

UNIT 33 ARCHITECTURE

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33.0 OBJECTIVES

The establishment of Mughal rule in India in 1526 (Block 2) revitalised Indo-Islamic architecture. The new rulers effected an amalgam of the prevalent architectural forms and techniques with those brought from Central Asia and Persia. The result of their efforts was the emergence of one of the most splendid buildings in India.

After reading this Unit you will know about:

- new structural forms and techniques in Mughal architecture;
- major buildings of this period; and
- elements of decadence in Mughal architecture towards the close of the period.

33.1 INTRODUCTION

The Mughal rulers were men of acute aesthetic awareness and, as patron of art and culture, they built beautiful cities and buildings in India. The foundation of a new style of architecture in India had already been laid in the thirteenth century with the introduction of the arcuate technique where spaces were covered with domes and entrances were made with the help of arches. The Mughals carried this tradition and created a synthesis of the pre-Turkish technique, viz., trabeate with the arcuate. The final result, however, of all this blending was the emergence of a distinct style of their own.

Babur did not have enough to devote to big architectural projects. He, nevertheless, laid out several gardens in India on the pattern of his culture-area. In his memoirs (**Baburnama**) he claims credit for some pavilions also. Unfortunately very few of his buildings survive today.

Humayun, Babur's successor, was plagued by continuously eroding political authority. Within a decade of his assuming power, he was dethroned and sent into exile in Persia. The buildings dating from this period, therefore, do not show any distinctiveness. Humayun survived for only one year after his return to India in 1555. However, the impact of a long contact with the Persian culture can be seen in the designing and execution of his mausoleum under the supervision of his wife Hamida Banu Begum.

The flowering of the Mughal architecture in reality took place under Akbar. He encouraged a hybrid style, containing foreign as well as indigenous elements. Akbar particularly

appreciated the resources of the indigenous artisans and got them translated in the buildings of Fatehpur Sikri.

Akbar's son Jahangir was not a notable builder, but Jahangir's son Shah Jahan was one of the greatest patron of the building art. Some of India's finest monumental heritage dates from Shah Jahan's reign. Marble replaced red sandstone as the principal building material, and the decorative art of inlaying achieved distinction with the introduction of semiprecious stones as inlay material, called *pietra dura* (*prachin kari*). Shah Jahan also introduced the bulbous domes and convoluted arches in his buildings.

Aurangzeb's temperament did not respond to the style prevailing from his father's reign. His buildings, therefore, show a change: they are austere in both material and style.

33.2 BEGINNING OF MUGHAL ARCHITECTURE

The history of architecture during the 16th-18th centuries is in fact an account of the building activities of Mughal Emperors, except for a brief interregnum of a decade and a half when Surs ruled in Delhi.

It is true that the Mughal style of architecture took a concrete form during the reign of Akbar, yet the basic principles of Mughal architecture were provided by Babur and Humayun, the two predecessors of Akbar.

33.2.1 Buildings of Babur

Babur had a short reign of five years, most of which was spent in fighting battles for the consolidation of the newly born Mughal state. He is, however, known to have taken considerable interest in building secular works. It is unfortunate that very little of this work is extant today. The only standing structures of Babur's reign are two mosques, built in 1526, at Panipat and Sambhal. But both these structures are common place, and possess no architectural merit.

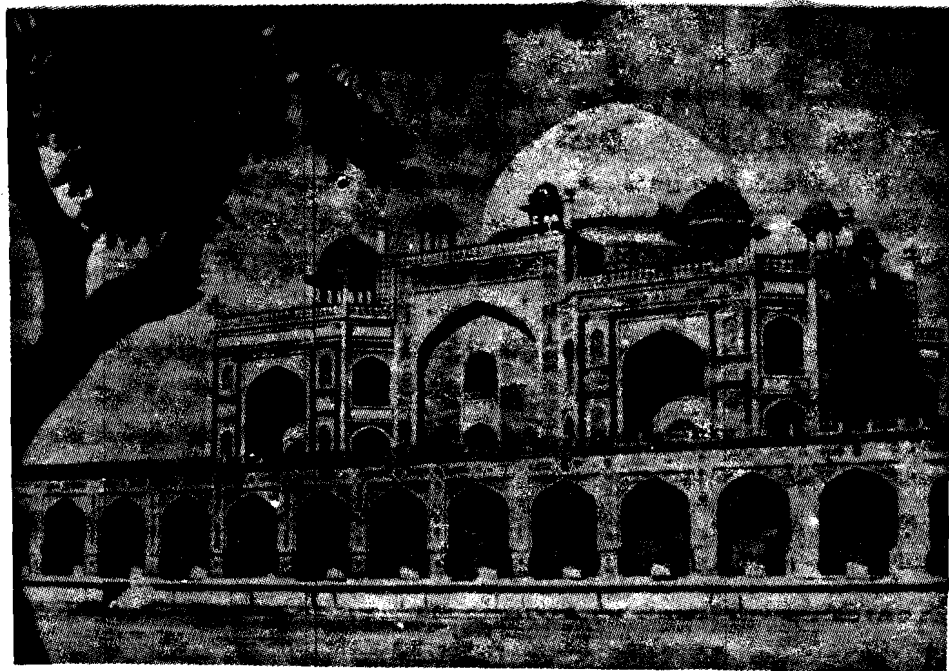
Babur's secular works mainly comprise the laying of gardens and pavilions. In one of the miniatures, he has been depicted inspecting the layout plan of a garden of Dholpur. Today, only the excavated ruins of this garden are visible. Two more gardens, Ram Bagh and Zahra Bagh at Agra, are also attributed to him. But the present layout of these gardens seems to have undergone many alterations. None of Babur's pavilions have been noticed as surviving today.

33.2.2 Buildings of Humayun

The surviving buildings of Humayun's reign have the same inconsequential character as that of Babur. The Mughal domination over India was too unsettled for the production of any great work of architecture. Moreover, Humayun had to spend fifteen long years of his life in exile in Persia during the ascendancy of the Sur dynasty in Delhi. However, two mosques from among several other buildings erected during the first phase of his reign survive. One of these lies in ruinous condition at Agra. The other is at Fatehabad (Hissar). But both these structures are devoid of any architectural distinctiveness much in the same manner as the mosques of Babur.

Humayun's return to Delhi in 1555 was shortlived. There are in fact no notable buildings of this time. Mention may, however, be made of Humayun's tomb as a structure which was inspired by the Persian culture imbibed by Humayun during his exile. This building is in fact a landmark in the development of the Mughal style of architecture. The construction began in 1564 after Humayun's death under the patronage of his widow, Hamida Bano Begum. The architect of the building was Mirak Mirza Ghiyas, a native of Persia. He brought many Persian craftsmen to Delhi to work on the structure and their skills and techniques were liberally employed. The tomb has thus become representative of an Indian rendition of a Persian concept. It may be noted that Humayun's tomb, strictly speaking, is a building of Akbar's reign. But because of peculiar features, it has been treated separately.

Humayun's tomb is one of the earliest specimens of the garden enclosure and is raised high on an arcaded sandstone platform. The tomb is octagonal in plan and is crowned by a high



Humayun's Tomb

done, which is actually a double dome. It has two shells, with an appreciable space in between. The inner shell forms the vaulted ceiling to the inner chambers, and the outer shell rises like a bulb in a proportion with the elevation of the main building. To the centre of each side of the tomb is a porch with a pointed arch providing entrance to the main chamber. The interior of this building is a group of compartments, the largest in the centre containing the grave of the Emperor. The smaller ones in each angle were meant to house the graves of his family member. Each room is octagonal in plan and they are connected by diagonal passages.

