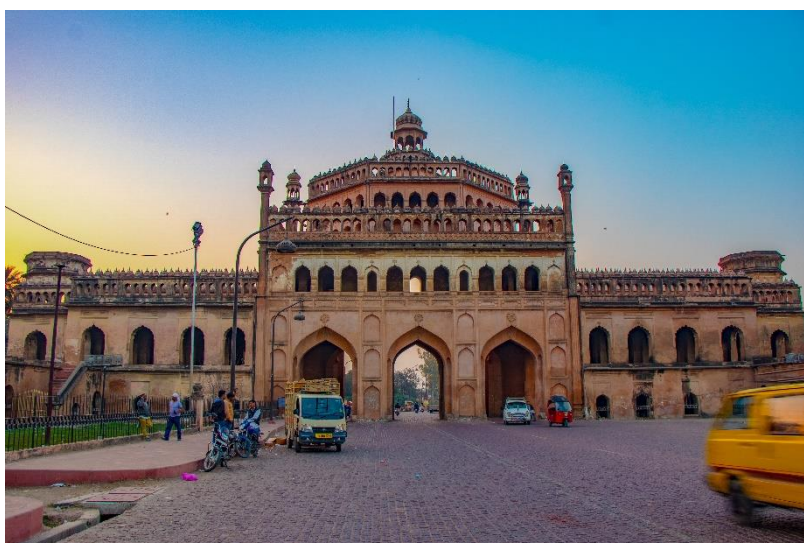


Source: - Author Fig 16

Front view



Back side view of top of rumi darwaza



Back side view of rumi darwaza

Construction techniques and materials of Rumi Darwaza

Red Sandstone: The primary construction material used for the Rumi Darwaza is red sandstone. Red sandstone was a favored choice in Mughal architecture due to its durability and aesthetic appeal. It is known for its ability to be intricately carved, and the Rumi Darwaza features extensive stone carvings.

Arch and Dome: The central arch of the Rumi Darwaza is a massive semi-circular structure that showcases Mughal architectural prowess. The arch is constructed using red sandstone blocks and intricately decorated with floral and geometric designs, including Persian calligraphy.

Octagonal Towers: On either side of the central arch, there are imposing octagonal towers that are constructed using red sandstone as well. These towers add symmetry and balance to the structure and are crowned with chhatris (small domed pavilions) that are also made of red sandstone.

Limestone Plaster: The exterior of the Rumi Darwaza is coated with a layer of white limestone plaster. This plaster not only adds to the aesthetic appeal of the structure but also provides protection against weathering.

Skilled artisans and craftsmen were instrumental in the construction of the Rumi Darwaza. These craftsmen were experts in stone carving and architectural detailing, and their craftsmanship is evident in the intricate designs and fine detailing throughout the gateway.

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