

Sarvajanik Education Society
Sarvajanik College of Engineering & Technology, Surat



A report on

Academic trip to

Rajasthan

By

Faculty members of

Faculty of Civil Engineering, SCET



For the students, of *BE IV Civil*

(05-03-2018 to 14-03-2018)

Team Members: Prof. (Dr.) Pratima A Patel (HOD, FCE)

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JAIPUR:

05/03/2018	Departure from Surat at 08:30pm by BDTS JP SF EXP, Over Night Journey (Non-A/c Sleeper Class)
06/03/2018 Lunch Dinner Hotel Shalimar	Pick up from Railway Station at 10:45am, Check in, Lunch and Half Day Sightseeing, Dinner and Night Halt Sight Seeing Places: <ul style="list-style-type: none"> • Jaipur Albert Hall • Zoo • Jaipur Birla Temple • Local Market
07/03/2018 Breakfast Dinner Hotel Shalimar	Breakfast, Full Day Sightseeing, Dinner and Night Halt Sight Seeing Places: <ul style="list-style-type: none"> • Hawa Mahal • JantarMantar • City Palace • KholeKeHanumanji Temple • Local Market

JAISALMER:

08/03/2018 Breakfast Dinner	Breakfast, Lunch, check out and Half Day Sightseeing, Dinner and Drop at Railway Station at 11:00pm, Departure for Jaisalmer at 11:45pm by DLI JSM EXPRESS (Non A/c Sleeper Class) Over Night Journey. Sight Seeing Places: <ul style="list-style-type: none"> • Jal Mahal • Jaigarh Fort • Amer Fort
09/03/2018 LunchDinner DDS Tent	Pick up from Railway Station at 11:45am, Check in, Lunch and Proceed for Desert, Dinner and Night Halt Activities: <ul style="list-style-type: none"> • Camel Ride • Evening high tea • Camp fire with Rajasthani culture programme with folk dance & folk music • Rajasthani dinner Accommodation on Swiss tent quard sharing
10/03/2018	Breakfast, Proceed for Jaisalmer, Sightseeing, Dinner and Night Halt Sight Seeing Places: <ul style="list-style-type: none"> • Visit Kuldeep village & Amar sagarjain temple

Breakfast	• Check in hotel lunch
Dinner	• Than visit gadisar lake
	• Patvoki haveli
	• Golden fort
Golden Haveli	• Visit Vyas charti
	• Bada Bhag

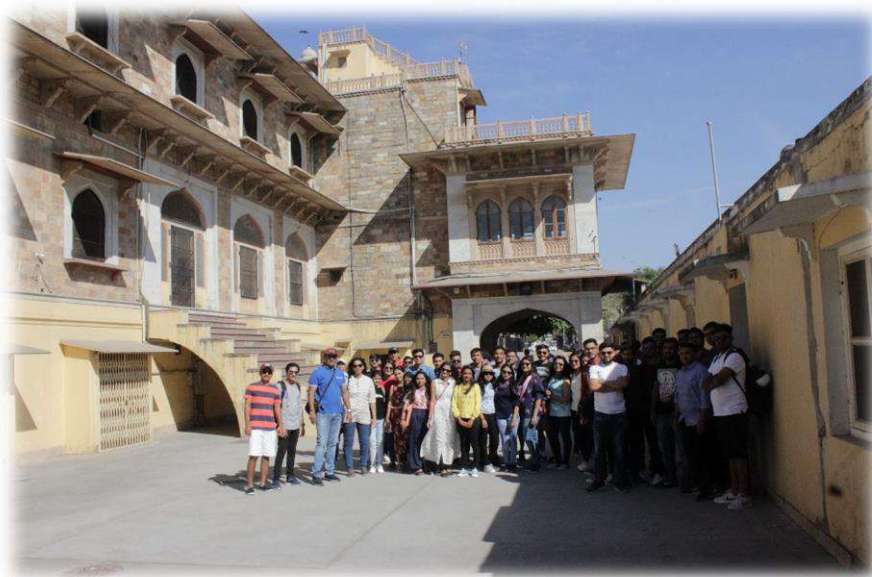
JODHPUR:

11/03/2018	Early Morning Breakfast, Chk out and Departure for Jodhpur by Bus (290 Kms – 6 Hrs) Lunch on Highway, Chk-in the Hotel, Evening Free, Dinner and Night Halt
Breakfast	
Lunch	
Dinner	
Chandra Inn	
12/03/2018	Breakfast, Full Day Sightseeing, Dinner and Night Halt
Breakfast	Sight Seeing Places:
Dinner	• UmmedBhavan palace
	• Mandor garden
Chandra Inn	• Evening visit market
13/03/2018	Breakfast, Lunch, Check-out, and Drop at Railway Station at 06:30pm, Travel by SURYA NAGRI EXP (Non A/c Sleeper Class) Over night Journey
Breakfast	Sight Seeing Places:
Lunch	• Visit Mehran Garh fort
Train	• Jaswantthada
14/03/2018	Reach Surat at 07:30am

Day 1:



The days started with a group photo at Hotel Shalimar which was our accommodation in Jaipur. Then we headed towards Albert Hall Museum, Jaipur which is one iconic building of not only Jaipur but the entire state.