A double-dome is built of two layers. There is one layer inside which provides ceiling to the interior of the building. The other layer is the outer one which crowns the building. The device of double dome enables the ceiling inside to be placed lower and in better relation to the interior space it covers. This is done without disturbing the proportions and the effect of elevation of the exterior. The method of making double dome was practised in Western Asia for quite some time before it was imported into India.

33.3 INTERREGNUM: THE SUR ARCHITECTURE

The Mughal rule in India was interrupted by Sher Shah Sur in 1540. For the next fifteen years the Empire came under the sway of the Surs who embarked on profound architectural projects. Their buildings, in fact, laid the ground work on which the Mughals built.

The architectural heritage produced under diverse conditions and in two separate localities of the Surs may be divided into two separate and distinct periods. The first phase emerged at Sasaram (Bihar) under Sher Shah between 1530 and 1540. Here a group of tombs was built illustrating the final fulfilment of the Lodi-style (for details, see course EHI-03, Block 8) by

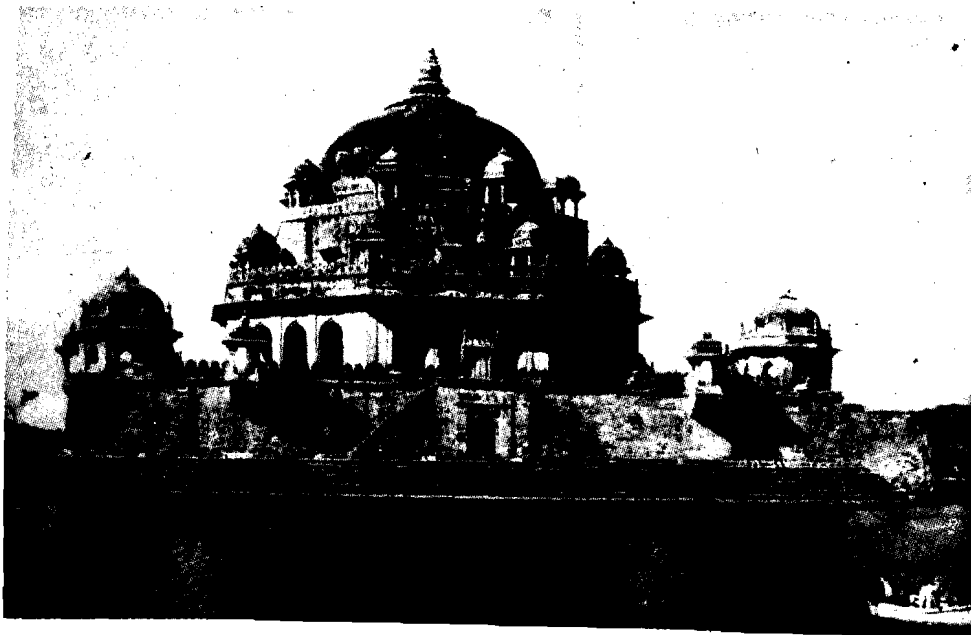
which it has been inspired. The second phase lasted from 1540 to 1545 when Sher Shah had wrested control of the Empire from Humayun. Under his patronage, several architectural innovations were adopted which got reflected in mature form in the consequent Mughal style.

The first phase is represented by a group of tombs, three belonging to the ruling family and one to Aliwal Khan who was the architect of these tombs. The buildings reflect the ambition of Sher Shah to create monuments grander than anything found in Delhi. The first project of this scheme was the construction of the tomb of Hasan Khan, Sher Shah's father, in 1525. But this was a conventional exercise in Lodi design. The major representative of this group was the tomb of Sher Shah (Sasaram), an architectural masterpiece. Here the architect considerably enlarged the normal proportions of the earlier building and set it in a beautiful tank approached by a causeway. In addition to this, he increased the number of stories thus producing a beautiful pyramidal structure in five distinct stages. This monument was constructed of the finest Chunar sandstone.

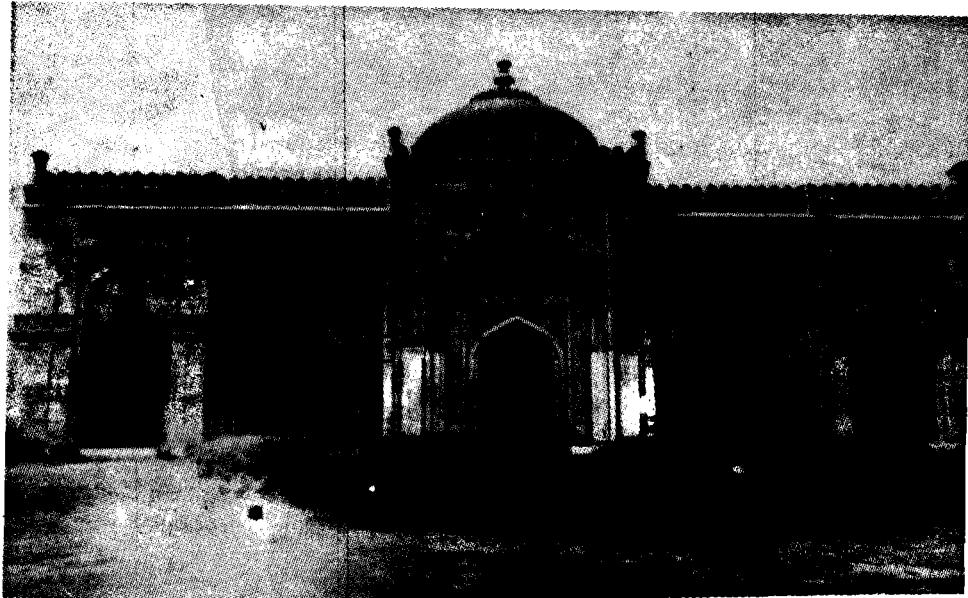
Sher Shah's tomb stands on a stepped square plinth on a terrace appreciated through a gateway via a bridge placed across the tank. There is an error in orienting the lower platform of the tomb on the main axis. But it is corrected by skewing the axis of the superstructure built over the lower platform. The main building comprises an octagonal chamber surrounded by an arcade. There are domed canopies in each corner of the platform. The proportions of diminishing stages and the harmonious transition from square to octagon and to sphere are elements which speak highly of the capabilities of the Indian architect.

The second phase of development took place in Delhi. Sher Shah built the **Purana Qila** intended to be the sixth city of Delhi. Today, only two isolated gateways survive. Far more important, however, was the **Qilai Kuhna Masjid**, built about 1542 inside the **Purana Qila** citadel. In the architectural scheme of this mosque, the facade of the prayer hall is divided into five arched bays, the central one larger than the others, each with an open archway recessed within it. The facade is richly carved in black and white marble and red sandstone, and the central arch is flanked by narrow, fluted pilasters. The rear carriers of the mosque have five stair turrets with rich windows carried on brackets.

One notable feature in this building is the shape of the arches — there is a slight drop, or flatness, in the curve towards the crown. It is indicative of the last stage before the development of the four-centred "Tudor" arch of the Mughals.



