1) Visit Place (Address) : Ahmedabad, Gujrat

2) Visit Date: 10/01/2020 to 14/01/2020

3) Course and Year: Engineering 2019-2020

4) Contact Person Details: Prof. Ganesh Kondhalkar

5) Organized By: ABMSP’S Anantraao Pawar College of Engineering and Resarch Parvati Pune

6) Industrial Visit under subject: FE to BE all branches

7) Brief Report:

Day 1 Visit

<table>
<thead>
<tr>
<th>Statue of Unity</th>
<th>11/01/2020</th>
<th>5:00 pm</th>
<th>7:00 pm</th>
</tr>
</thead>
</table>

Statue of Unity:

The Statue of Unity built as a tribute to Sardar Vallabhbhai Patel known as Iron Man of India, would be the tallest in the world and the quickest to be completed in just 33 months. At 182 metres from the road entry and 208.5 metres from the river entry.

Specific Knowledge for engineering students:

The raft construction of the structure actually begun on December 19, 2015, and took 33 months construction time for completion. It devoured 180,000 cu m of cement concrete, 18,500 tonnes of reinforced steel, 6,500 tonnes of structured steel, 1,700 tonnes of bronze.

The Statue of Unity is built in dedication to Iron Man Sardar Vallabhbhai Patel, who served as the first home minister of independent India. Sardar Patel is credited with uniting all 562 princely states in pre-independent India to build the Republic of India -- hence the name of the statue.

The statue depicts Vallabhbhai Patel, one of the most prominent leaders of the Indian independence movement, the first home minister as well as the first Deputy Prime Minister of Independent India, and responsible for the integration of hundreds of princely states into the modern Republic of India.

Dedicated to: Sardar Vallabhbhai Patel

Location: Narmada Valley Kevadiya colony.

Height: 182 metres (597 ft)
Material: Steel framing, reinforced by concrete.

The Statue of Unity is a testimonial of the life of Sardar Patel, a role model of unity and statesmanship. The tallest statue of the world enjoys a splendidly scenic location facing the Sardar Sarovar Dam, 3.2 kilometers away. This colossal statue stands on the isle of Sadhu-Bet in River Narmada, at Kevadia, District Rajpipla in the Indian State of Gujarat, with the majestic Vindhyachal and Satpuda Mountain Ranges in the backdrop. The statue is fast becoming one of the country's top tourist attractions. It was designed by Indian sculptor Ram V. Sutar and was inaugurated by Indian Prime Minister Narendra Modi on 31 October 2018, the 143rd anniversary of Patel's birth.

Day 2 Visit

<table>
<thead>
<tr>
<th>ISRO</th>
<th>12/01/2020</th>
<th>10: 00 am</th>
<th>12:30 pm</th>
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</table>

Technical Visit at ISRO:-

ANANTRAO PAWAR COLLEGE OF ENGINEERING & RESEARCH organized one day technical visit to Space Application Center and Vikram Sarabhai Space Exhibition unit of ISRO at Ahmedabad on 12th Jan, 2020 for the students all departments with a view to familiarize and educate students in the field of Remote Sensing, Space applications, Earthquake Engineering and Smart City Planning with Green Building Concept and also to enhance their concept regarding the practical aspects of construction, launching and operation of Satellite in space and to understand origins, properties and consequences of earthquakes, earthquake monitoring through standardized surface, ocean bottom and satellite observations.
Group Photo at ISRO Main Gate

LAB 1(Satellite Navigation Centre Lecture):
At first we visited the satellite navigation lab center named GNSS (Global Navigation Satellite System). There we saw different receiving satellites for communication and tracking purpose at SAC, ISRO. At outside the lab there were many different satellites being established of different heights and different focal lengths. One was to high up to 6.3 meters and other were small satellites. Next we entered to MSS (Mobile Satellite System) were a device has been issued to different paramilitary officers including army, navy, air force, CRPF, etc. this device contended a tracking substance so that many scientists at ISRO, SAC can locate their locations if they are been attacked or trying to betray by any enemy party. So ISRO can inform to other government authorities for help as they may cannot contact.