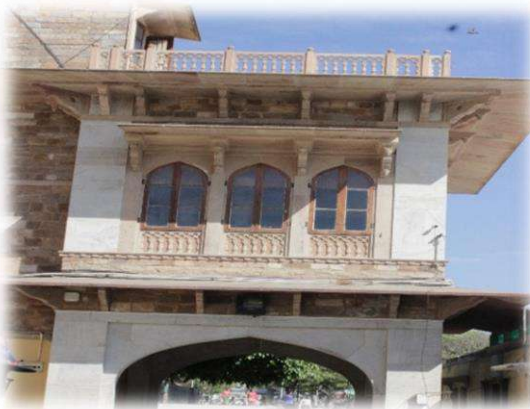
Albert Hall Museum

Day 1 started with a beautiful place called the **Albert Hall**, which is situated in the centre of the Pink City Jaipur. It is the oldest museum of the state and functions as the State museum of Rajasthan. The building is situated in Ram Niwas Garden outside the city wall opposite New Gate and is a fine example of Indo-Saracenic architecture. The building was designed by Sir Samuel Swinton Jacob.

The museum was one very important attraction for the students as they got to know the architecture and the planning of the interior of the museum was done magnificently. The students got to learn the various methods of retrofitting which had been carried out on the building.



Albert Hall Museum



This museum is also called the Government Central Museum. Thus, Albert Hall became a centre for imparting knowledge of history of civilizations, inspiring artisans to improve their skills, and preserving & developing traditional Indian arts, crafts, architectural forms and not least as Hendlay said to amuse and instruct the common people”.

After having completed a mesmerizing visit to such an iconic building, the day didn't end yet. There was one more important place to visit which is called the Jaipur Birla Mandir, situated at the foot of Moti Dungri fort. It almost becomes mandatory to visit this temple when in Jaipur.



Jaipur Birla Temple

The soothing effects of its walls and its iconic structure make this temple a very important place to visit. Students were very much in awe of the kind of infrastructure that it had. The beautiful white marble temple mesmerizes the onlookers, when it glows at night. Stained glass windows depict the scenes from Hindu scriptures. Ganesh the protector of households, is above the lintel, and the excellent quality of marble is evident when you enter the temple and look back at the entrance way.

This was one fine way to start an academic trip where the entire day was filled with monument worth visiting and a temple in the evening to end your day embarking a great time for the rest of our stay in Rajasthan.

Day 2 had a lot to offer with a lot of interesting structures and monuments to visit that included the Hawa Mahal, JantarMantar and the City Palace.

Started with taking entry in JantarMantar, which The JantarMantar is an equinoctial sundial, consisting a gigantic triangular gnomon with the hypotenuse parallel to the Earth's axis. On either side of the gnomon is a quadrant of a circle, parallel to the plane of the equator. The instrument is intended to measure the time of day, correct to half a second and declination of the Sun and the other heavenly bodies.

There are five **JantarMantar** monuments in India, of which the largest is in Jaipur which features many instruments along with the world's largest stone sundial. The VrihatSamrat

yantra is a sundial that can give the local time to an accuracy of 2 seconds. It is a UNESCO World Heritage Site.



In the early 18th century, Maharaja Jai Singh II of Jaipur constructed five Jantar Mantars in total, in New Delhi, Jaipur, Ujjain, Mathura and Varanasi; they were completed between 1724 and 1735. The jantars have evocative names like Samrat Yantra, Jai Prakash, Ram Yantra and Niyati Chakra; each of which are used to for various astronomical calculations. The primary purpose of the observatory was to compile astronomical tables, and to predict the times and movements of the sun, moon and planets. The name "Jantar Mantar" is at least 200 years old, finding a mention in an account from 1803.[4] However, the archives of Jaipur State, such as accounts from 1735 and 1737–1738, do not use this as Jantra, which in the spoken language is corrupted to Jantar.[4] The word Jantra is derived from yantra, instrument, while the suffix Mantar is derived from mantrana, meaning consult or calculate. The words jantar and mantar (or yantra and mantra) means calculation instrument.