Sher Shah's Tomb



Qila-i Kuhna Masjid

Check Your Progress 1

1. Match the following:

- | | |
|------------------------------|----------------------|
| d i) Ram Bagh and Zahra Bagh | a) Hamida Bano Begum |
| a ii) Humayun's tomb | b) Tomb of Sher Shah |
| b iii) Sasaram | c) Sher Shah |
| c iv) Purana Qila | d) Babur |

2. Discuss the characteristic features of Humayun's tomb in 60 words.

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33.4 ARCHITECTURE UNDER AKBAR

Akbar's reign can be taken as the formative period of Mughal architecture. It represents the finest example of the fusion of Indo-Islamic architecture.

33.4.1 Structural Form

The architecture of the reign of Akbar represents encouragement of the indigenous techniques and a selective use of the experiences of other countries. The chief elements of the style of architecture that evolved under Akbar's patronage can be listed thus:

- a) the buildings mainly used red sandstone as the building material;
- b) a widespread use of the trabeated construction;
- c) the arches used mainly in decorative form rather than in structural form;
- d) the dome was of the 'Lodi' type, sometimes built hollow but never technically of the true double order;
- e) the shafts of the pillars were multifaceted and the capitals of these pillars invariably took the form of bracket supports; and
- f) the decoration comprised of boldly carved or inlaid patterns complemented by brightly coloured patterns on the interiors.

33.4.2 Building Projects

Akbar's building projects can be divided into two main groups, each representing a different phase. The first group comprised buildings of forts and a few palaces mainly at Agra, Allahabad and Lahore. The second group related basically to the construction of his new capital at Fath-pur Sikri.

a) The First Phase

One of the earliest building projects of Akbar's reign was the construction of a fort at Agra, conceived actually as a fortress-palace. Its massive walls and battlements convey an effect of great power. Inside the fort, Akbar had built many structures in the styles of Bengal and Gujarat. Except the **Jahangiri Mahal**, however, all the other structures were demolished by Shah Jahan as part of a later phase of remodelling. Today the Delhi Gate of the fort and **Jahangiri Mahal** are the only representative buildings of Akbar's reign.

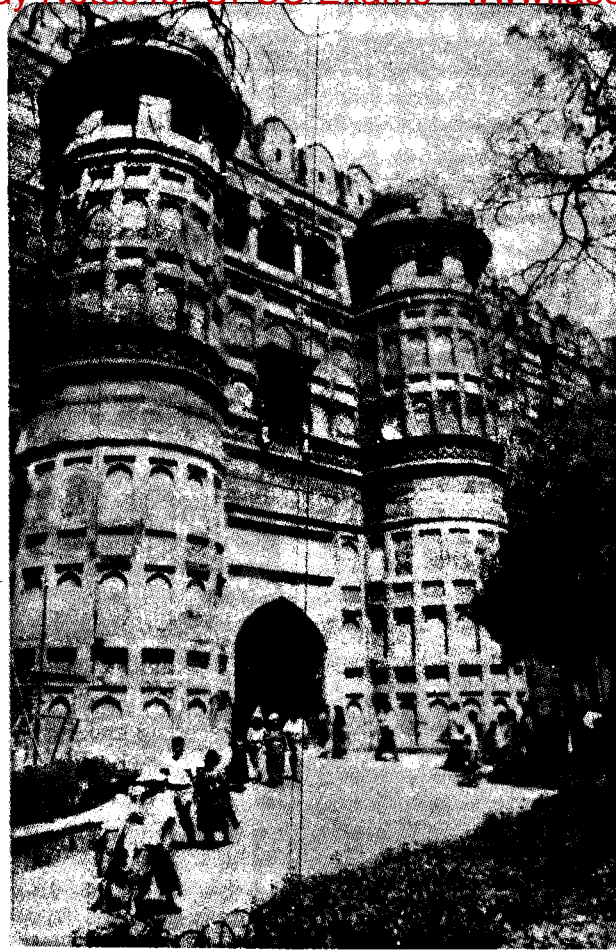
The Delhi Gate of Agra Fort probably represents Akbar's earliest architectural effort. It formed the principal entrance to the fort. The architecture of the gate shows an originality signifying the start of a new era in the building art of India. The gate follows a simple plan; the different components are:

- a front consisting of two broad octagonal lowers by the sides of a central archway;
- a back having arcaded terraces topped by kiosks and pinnacles; and
- an ornamentation consisting of patterns in white marble inlaid against the red sandstone background.

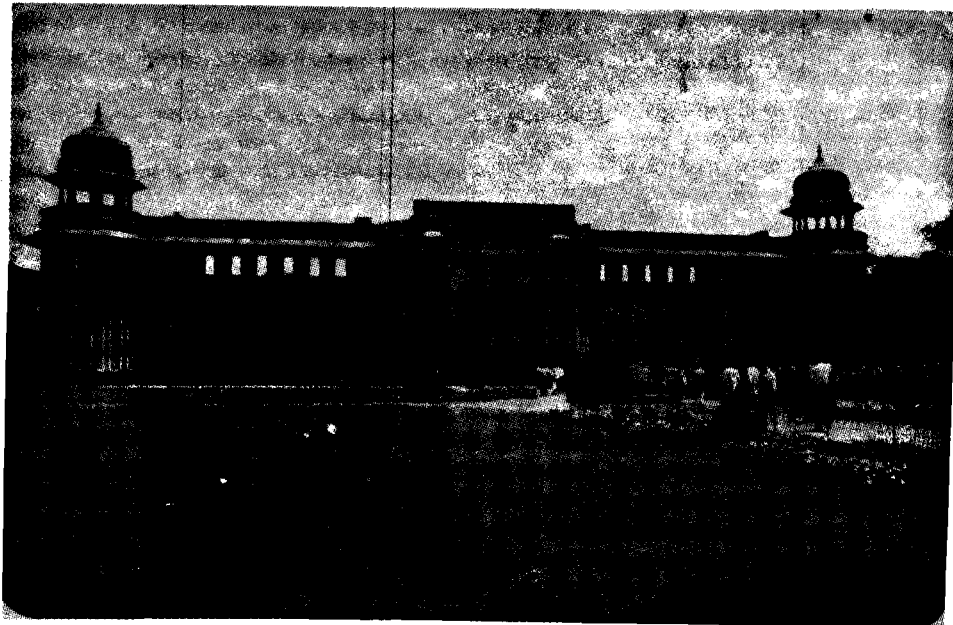
The **Jahangiri Mahal** was built by Akbar and is conceived as a robust building in red sandstone. It is the only surviving example in the fort of the domestic requirements of the ruler and is a fine specimen of the fusion of the Hindu and Islamic building designs. It is planned in the form of an asymmetrical range of apartments. The facade on the eastern side has an entrance gateway leading to a domed hall with elaborately carved ceiling. As one crosses this hall one reaches a central open courtyard. On the north side of this courtyard is a pillared hall with a roof supported on piers and cross-beams with serpentine brackets. The southern side, too, has a similar hall. This symmetry is, however, broken on the east side by a set of chambers that lead to a portico facing the river Yamuna. The entire construction is mainly in red sandstone with the combination of beam and bracket forming its principal structural system.

The same style is manifested in the other palace-fortresses at Lahore and Allahabad. Only the fort at Ajmer represents a different class. Since it spearheaded the advancing frontier of the Empire, the walls of the fort were thickly doubled.

India from 16th to
Mid 18th Century



Agra Fort-Gate



Jahangiri Mahal

The second phase of Akbar's architectural scheme coincides with the conception and creation of a ceremonial capital for the Empire at Sikri, nearly forty kilometres west of Agra. The new capital was named Fathpur.