LAB 2 (ANTENNA TESTING AND DETECTING CENTRE):

Next around 12:00 noon we visited the lab where satellites and antenna that are to be launched into space through missiles are been aligned and detected or tested here. As we entered the lab the lab was fully centered AC with the gargantuan size of hall which consisted of triangular cones made up of polyurethane material so to stop the disturbance or reduce the unnecessary reflection of the hall at the time of testing. First the antenna to be launched is placed at some mounting device which is mobile in nature. So to align and check the focal length of antenna with its receiving efficiency. There were to large mirrors being place in that gargantuan hall for the reflection and transmitting and receiving purpose of light to antenna, with each corona of the transmitting and reflecting mirror consisted of light source, and those mirrors were made up of Germany weighing around intones.
Vikram Sarabhai Space ExhibitionCentre(VSSE):
Some of the major attractions of the exhibition are a 3D auditorium, light and sound show on solar system, the virtual presenter, 3D holographic display and augmented reality. You will be personally guided at the exhibition. At last on this exhibition visit our ISRO trip was concluded.
Total 91 Students along with 9 faculty members had attended this one Day Technical visit.
Google Map for Travelling:

Day 2 Visit

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>12/01/2020</td>
<td>3:00 pm</td>
<td>SABARMATI ASHRAM AHMEDABAD, INDIA</td>
</tr>
<tr>
<td></td>
<td>5:00 pm</td>
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</tr>
</tbody>
</table>
ARCHITECT – CHARLES CORREA By- Kapil Singh Aniruddh Dubey Abhishek Sharma DESIGN

CONCEPT : The main concept is that each building group in causal meandering pattern, creating a pathway along which the visitors progresses towards the centrality of the water court.

Plan Of Sabarmati Ashram: - The site on the Sabarmati river bank. it is the part of the larger ashram Complex and is integrated into its garden

Construction: - The materials used in the construction are similar to the other buildings in the ashram: tiled roof, brick walls, stone floors and wooden doors. :- The only additions are the RCC channels which act as beams and as rainfall conduits and which permit additional construction to be added in future. No glass windows are used anywhere in the building; being wooden.

uses a simple post and beam structure. Load bearing brick columns support concrete channels, which are both support the wooden roof and direct rainfall, boards are nailed underneath the joist and tiles are placed atop the joints, the foundation is concrete and is raised about foot from the ground, wooden doors, stone floors, brick columns and ceramic tile roofs are the palette of the building

Vaastu in Sabarmati Ashram 1. Square grid – Square is the sacred shape and is used wherever Vaastu is applied. Various other shapes can be derived from square like rectangle (from two squares), circle (by rotating square towards infinity). Distorted 11x11 grid is used and each square measures 6x6 m. 2. Courtyard – As in VaastuPurushaMandala Lord Brahma resides and that is why courtyard or water body is provided in centre of the building N2.
Vaastu in Sabarmati Ashram 1. North East – Books as a symbol of positive energy are placed in north east direction. Light reaches at around 3 am- 6am. This time is well suited for jobs like meditation and concentration. Best suited for pooja, yoga, study room. This part is under the reign of Ishana. 2

North West and West – This is the house of wind and water god that’s why toilet is provided in this region and open gallery and louvered windows are provided in this direction. Directions according to Vaastu N 3.9

Vaastu in Sabarmati Ashram 3. East – This direction is ruled by Sun god and as Sabarmati river flows in east and south east and is believed the morning sun purifies water and water is germ free that’s why building placement is accordingly. 4. South East – Dedicated to god of fire and snack shop is proposed in this portion. 5. South – Office portion is in this portion south monsoon provides excellent ventilation.

Directions according to Vaastu Sabarmati river N 4. 10. Vaastu in Sabarmati Ashram Sabarmati river, N 3. South West – Dedicated to ancestors or Pitru. This part of building is for store or living space and hence building entry and open gallery starts from this direction. Site Entry Is From West Along With Famous Ashram Road North To West Directions, according to Vaastu, Vaastu in Sabarmati Ashram Site Entry Building Entry Sabarmati Ghat, Vaastu in Sabarmati Ashram Site Entry Building Entry Sabarmati Ghat

Day 2

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<tr>
<th>Akshardham Mandir</th>
<th>12/01/2020</th>
<th>6:00 pm</th>
<th>9:00 pm</th>
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</table>

SwaminarayanAkshardham in Gandhinagar, Gujarat is a large Hindu temple complex inspired by YogijiMaharaj (1892-1971) the fourth spiritual successor of Swaminarayan, and created by Pramukh Swami Maharaj (1921-2016), the fifth spiritual successor of Swaminarayan according to the BAPS denomination of Swaminarayan Hinduism.