Faculties at JantarMantar, Jaipur

The entire functioning of **JantarMantar** was beautifully explained by a guide which was hired for the said purpose. The students exactly got to understand the significance of all the different instruments and dials in the observatory.



Students were keenly interested to learn and understand how the observatory worked, which instrument had what significance and how was time and sun/moon signs were calculated during the king's era.

After having a thorough explanation and learning of the JantarMantar observatory, we proceeded to the Hawa Mahal which is yet another important monumental structure of the city.

Hawa Mahal also known as "Palace of Winds" or "Palace of the Breeze" is a palace in Jaipur, India which is constructed of red and pink sandstone. The palace sits on the edge of the City Palace, Jaipur, and extends to the zenana, or women's chambers.



Hawa Mahal, Jaipur

The structure was built in 1799 by Maharaja Sawai Pratap Singh. He was so inspired by the unique structure of Khetri Mahal that he built this grand and historical palace. It was designed by Lal Chand Ustad. Its unique five-storey exterior is akin to the honeycomb of a beehive with its 953 small windows called jharokhas decorated with intricate latticework. The original intent of the lattice design was to allow royal ladies to observe everyday life and festivals celebrated in the street below without being seen, since they had to obey the strict rules of "purdah", which forbade them from appearing in public without face coverings. This architectural feature also allowed cool air from the Venturi effect (doctor breeze) 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 in reality it is the back of that structure.



Magnificent structures of Hawa Mahal

After having visited the **Hawa Mahal**, we proceeded to **The City Palace, Jaipur**, which includes the Chandra Mahal and Mubarak Mahal palaces and other buildings, is a palace complex in Jaipur, the capital of the Rajasthan state, India. It was the seat of the Maharaja of Jaipur, the head of the Kachwaha Rajput clan. The Chandra Mahal palace now houses a museum, but the greatest part of it is still a royal residence. The palace complex, located northeast of the centre of the grid-patterned Jaipur city, incorporates an impressive and vast array of courtyards, gardens and buildings. The palace was built between 1729 and 1732, initially by Sawai Jai Singh II, the ruler of Amber.



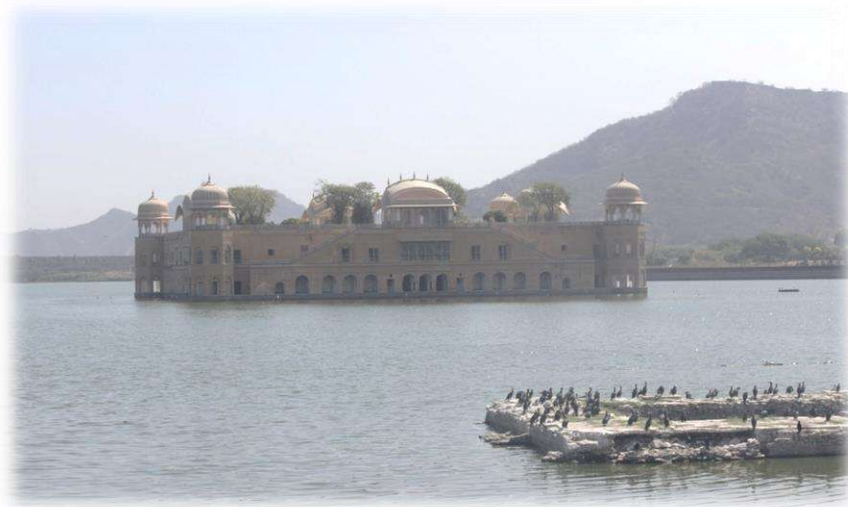
The City Palace, Jaipur

The palace complex lies in the heart of Jaipur city, to the northeast of the very centre, located at 26.9255°N 75.8236°E. The site for the palace was located on the site of a royal hunting lodge on a plain land encircled by a rocky hill range, five miles south of Amber (city). The history of the city palace is closely linked with the history of Jaipur city and its rulers, starting with Maharaja Sawai Jai Singh II who ruled from 1699-1744. He is credited with initiating construction of the city complex by building the outer wall of the complex spreading over many acres. Initially, he ruled from his capital at Amber, which lies at a distance of 11 kilometres (6.8 mi) from Jaipur. He shifted his capital from Amber to Jaipur in 1727 because of an increase in population and increasing water shortage. He planned Jaipur city in six blocks separated by

broad avenues, on the classical basis of principals of Vastushastra and other similar classical treatise under the architectural guidance of Vidyadar Bhattacharya, a Bengali architect from Naihati of present-day West Bengal who was initially an accounts-clerk in the Amber treasury and later promoted to the office of Chief Architect by the King.