It is one of the most remarkable monuments in India. In its design and layout Fathpur Sikri is a city where the public areas like the courtyards, **Diwan-i Am** and **Jami Masjid** form a coherent group around the private palace apartments. The city was built in a very short span of time (1571-1585) and as such does not follow any conscious overall plan. The buildings were sited to relate to each other and to their surroundings. An asymmetry seem to have been deliberately incorporated into the setting-out and design of the complex. All the buildings are in characteristic rich red sandstone, using traditional trabeate construction. The pillars, lintels, brackets, tiles and posts were cut from local rocks and assembled without the use of mortar.

The buildings in Fathpur Sikri may be resolved into two categories: religious and secular character. The religious buildings comprise (a) the **Jami Masjid**; (b) the ; **Buland Darwaza**; and (c) the tomb of Shaikh Salim Chishti. The buildings of secular nature are more varied and thus numerous. These can be grouped under (a) palaces; (b) administrative buildings; and (c) structures of miscellaneous order. It is a curious fact that the religious buildings are invariably built in the arcuate style while in secular buildings dominates the trabeate order.

The **Jami Masjid** uses the typical plan of a mosque — a central courtyard, arcades on three sides and domed skyline. The western side has the prayer hall with three separate enclosed sanctuaries, each surmounted by a dome and linked by arcades. The usual entrance to the masjid is from the east where stands the structure of a big gateway projected in the form of a half hexagonal porch.

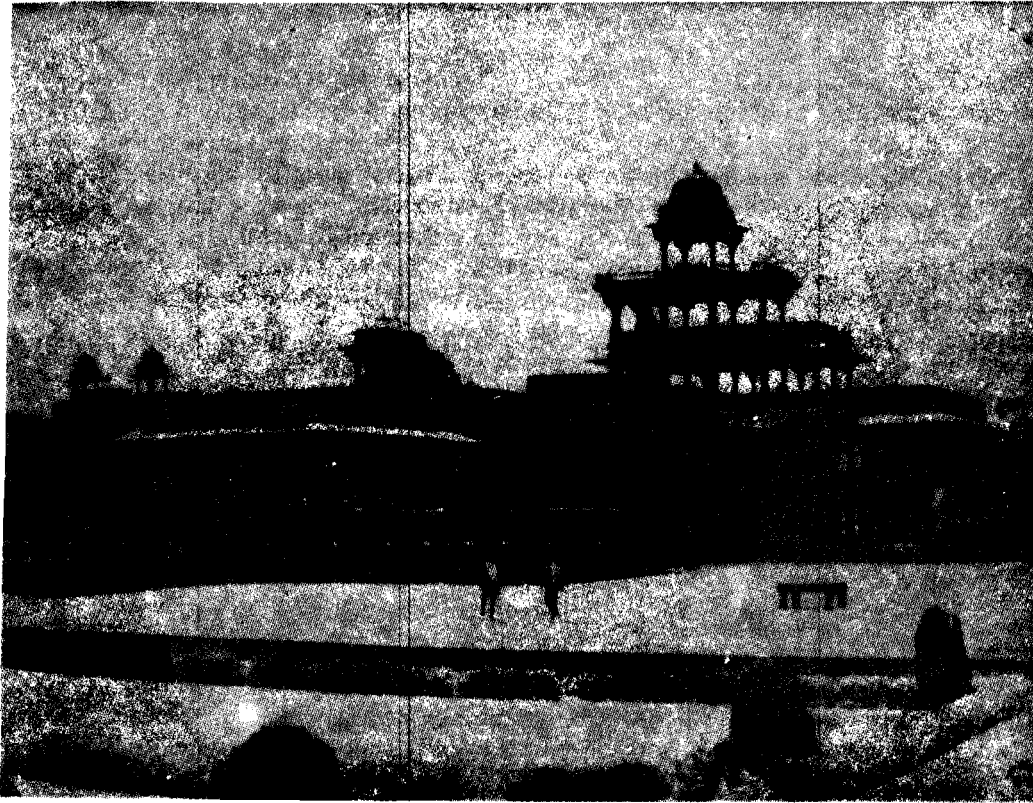
In 1596, the southern gateway was replaced by Akbar with a victory gate, the **Buland Darwaza**. It is constructed in red and yellow sandstone with white marble inlay outlining the span of the arches. The loftiness of the structure is enhanced by a flight of steps on the outside. The entrance has been formed by a piercing huge central arch which is crowned by an array of domed kiosks. The **Buland-Darwaza** was built to commemorate Akbar's conquest of Gujarat in 1573.

The tomb of Salim Chishti stands in the courtyard of the **Jami Masjid** in the north-western quarter. It is an architectural masterpiece as it exhibits one of the finest specimens of marble work in India. The structure was completed in 1581 and was originally faced only partly in marble. The serpentine brackets supporting the eaves and the carved lattice screens are remarkable features of this structure.

The palace complex in Fathpur Sikri comprises a number of apartments and chambers. The largest of these buildings is known as the **Jodh Bai palace**. The palace is massive and austere in character. The wall outside is plain with principal buildings attached to inner side, all facing an interior courtyard. On the north side is an arcaded passage and a balcony. There are rooms in the upper storey in the north and south wings. They have ribbed roofs covered with bright blue glazed tiles from Multan.

A unique building of the palace complex is the **Panch Mahal**, a five storeys structure, located south-east of the **Diwani Khas**. The size of the five storeys successively diminishes as one goes upwards. At the top is a small domed kiosk. Some of the sides in this building were originally enclosed by screens of red sandstone. But none remain intact now. An interesting feature is that the columns on which the five storeys have been raised are all dissimilar in design. Of the administrative buildings, undoubtedly the most distinctive is the **Diwani Khas**. The plan of this building is in the form of a rectangle and is in two stories from outside. It has flat terraced roof with pillared domed kiosks rising above each corner. Inside, there is a magnificent carved column in the centre, having a huge bracket capital supporting a circular stone platform. From this platform radiate four railed 'bridges' along each diagonal of the hall to connect the galleries surrounding the upper portion of the hall. The main architectural object in this interior is the central column. The shaft is variously patterned and branches out, at the top, into a series of closely set voluted and pendulous brackets which support the central platform.