Located in the capital of Gujarat, the complex was built over 13 years and is a tribute to Swaminarayan and his life and teachings. At the center of the 23-acre complex is the Akshardhammandir, which is built from 6,000 metric tons of pink sandstone from Rajasthan.

The complex's name refers to the divine abode of Swaminarayan in the BAPS philosophy; followers of Swaminarayan believe that the jiva or soul goes to Akshardham after attaining moksha, or liberation. BAPS followers worship Swaminarayan as God almighty.
Construction and Opening:-

The foundation stone-laying ceremony for the Akshardhammandir was conducted by Pramukh Swami on 14 December 1979, and the foundation was completed in 1981. Artisans skilled in stonework prepared the stones used in the Akshardhammandir, the process consisted of smoothing, contouring, detailing and polishing. Smoothing entails chiseling the hewn stone into smaller pieces; contouring involves stenciling the bare designs onto stone, and to give approximate contours to the stone; the artisans use chisels to detail the designs and figurines into stone; and finally, emery is used to file and polish the stone to a smooth finish. While the mandir structure itself was completed in 1985, the concepts and designs for the exhibition halls were developed over the next three years and work on the exhibitions and colonnade began in 1988. The completed complex was inaugurated on 4 November 1992.

Day 3 Visit

<table>
<thead>
<tr>
<th>Day 3 Visit</th>
<th>Date</th>
<th>Time 1</th>
<th>Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adalaj Stepwell</td>
<td>13/01/2020</td>
<td>10:00 am</td>
<td>1:00 pm</td>
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</tbody>
</table>

Adalaj Vav is a five-storey step-well on the outskirts of Ahmedabad. Perhaps the finest stepwell in Gujarat, Adalaj was built in 1555. What makes this stepwell the most beautiful amongst other is its series of platforms and galleries built on the side of the stepwell. It looks like a tales of unrequited passion and events are revolving around it.

The story behind the making of this legendary stepwell is as fascinating as its architecture. Adalaj Vav was commissioned by Rani Roopba, the queen of Rana Veersingh, a local chief who was defeated by the Muslim ruler Mohammed Begda. The stepwell was under the construction process when her husband (Rana Veersingh) was vanquished by Begada. Begada was so stunned by her beauty that he made a marriage proposal to Rani Roopba. Begada was so much charmed by the queen's beauty that he agreed and took up the challenging task. As the years rolled by, Begada completed the construction, minus the domes and proposed to the Rani Roopba once again. The next day, Rani Roopba jumped into the well, ending the saga of building the well in tragedy. After listening to the news, Begada stopped the construction. Till date, every visitor who comes here prays for the spirits of Rani Roopba as they believe that her spirit still resides here.
Adalaj stepwell is the finest example of Indo-Islamic architecture as here one can see a fusion of Hindu craftsmanship and the geometric pattern of Islamic architecture. All the five stories of Adalaj structure use cross beams all along their length. The octagonal spaces unfold in front of eyes while steps take one to the circular well at the end of those steps. The entire structure of stepwell consists of beautifully carved columns, finely crafted niches and platforms.

Flight of the steps leading to circular tank, entrance pavilion at the ground level and well at the lowest level are the three distinctive feature of Adalaj stepwell. The stepwell is one of its kinds in Gujarat as it has three entrance stairs that lead to the stepped corridor. All three entrances of the stepwell converge at the first underground storey in a square platform where tourists gather to savour its beauty.
As one descends towards the well, the temperature starts getting cooler than outside. Each floor has a large number of rooms that are well ventilated. The unique part of the stepwell architecture is the fact that the sunlight does not touch the flights of steps or landing. Apart from the abstract symbols of the god and goddesses, the panel of the Adalaj are decorated with beautiful panels depicting scenes showing caring of a king sitting on a stool with two chauri bearers, the churning of buttermilk, and musicians accompanying dancing women. It is a belief that small navagraha friezes at the edges of the wall protect the monument from evil spirit. People from neighboring villages usually come here to offer prayers to the deities carved on the walls and to interact with each other under the cool shade of the vav or step well.