The day was hence concluded with some magnificent structures in the heart of Jaipur city. The proceeding day also had a lot to follow which included the Jal Mahal, Jaigarh Fort and the Amber Fort which was also a day to look out for.

Day 3 we started with visiting the Jal Mahal is a palace in the middle of the Man Sagar Lake in Jaipur city, the capital of the state of Rajasthan, India. The palace and the lake around it were renovated and enlarged in the 18th century by Maharaja Jai Singh II of Amber.



Jal Mahal, Jaipur

The Jal Mahal palace is an architectural showcase of the Rajput style of architecture (common in Rajasthan) on a grand scale. The building has a picturesque view of the lake itself but owing to its seclusion from land is equally the focus of a viewpoint from the Man Sagar Dam on the eastern side of the lake in front of the backdrop of the surrounding Nahargarh ("tiger-abode") hills. The palace, built in red sandstone, is a five-storied building, of which four floors remain underwater when the lake is full and the top floor is exposed. One rectangular Chhatri on the roof is of the Bengal type.



Faculties at Jal Mahal, Jaipur

The hills surrounding the lake area, towards the north east of Jaipur, have quartzite rock formations (with a thin layer of soil cover), which is part of Aravalli hills range. Rock exposures on the surface in some parts of the project area have also been used for constructing buildings. From the north east, the Kanak Vrindavan valley, where a temple complex sits, the hills slope gently towards the lake edge.

After having seen this beautiful architectural monument right in the middle of the lake, we headed towards the **Jaigarh Fort**, which is situated on the promontory called the Cheel ka Teela (Hill of Eagles) of the Aravali Range, it overlooks the Amber fort and the Moata lake, near Amber in Jaipur.



Jaigarh Fort

The fort rugged and similar in structural design to the Amber fort, is also known as Victory Fort. The fort is 10 kilometres away from Jaipur city and was the main defensive structure rather than the palace itself. During the Moughal reign, Jaigarh became the world's most efficient cannon foundries mainly due to the abundance of iron core mines in the vicinity of the fort. The Jaigarh Fort was a centre of artillery production for the Rajputs. In 1720, it was the world's largest cannon on wheels of the early modern era. The cannon was fired only once with a charge of 100 kilograms of gunpowder and when fired, it covered a distance of about 35 kilometers.



Entire team of final year at the great cannon, Jaigarh Fort

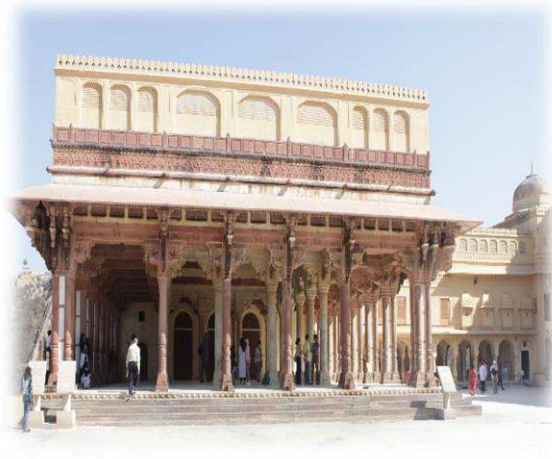


The Great Cannon

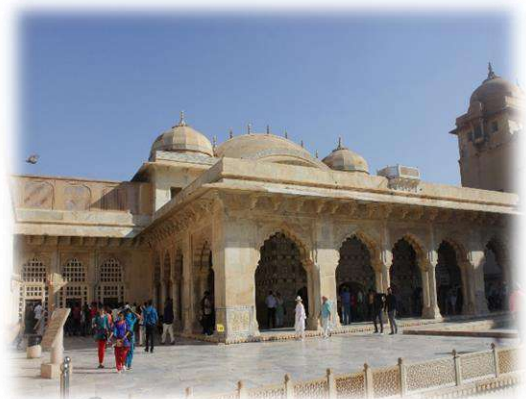
After having completed a visit to the Jaigarh Fort, the team went to visit the **Amer Fort** which is just 7 kilometres from Jaigarh Fort. It is located in the city of Amer, in Jaipur. It was initially built by the Meenas and later it was ruled by Raja Man Singh I. Amer fort is known for its artistic Hindu style elements. It is constructed of red sandstone and marble, the attractive opulent palace is laid out on four levels, each with a courtyard. At the entrance of the palace near the fort's Ganesh Gate, there is a temple dedicated to Shila Devi, a goddess of the Chaitany cult, which was given to Raja Man Singh when he defeated the Raja of Jessore, Bengal in 1604.