India from 16th to
Mid 18th Century



Panch Mahal

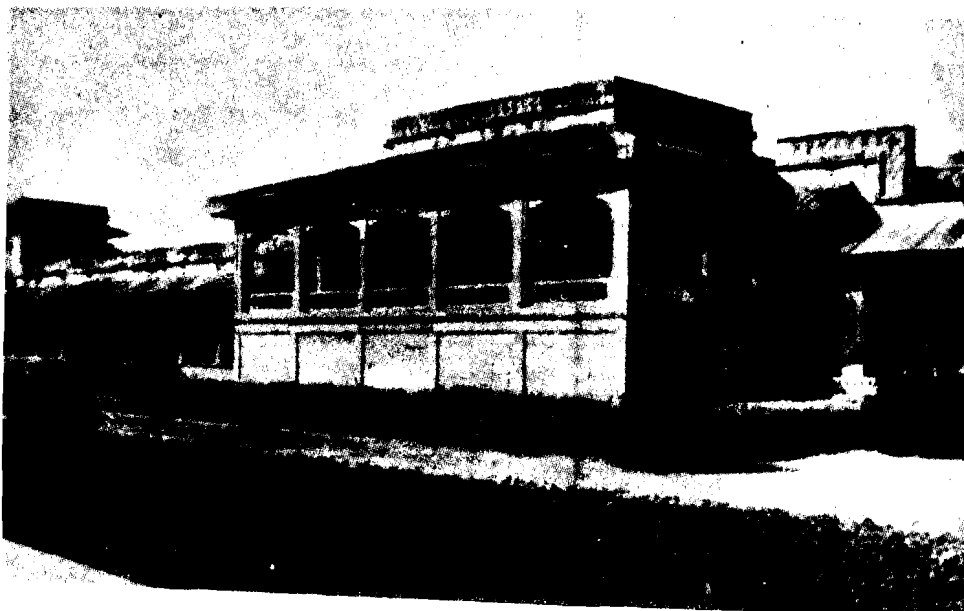


Diwan-i Khas

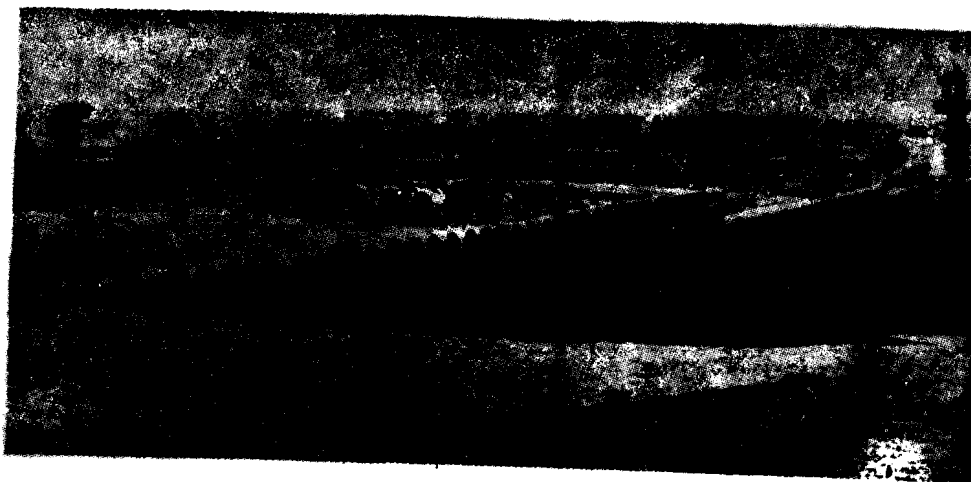
Another notable building of the same category is the **Diwani Am**. It is a spacious rectangular courtyard surrounded by colonnades. The Emperor's platform is towards the western end. It is a projecting structure with a pitched stone roof having five equal openings. The platform is in three parts, the centre probably used by the Emperor and separated from the other two sides by fine stone screens pierced with geometric patterns.

Buildings of miscellaneous character are scattered all over the city complex:

- i) Two **caravansarais**, one located inside the Agra Gate, immediately to the right; and the other, the larger structure, is outside the **Hathi Pol** on the left side;
- ii) **Karkhana** building located between the **Diwani Am** and **Naubat Khana**, having a series of brick domes of radiating rather than horizontal courses; and
- iii) The water-works, opposite the **caravansarai** near **Hathi Pol**, comprising a single deep **baoli** flanked by two chambers in which a device was used to raise the water for distribution in the city.



Diwan-i Am



Caravansera

Check Your Progress 2

1. Tick mark right (✓) and wrong (X) against the following statements:

- i) Akbar used white marble as building material in most of his buildings.
- ii) Akbar's buildings never used double dome.
- iii) Akbar's architecture is a combination of trabeate and arcuate styles.
- iv) Akbar used corbelling to cover the spaces.

2. Write a note on the important secular buildings at Fatehpur Sikri.

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3. Name the last of the religious buildings at Fatehpur Sikri and write two lines on that.

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33.5 ARCHITECTURE UNDER JAHANGIR AND SHAH JAHAN

Akbar's death in 1605 did in no way hamper the development of a distinctive Mughal architecture under his successors. A secure Empire and enormous wealth in legacy in fact permitted both Jahangir and Shah Jahan to pursue interest in the visual arts.

33.5.1 New Features

In the sphere of the building art, Jahangir and Shah Jahan's reigns were an age of marble. The place of red sandstones was soon taken over by marble in its most refined form. This dictated significant stylistic changes which have been listed below:

- a) The arch adopted a distinctive form with foliated curves, usually with nine cusps;
- b) Marble arcades of engrailed arches became a common feature;
- c) The dome developed a bulbous form with stifled neck. Double domes became very common;
- d) Inlaid patterns in coloured stones became the dominant decorative form; and
- e) In the buildings, from the latter half of the Jahangir's reign, a new device of inlay decoration called **pietra dura** was adopted. In this method, semi-precious stones such as lapis lazuli, onyx, jasper, topaz and cornelian were embedded in the marble in graceful foliations.

33.5.2 Major Buildings

The account of the major buildings of this period begins with a remarkable structure, that is, the tomb of Akbar, located at Sikandra, eight kilometers from the Agra on Delhi road. It was designed by Akbar himself and begun in his own lifetime but remained incomplete at the time of his death. Subsequently, it was completed by Jahangir with modifications in the original design. As it stands today, the entire complex is a curious mix of the architectural schemes of both Akbar and Jahangir.

The scheme of this complex envisages the location of tomb in the midst of an enclosed garden with gateway in the centre of each side of the enclosing wall.

The tomb building in the centre is a square structure built up in three stories. The first storey is in fact an arcaded platform making the basement. Within the platform, vaulted cells surrounded the mortuary chamber and a narrow inclined corridor in the south leads to the grave. The middle portion is in three tiers of red sandstone pavilions trebeated throughout. The top storey, of white marble in contrast to the red sandstone elsewhere, has an open court surrounded by colonnades with screens. The tomb is linked by causeways and canals to the gateways in the enclosure wall. But it is the one in the south which provides the only entrance, the other three being false gateways added for symmetry.

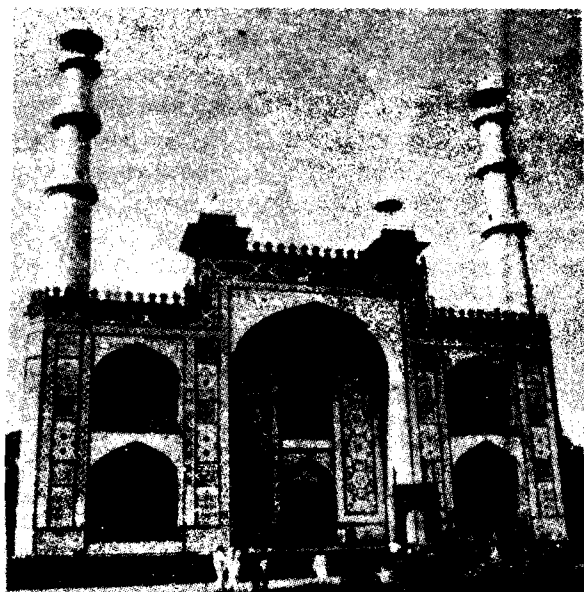
The southern gateway is a two-storey structure with circular minarets of white marble rising above the corners. The entire structure of the gateway is ornamented with painted stucco-coloured stone and marble inlay. Interestingly, the decorative motifs include, besides the traditional floral designs, arabesques and calligraphy, **gaja** (the elephant) **hamsa** (the swan) **padma** (the lotus), **swastika** and **chakra**.