All thanks to Ahmedabad tourism, Adalaj Vav is still in a perfect condition and invites visitors from visitors from all over the world to marvel at the splendid architectural delight. All thanks to its exquisite carving and embellishment, Adalaj is a clear winner of being the perfect landmark in Gujarat.

Day 3 Visit:

About Vintage cars and Bikes:

<table>
<thead>
<tr>
<th>Vintage cars and Bikes</th>
<th>13/01/2020</th>
<th>4:00 pm</th>
<th>5:00 pm</th>
</tr>
</thead>
</table>

Auto World Vintage Car Museum in Ahmedabad is one of a best car museum in the world which houses a world-class collection of vintage cars, antique vehicles, utility vehicle, motorcycles, and buggies. Formed in the year 1927 by the General Motors India Ltd, the museum is a must visit tourist attraction in Ahmedabad. From the rare marques cars to ceremonial limousines to the romantic convertibles to the sports car, here one can find cars from all over the world of different ages and types. Even after so many years of its formation, the museum houses a sizable amount of vintage cars of famous brands like Mercedes, Maybach, Packards, Cadillacs, Cord, Lancias, Lincolns, etc. Also, there is a cafeteria in the museum, where one can see people of same interest chatting about their fetish for cars. These vintage cars contribute a lot to the heritage of India because many of these belong to Indian Maharajas.
Importance of Kite Festival

Gujarat is vibrant with the Kite Festival (Makar Sankranti) which is celebrated with colors of joy, colors of life. The Kite Festival signify Gujarat’s ‘Cultural Strength’ and like the kites, Gujarat soars high to touch the skies to be the ‘best in the world.’. Makar Sankranti (Kite Flying Day) marks the end of a long winter with the return of the sun to the Northern Hemisphere. According to the Hindu astronomy the sun enters the zodiac of Makara (Capricorn). Hence, it is called Uttarayan or Makar Sankranti.

The special significance attached to the celebration of Makar sankranti, is Kite Flying. The gods who are believed to have slumbered for six long months are now awake and the portals of heaven are thrown open!

Details of stay During Visit:

Name of Hotel: "THE CLOUD HOTEL"
Industrial Visit Report

Date | Activity
--- | ---
11/01/2020 | Check In, Dinner and Stay
12/01/2020 | Break Fast, Lunch, Dinner and Stay
13/01/2020 | Break Fast, Lunch and Checkout
13/01/2020 | Dinner at City Point Hotel

8) Visit Schedule Summary:

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Place</th>
<th>Date</th>
<th>Arrival</th>
<th>Departure</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>State of Unity</td>
<td>11/01/2020</td>
<td>05:00 pm</td>
<td>07:00 pm</td>
</tr>
<tr>
<td>2</td>
<td>ISRO</td>
<td>12/01/2020</td>
<td>10:00 am</td>
<td>12:30 pm</td>
</tr>
<tr>
<td>3</td>
<td>Sabarmati Ashram</td>
<td>12/01/2020</td>
<td>03:00 pm</td>
<td>05:00 pm</td>
</tr>
<tr>
<td>4</td>
<td>Akshardham Mandir</td>
<td>12/01/2020</td>
<td>06:00 pm</td>
<td>09:00 pm</td>
</tr>
<tr>
<td>5</td>
<td>Adalaj Stepwell</td>
<td>13/01/2020</td>
<td>10:00 am</td>
<td>01:00 pm</td>
</tr>
<tr>
<td>6</td>
<td>Vintage cars and Bikes</td>
<td>13/01/2020</td>
<td>04:00 pm</td>
<td>05:00 pm</td>
</tr>
</tbody>
</table>

1. No. of Students attended the Visit : - 91
2. Name of the staff attended the visit :- 9

Date:

Visit Incharge          Head of the Department          Principal