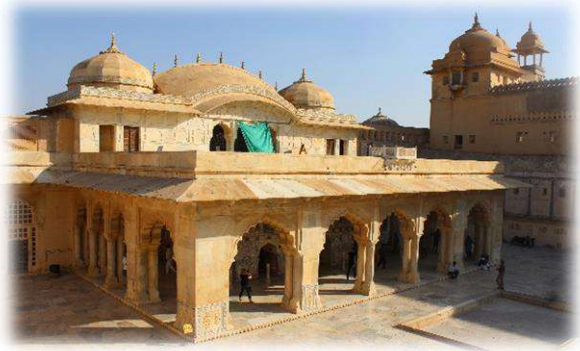
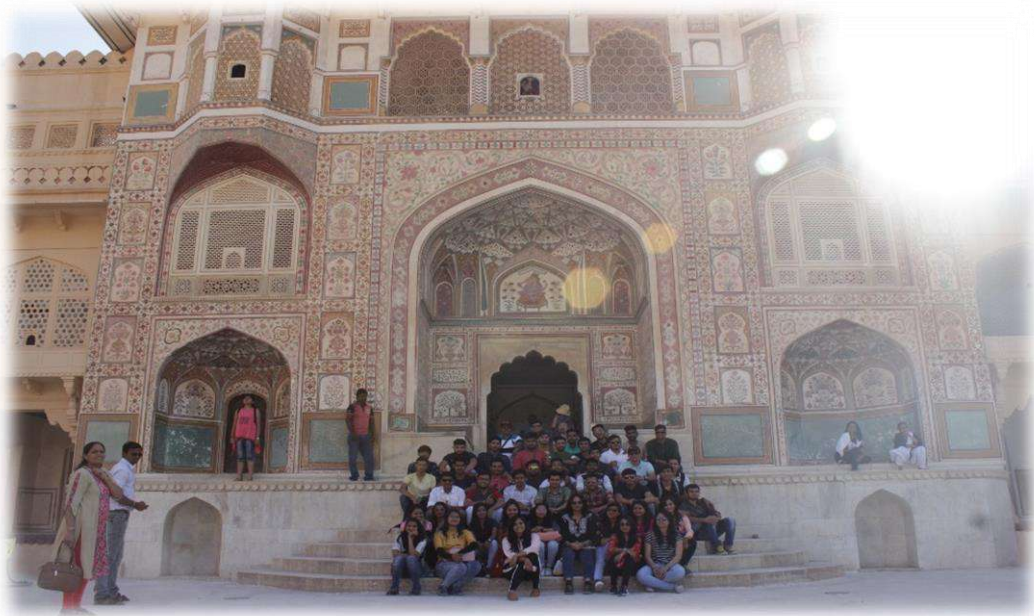
Amer Fort



Different glimpses of Amer Fort



Glimpses of Amer fort



Glimpses of Amer Fort

This was one of the finest experiences for the students in Jaipur. Thus, with observing proper architectural monuments and significant infrastructures of forts we headed towards Jaisalmer where all new experiences were awaiting for the students to witness.

The first place that we visited was the Sam Sand Dunes, a magnificent experience of the desert safari which includes camel rides, car safari, paragliding, folk dances etc.



Sam Sand Dunes, Tent Experience

Desert Camp is situated just opposite to Sam sand dunes in Jaisalmer. Desert Camp has perfect experience of arranging all travel needs of tourists. Desert safari camp is best located camp in Sam Sand Dunes area. As it is the only camp located right opposite to Sam Sand Dunes, Desert Camp Jaisalmer is having skilled team having expertise of 8 years in camping in Jaisalmer. They try to provide maximum luxurious facilities in minimum expenses. desert Camp has well-appointed and elegantly decorated Swiss tents covering 14 ft x 14 ft bed room, 14 x 7 Verandah and 14x7 attached toilet with running water, toilet is having WC and a separate bathing place made of Iron, Desert Camp is situated only 42 Kms from Jaisalmer city in Sand Dunes. Our Desert Camp provides facilities of DJ every night with cultural show with snacks & bonfire.





Faculties at desert safari

It has been a wonderful experience to each and all present at the Sam Sand Dunes as all were very much entertained by the Rajasthani folk dance and tribal dances by various

performers. The next morning, we left for Jaisalmer proper city where we were to visit Kuldhara village, the haunted village on our way to the city.