The architectural importance of Akbar's tomb at Sikandra can be gauged from the fact that several mausoleums built subsequently reflect the influence of this structure to varying degree. Particular mention may be made of the tomb of Jahangir at Shahadara near Lahore and of Nur Jahan's father Mirza Ghiyas Beg at Agra.

The tomb of **Itimadud Daula**, built in 1622-8 by Nur Jahan on the grave of her father Mirza Ghiyas Beg marks a change in architectural style from Akbar to Jahangir and Shah Jahan. The transition from the robustness of Akbar's buildings to a more sensuous architecture of the later period is evident in the conception of this structure.

The tomb is a square structure raised on a low platform. There are four octagonal minarets, at each corner, with domed roofs. The central chamber is surrounded by a verandah enclosed with beautiful marble tracery. The main tomb is built in white marble and is embellished with mosaics and **pietra dura**. The central chamber contains the yellow marble tomb of Itimadud Daula and his wife. The side rooms are decorated with painted floral motifs. Four red sandstone gateways enclosing a square garden, provide a splendid foil for the white marble tomb at its centre.

It should be noted here that Jahangir was a much greater patron of the art of painting. His love of flowers and animals as reflected in the miniature painting of his period, made him a great lover of the art of laying out gardens rather than building huge monuments. Some of the famous Mughal gardens of Kashmir such as the Shalimar Bagh and the Nishat Bagh stand as testimony to Jahangir's passion.



Akbar's Tomb — Entrance



Main Building



Lal Qila

In contrast to Jahangir, his son and successor Shah Jahan, was a prolific builder. His reign was marked by a extensive architectural works in his favourite building material, the marble. Some of these were:

- a) the palace-forts, e.g, the **Lal Qila** at Delhi;
- b) the mosques, e.g. the Moti Masjid in the Agra Fort and the Jami Masjid at Delhi; and
- c) the garden-tombs, e.g., the Taj Mahal.

We shall describe here only the more important and representative buildings of Shah Jahan's reign.

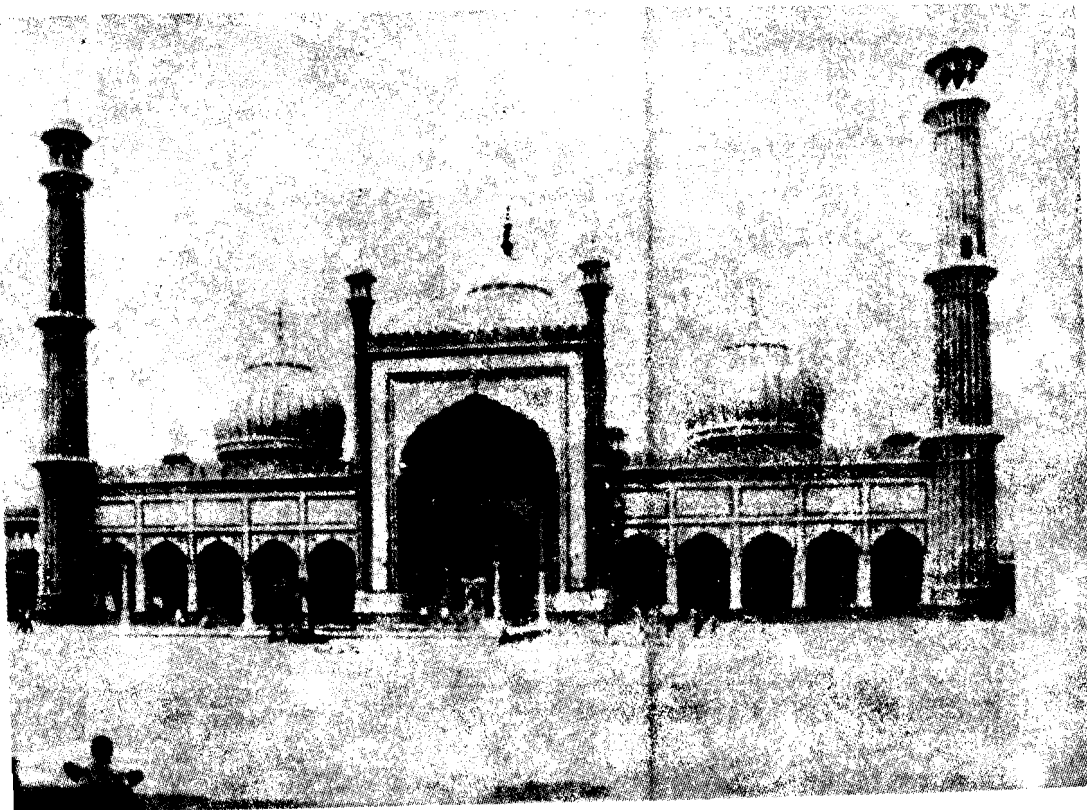
The **Lal Qila** is a regular rectangle with the north wall following the old course of the Yamuna river. There are two gate-ways -- the Delhi and Lahore Gates, and massive round bastions at regular intervals along the wall. The gates are flanked by octagonal towers with blind arcades and topped by cupolas. A moat runs all along the fort wall except the river side. Inside, there are several notable buildings of which particular mention may be of **Diwani Am, Diwani Khas and Rang Mahal**. The **Diwani Am** and **Rang Mahal** are arcaded pavilions with sandstone columns in pairs, plastered with powdered marble. In the eastern wall of the **Diwani Am** is built the throne platform for the Emperor having curved corniced roof in the style of the Bengal architecture. Behind this structure on the eastern side is located the **Rang Mahal** fronted by an open courtyard. Further north, in alignment with the **Rang Mahal** is the **Diwani Khas**. All of these buildings have floral decorations on the walls, columns and piers.

In the Moti Masjid in the Agra Fort, Shah Jahan made experiment with an alternative scheme—an open arcaded prayer hall. Moreover, in this mosque the designer has also dispensed with the minarets. In their place, **chhatris** have been used on all four corners of the prayer hall. There are three bulbous domes rising over a cusped arcades. The entire building has been built in white marble with black marble calligraphy, heightening the elegance of the structure.

The Jami Masjid at Delhi is an extended and larger version of the Jami Masjid at Fatehpur Sikri and thus becomes the largest building of its kind in India. It is built on a raised platform surrounded by arcades that have been left open on both sides. The main entrance is on the eastern side with an ascending flight of steps increasing the effect of loftiness. There are two smaller gateways in the middle of the northern and southern wings. Within, the mosque follows a plan similar to the Jami Masjid at Fatehpur Sikri—colonnades running along the three sides and sanctuary on the fourth side. Three bulbous domes in white marble rise above the sanctuary. The building material used here is red sandstone with white marble for revetments and for inlaying the frames of panels.

The Taj Mahal is undoubtedly Shah Jahan's grandest and most well known project. The construction work began in 1632, and most of it was completed by the year 1643. The plan of the complex is rectangle with high enclosure wall and a lofty entrance gateway in the middle of the southern side. There are octagonal pavilions, six in all, at the corners and one each in the eastern and western sides. The main building of the Taj stands on a high marble platform at the northern end of the enclosure. To the west of this structure is a mosque with a replica on the east side retaining the effect of symmetry.

The Taj Mahal is a square building with deep alcoved recesses in each side and its four corners bevelled to form an octagon. Above this structure rises a beautiful bulbous dome topped with an inverted lotus finial and a metallic pinnacle. At the four corners of the platform rise four circular minarets capped with pillared cupolas. The interior resolves itself into a central hall with subsidiary chambers in the angles, all connected by radiating passages. The ceiling of the main hall is a semi-circular vault forming the inner shell of the double dome. The decorative features of the building consist of calligraphy and inlay work in the exterior and *pietra dura* in the interior. Marble, the main building material, is of the finest quality brought from Makrana quarries near Jodhpur. The garden in front of the main structure is divided into four quadrants with two canals running across, forming the quadrants. The cenotaph in the main hall was enclosed originally with a screen in golden tracery. But it was later replaced by Aurangzeb with a marble screen.





Taj Mahal

Check Your Progress 3

1. Mark right (✓) and wrong (X) against the following statements:

The characteristic feature of Jahangir and Shah Jahan's architecture is:

- i) red sandstone is replaced by marble as building material.
 - ii) use of multi-foliated curves in arches.
 - iii) double dome replaced by the single one.
 - iv) inlay work is replaced by fine carvings and geometrical designs.
 - v) introduction of **pietra dura**.
2. Write a note on the architecture of the Taj Mahal in about 60 words.

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33.6 THE FINAL PHASE

This section is divided into the two sub-sections. The first one deals with the building activities of Aurangzeb reign; the second tells us about the buildings of the post-Aurangzeb period.

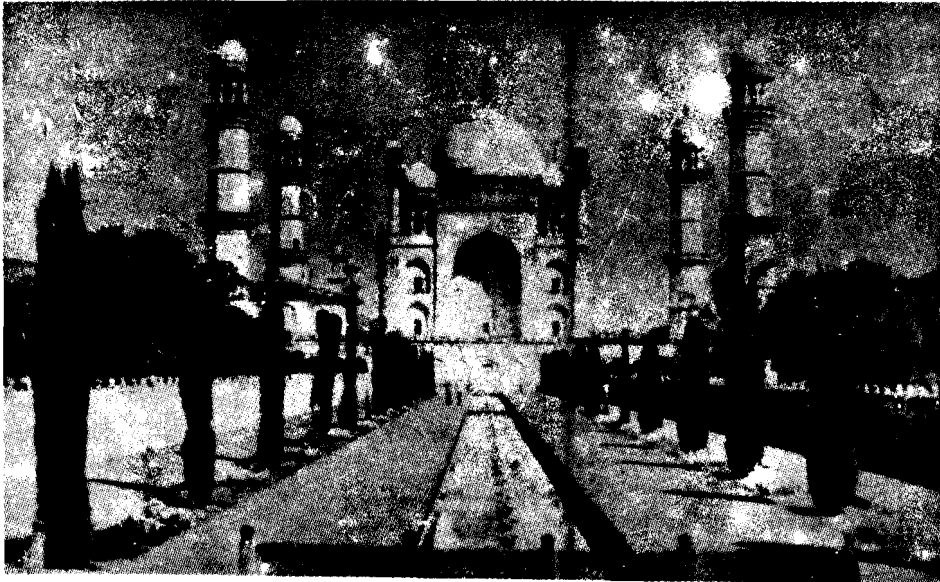
33.6.1 Buildings of Aurangzeb

Architecture

Aurangzeb had none of his father's passion for architecture. Under him, the generous encouragement given by his predecessors to the arts was almost withdrawn. The architectural works during the reign of Aurangzeb were less numerous and of a lower standard than those executed under any previous Mughal ruler. In Delhi itself, the capital city of the Empire, very few buildings are associated with his name. The major buildings include the mausoleum of his wife Rabiya ud Dauran in Aurangabad, the Badshahi Masjid in Lahore and the Moti Masjid at Lal Qila, Delhi. The Badshahi Masjid is comparable to the Delhi one in size and architectural composition. It has a vast court, a free standing prayer hall and minarets at each corner of the hall. There are four smaller minarets at each angle of the sanctuary. The cloisters run on the both sides with arched entrances at regular intervals. There is only one portal. The building material is red sandstone with the use of white marble as a relief to the red sandstone. Atop the prayer hall, three bulbous domes in white marble rise beautifully.

The other important building of this period is the Moti Masjid in the Lal Qila, Delhi. The marble used in its construction is of a very fine quality. The plan is similar to the Moti Masjid built by Shah Jahan in Agra fort; only the curves are more prominent. The three bulbous domes cover the prayer hall which is designed in the form of three cupolas in the same alignment.

The mausoleum of his wife at Aurangabad, is an attempt at emulating the Taj Mahal. But a serious miscalculation on the part of Aurangzeb's architects in providing the corners of the mausoleum, too, with minarets upsets the harmony of the entire building. These minarets, which are superfluous in the overall scheme of the building, are the only major deviation in copy from the original scheme of the Taj Mahal.

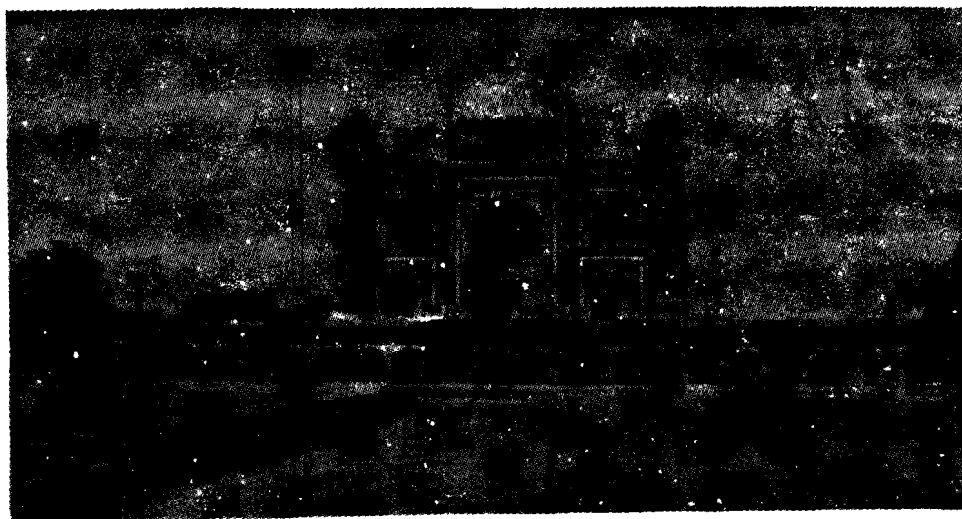


Rabiya ud Dauran's Mausoleum

33.6.2 The Safdar Jang's Tomb

After Aurangzeb's death in 1707, the collapse of the Empire was only a matter of time. The few buildings that were built during the first half of the eighteenth century amply testify the decadent conditions that ensued.

The Safdar Jang's tomb at Delhi is the most important building of this period. It is located amidst a large garden and copies the plan of the Taj Mahal in the same manner as was done in the Rabia ud Dauran's tomb. One major change in the design, however, is that the minarets rise as an adjunct to the main building and not as independent structures. The main building stands on an arcaded platform. It is double storeyed and is covered by a large and almost spherical dome. The minarets rise as turrets and are topped by domed kiosks. The building is in red sandstone with marble panelling. The cusps of the arches are less curved, but synchronise well with the overall dimensions of the building.



Safdar Jang's Tomb

Check Your Progress 4

1. Discuss the architectural activities during Aurangzeb's reign.

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2. Write a note on the Safdar Jang's tomb.