Kuldhara is an abandoned village in the Jaisalmer district of Rajasthan, India. Established around 13th century, it was once a prosperous village inhabited by Paliwal Brahmins. It was abandoned by the early 19th century for unknown reasons, possibly because of dwindling water supply, or as a local legend claims, because of persecution by the Jaisalmer State's minister Salim Singh. A 2017 study suggests that Kuldhara and other neighbouring villages were abandoned because of an earthquake.



Kuldhara Village (Haunted village)



Group photo at Kuldhara village

Ruins of 410 buildings can be seen in the former village. Another 200 buildings were in the lower township on the outskirts of the village.

Lakshmi Chand's Tawarikh-i-Jaisalmer (1899) provides statistics about Paliwal population and households of several villages. Using the figure of 3.97 persons per household based on these statistics, and considering the number of ruined houses as 400, S. A. N. Rezavi estimated the 17th-18th century population of Kuldhara as 1,588. The British officer James Tod recorded the 1815 population of Kuldhara as 800 (in 200 households), based on information from "the best-informed natives". By this time, the Paliwals had already started deserting the village. By 1890, the population of the village had declined to 37 people; the number of houses was recorded as 117.



After this visit, we headed towards Patvoki Haveli but on our way to Patvoki Haveli we visited Vyas Chattri



Next, we headed towards Patvoki Haveli which is situated in the heart of Jaisalmer City. The Patwon Ji ki Haveli is an interesting piece of Architecture and is the most important among the havelis in Jaisalmer. This is precisely because of two things, first that it was the first haveli erected in Jaisalmer and second, that it is not a single haveli but a cluster of 5 small havelis. The first among these havelis was commissioned and constructed in the year 1805 by Guman Chand Patwa and is the biggest and the most ostentatious. It is believed that Patwa was a rich man and was a renowned trader of his time. He could afford and thus ordered the construction of separate stories for each of his 5 sons. These were completed in the span of 50 years. All five houses were constructed in the first 60 years of the 19th century.



Patvo ki Haveli

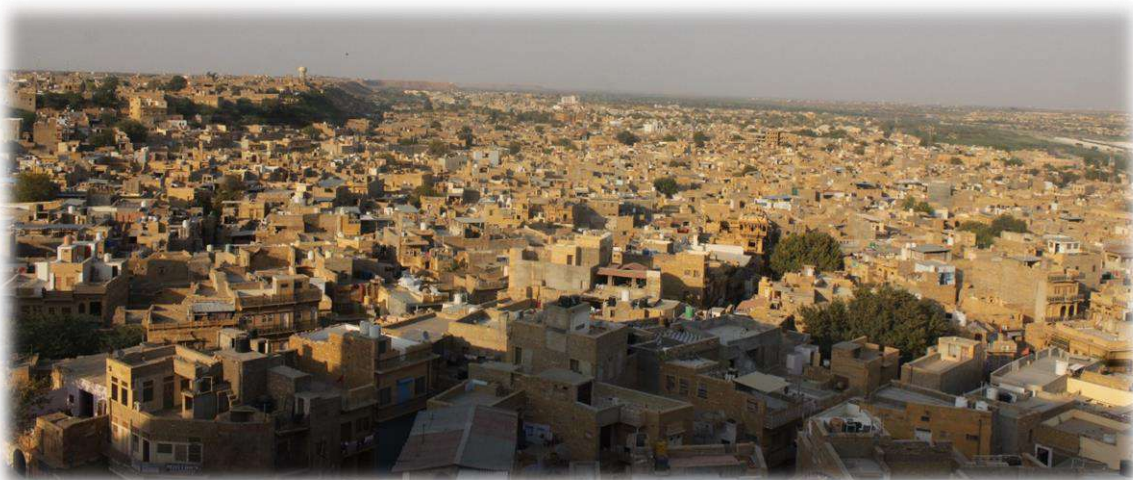


Patvo ki Haveli

The most significant palace that is seen from the top of Patvo ki Haveli is the Golden Fort which is a must visit when in Jaisalmer.



Golden Fort, Jaisalmer



Jaisalmer

Jaisalmer was a place to visit and was thoroughly enjoyed by the students as they got to see the planning of the city from the top. It is an ancient city but yet had the audacity to be the planned city. An entire view of the city was visible from the top of Golden Fort.

The next destination was Jodhpur which was a six hours journey in bus. And the very first place that we visited the Mehran Garh Fort.

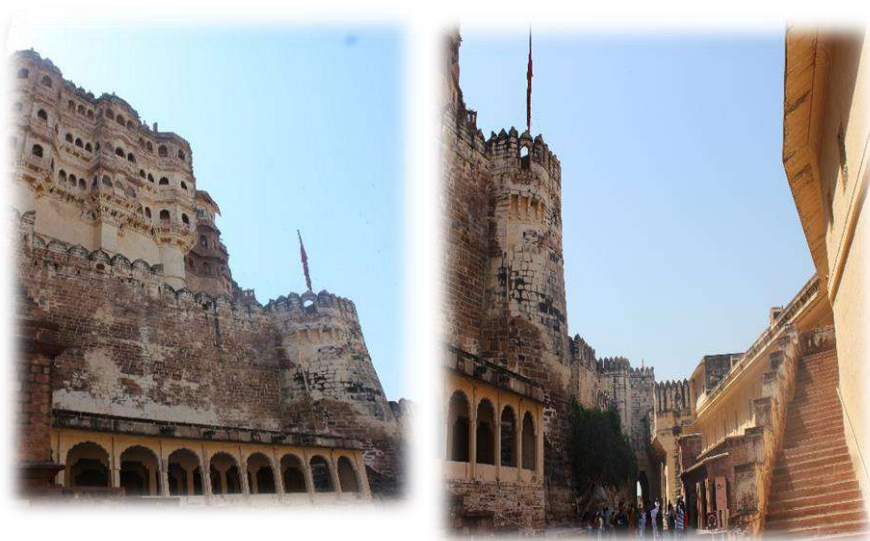
After having departed from Jaisalmer, our next destination was Jodhpur, the Blue City. This was our destination of such a wonderful trip to Rajasthan, but Jodhpur also had a lot to offer to us in terms of magnificent palaces, gardens, amazing architectural buildings and well planned and organised houses.

The very first place to visit in the morning was the **Mehrangarh fort** which is one of the largest forts in India built around 1460 by Rao Jodha, the fort is situated 410 feet (125 m) above the city and is enclosed by imposing thick walls. Inside its boundaries there are several palaces known for their intricate carvings and expansive courtyards. A winding road leads to and from the city below. The imprints of the impact of cannonballs fired by attacking armies of Jaipur can still be seen on the second gate. To the left of the fort is the chhatri of Kirat Singh Soda, a soldier who fell on the spot defending the Mehrangarh fort.

There are seven gates, which include Jayapol (meaning 'victory'), built by Maharaja Man Singh to commemorate his victories over Jaipur, Udaipur and Bikaner armies. Fattehpul (also meaning 'victory') gate was built by Maharaja Ajit Singh to mark the defeat of the Mughals. The palm imprints upon these still attract much attention.



Mehrangarh Fort



Palanquins were a popular means of travel and circumambulation for the ladies of the nobility up to the second quarter of the 20th century. They were also used by male nobility and royals on special occasions.

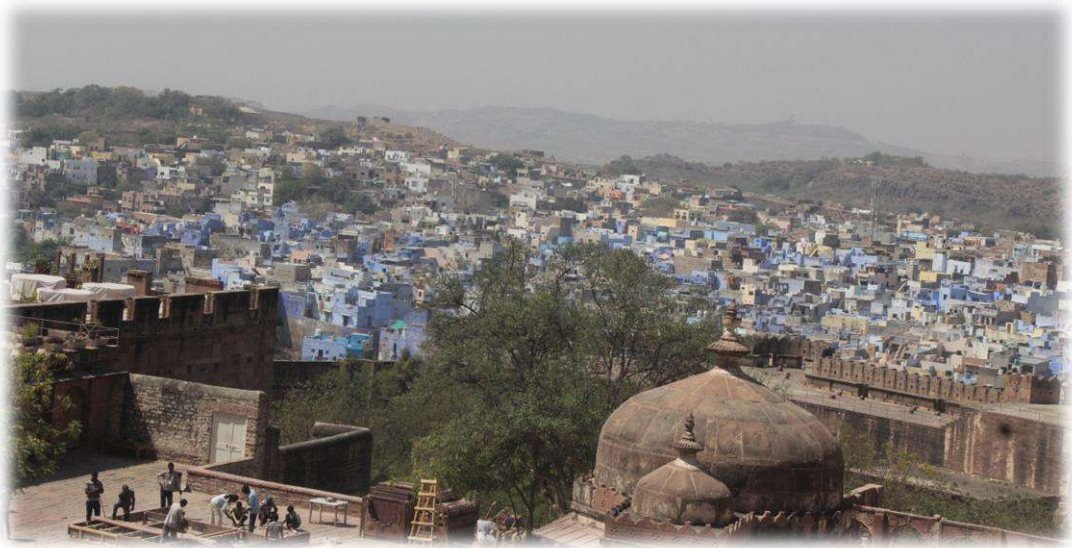


Palanquins

DaulatKhana - gallery displays one of the most important and best-preserved collections of fine and applied arts of the Mughal period of Indian history, during which the Rathore rulers of Jodhpur maintained close links with the Mughal emperors. It also has the remains of Emperor Akbar.