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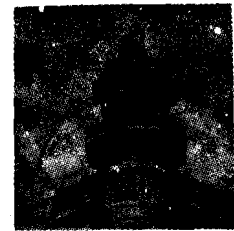
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33.7 LET US SUM UP

Babur and Humayun were too busy to tackle the political problems to pay much attention to the building activities. However, Babur himself was a deep lover of gardens and he laid out a number of gardens in India during the short span of his reign. The main Mughal architectural activities took place under Akbar. His buildings are mostly of red sandstone. Akbar's buildings show a fine blend of trabeate and arcuate forms. Jahangir was more interested in paintings rather than architecture. However, his interest in paintings, animals and floral designs affected the contemporary architecture as well and a new decorative style—**pietra-dura** was introduced during his reign. During Shah Jahan's reign the Mughal architecture reached its zenith with the predominant use of marble. Shah Jahan immortalised the Taj Mahal, a pure white marble structure. Its double domes, minarets, multi-foliated arches, etc.,—all speak of the perfection and the climax. His successor, Aurangzeb, had little time for building activities, and very few buildings were, therefore, constructed during his reign. The post-Aurangzeb's period can also be termed as period of decline. Owing to disturbed political scenario later, the Mughal Emperors could hardly pay any attention to huge building projects. The only monument of note that can be identified is the Safdar Jang's tomb at Delhi.

33.8 KEYWORDS

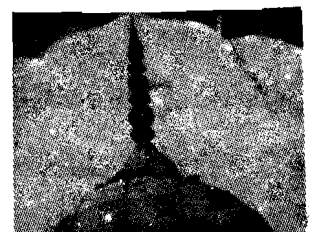
- Alcove : a vaulted recess
- Arcade : a range of rooted arches
- Arch : a self-supporting structure made of bricks or of stone blocks and capable of carrying a superimposed load over an opening
- Baoli : Step-well
- Bay : deep recess
- Bevel : a sloping surface
- Bracket : a support projecting from a wall
- Cenotaph : commemorative building
- Convolute arch : An arch that is cusped inside.
- Colonnade : a row of columns
- Causeways : passage across water
- Cupola : a domical roof over a polygonal space.
- Dome : a convex roof built over a square; Octagonal or circular space in building
- Eaves : slight projection of roof
- Engrailed arches : foliated arch
- Facade : a course of bricks or stones projecting from a wall as a continuous structure.
- Finial : the top of a pinnacle
- Kiosk : an open pavilion having roof supported by pillars
- Pier : a mass of stone or brick which supports a vertical load
- Pietra Dura : an ornamental mosaic of lapis lazuli, marble etc.



Kiosk/Cupola

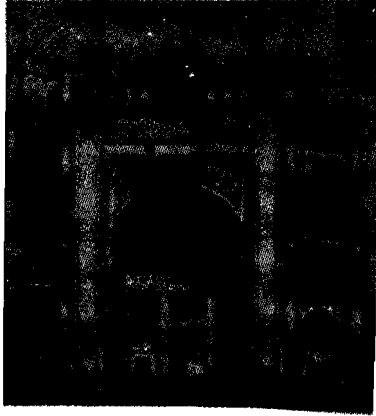


Turrets



Finial

- Post** : long timber supporting vertical thrust of some part of a building
- Portal** : frontage
- Reventments** : supportive joints
- Stucco** : ornamentation done by carving lime plaster
- Trabeate** : an architectural form in which the main openings are made by beams supported on pillars
- Turrets** : side minarets attached with the building.



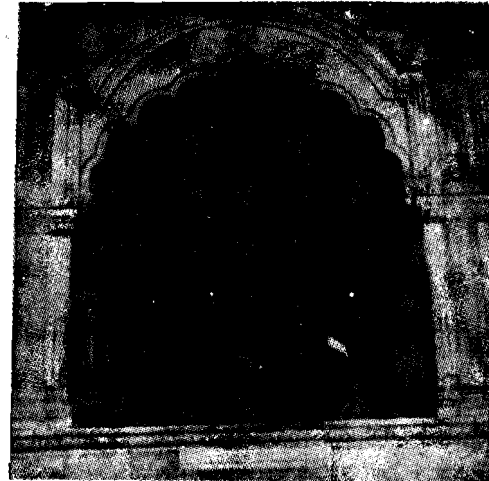
Facade



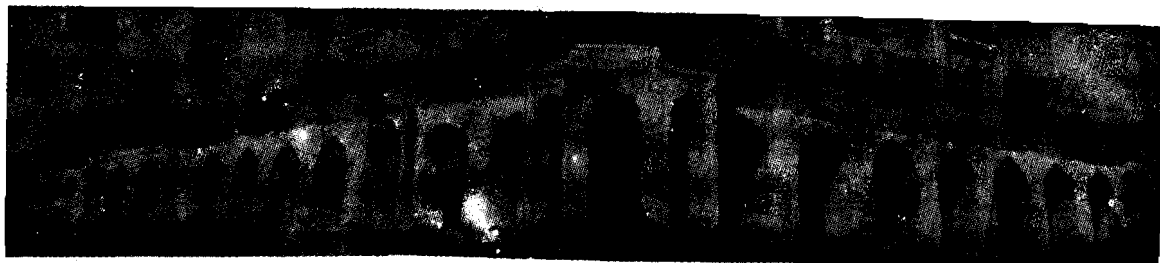
Akbari Arch



Dome/s



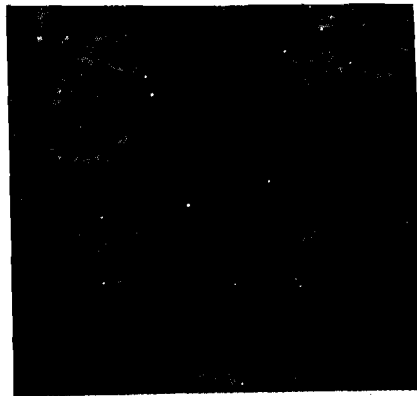
Engrailed Arch (Shahjahan)



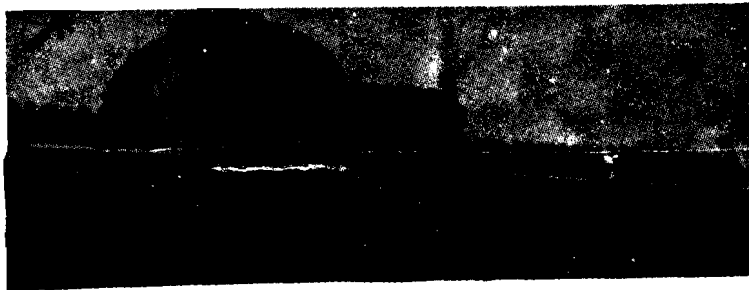
Colonnade/Arcade



Bracket/s



Alcove



Eaves on Brackets

33.9 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. i) d ii) a iii) b iv) c
2. See Sub-sec. 33.2.2

Check Your Progress 2

1. i) x ii) ✓ iii) ✓ iv) X
2. See Sub-sec 33.4.2. Discuss the general characteristic features of Akbar's building at Fathpur Sikri— the style adopted, building material used, decoration, carving etc.
3. See Sub-sec. 33.4.2

Check Your Progress 3

1. i) ✓ ii) ✓ iii) X iv) X v) ✓
2. See Sub-sec. 33.5.2.

Check Your Progress 4

1. See Sub-sec. 33.6.1. Discuss that Aurangzeb was hardly interested in the building activities and very few buildings were constructed during his reign. Describe these buildings and their characteristic features.
2. See Sub-sec. 33.6.2.