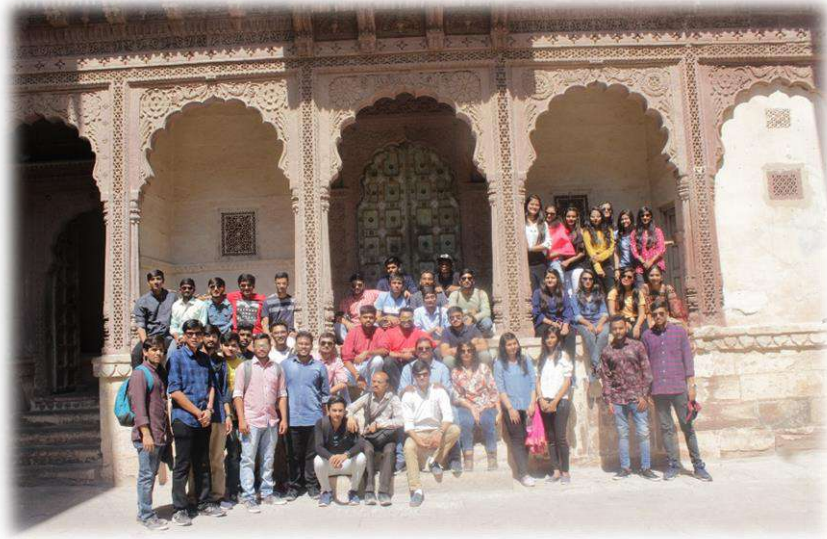


Daulat khana



Skyline of Jodhpur city from the top of Mehrangarh fort

Thus after a complete visit of the fort with the help of a licensed tour guide, it was time for a group picture to be clicked for the wonderful memories.



Group picture at Mehrangarh Fort

It was then time for us to move to **Jaswant Thada**, which is a cenotaph located in Jodhpur, in the Indian state of Rajasthan. It was built by Maharaja Sardar Singh of Jodhpur State in 1899 in memory of his father, Maharaja Jaswant Singh II, and serves as the cremation ground for the royal family of Marwar.

The mausoleum is built out of intricately carved sheets of marble. These sheets are extremely thin and polished so that they emit a warm glow when illuminated by the sun.



Jaswant Thada

The cenotaph's grounds feature carved gazebos, a tiered garden, and a small lake. There are three other cenotaphs in the grounds. The cenotaph of Maharaja Jaswant Singh displays portraits of the rulers and Maharajas of Jodhpur.



Jaswant Thada from various angles

It was an eventful day where the students got to witness some of the most ancient methods of life how the kings and queens used to live a royal life in their palaces and then the thada which is again a royal symbol for the kin's family after their deaths.

The next day was time for us to visit the royal Umaid Bhavan Palace, which is a symbol of beauty and royalty and is one of the world's largest private residences. A part of the palace is managed by Taj Hotels. Named after Maharaja Umaid Singh, grandfather of the present owner Gaj Singh of the palace, this edifice has 347 rooms and serves as the principal residence of the erstwhile Jodhpur royal family. A part of the palace also houses a museum.

Ground for the foundations of the building was broken on 18 November 1929 by Maharaja Umaid Singh and the construction work was completed in 1943. The Palace was built to provide employment to thousands of people during the time of famine.



Umaid Bhavan Palace

The palace was built at a slow pace as its initial objective was to provide employment to the famine-stricken farmers of the locale. The foundation stone was laid in 1929. About 2,000 to 3,000 people were employed to build it. However, the actual occupation of the palace by the Maharaja came only after its completion in 1943, very close to the period of Indian Independence. There was criticism in some quarters for embarking on an expensive project but it had served the main purpose of helping the citizens of Jodhpur to face the famine situation. The estimated cost of building the palace was Rs 11 million. When it opened its gilded doors in 1943 it was considered as one of the largest royal residences in the world.



Rooms at Umaid Bhavan Palace



Outer corridor of the Palace



Faculties at Umaid Bhavan Palace

This was the last stop in the visit to Rajasthan as we were heading towards the Railway station after this and back to Surat. It was thus one of the finest experiences for the students as well as the faculties as everyone got to learn a lot of things including the architecture, the planning of the forts and palace, the cities overall were properly planned, the old buildings were properly maintained and taken care of from its structural point of view.

Prepared and compiled by: Prof. Palak S. Shah