REPORT ON

Industrial Visit to

JAIN TEMPLE

&

L S SAKURA, SARJAPUR

Organized by:

Department of Civil Engineering

B.M.S. COLLEGE OF ENGINEERING, BENGALURU-19

(Autonomous Institute, affiliated to VTU, Accredited by NAAC with A+)

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ABOUT

JAIN TEMPLE

A prominent Jain temple near Electronic City in Bengaluru is the Shree Parshwa Susheel Dham, located on Hosur Road near Attibele, approximately 15–20 minutes from Electronic City. This Swetambar Jain temple is known for its serene environment and impressive white marble architecture, which reflects traditional Jain design principles. The temple houses beautifully crafted idols of Lord Parshwanath and other Jain Tirthankaras, making it an important spiritual center for the Jain community in and around Bengaluru. In addition to serving as a place of worship, the temple complex includes facilities such as a dharmashala and bhojanshala for devotees and visitors. Its peaceful atmosphere, well-maintained premises, and accessibility from Electronic City make it a significant religious and cultural landmark in the area.

About

L S SAKURA, SARJAPUR

LS Sakura is a premium residential project on Sarjapur-Attibele Road, Sarjapur, Bengaluru, spread over 2.1 acres. It offers 132 thoughtfully designed 2 BHK and 3 BHK apartments, ranging from 1,445 sq ft to 1,890 sq ft, with Vastu-compliant layouts and modern construction standards. The project features lifestyle amenities such as a clubhouse, swimming pool, rooftop garden, children's play area, and yoga and meditation zones. Strategically located with easy access to schools, healthcare, retail hubs, and upcoming infrastructure, LS Sakura provides a comfortable and convenient living environment for families and investors.

1. INTRODUCTION

The Department of Civil Engineering organized an industrial visit on 26th December 2026 to provide students with practical exposure to architectural design and modern construction practices. While classroom learning provides a theoretical foundation, field visits are essential to understand the real-world application of Building Materials and Construction (23CV3PCBMC).

The visit was strategically divided into two phases. The first phase involved a stop at a Jain Temple to observe traditional architectural principles and the use of natural stone materials. The second phase focused on LS Sakura in Sarjapur, an active residential apartment construction site. This allowed students to contrast ancient masonry techniques with modern reinforced concrete framed structures, gaining a comprehensive understanding of how materials evolve from raw states to finished buildings.

2. PURPOSE OF THE VISIT

The primary intent of this industrial visit was to supplement academic knowledge with real-world engineering practices. Specifically, the visit aimed to:

Material Identification: Identify various building materials such as different grades of concrete, reinforcement steel, and masonry units used in high-rise construction.

Architectural Study: Observe the aesthetic and structural integration in traditional stone architecture.

Construction Sequencing: Study the chronological stages of building construction, from formwork to finishing.

Field Interaction: Interact with site engineers to understand the logistical and technical challenges faced during large-scale projects.

Safety Awareness: Observe the safety protocols and equipment necessary for high-rise residential construction.

3. SITE 1: JAIN TEMPLE - ARCHITECTURAL STUDY

The first leg of the visit focused on observing traditional architecture. The Jain Temple served as a prime example of high-quality masonry and intricate material work.

Key Technical Observations:

Natural Stone Masonry: Extensive use of marble and granite was observed, showcasing the durability and aesthetic appeal of natural stones in religious structures.

Structural Detail: Students examined the load-bearing characteristics of large stone pillars and the precision required in stone-to-stone joinery without the heavy use of modern mortars.

Aesthetics: The visit highlighted how building materials are carved and finished to meet specific architectural requirements, providing a baseline for understanding "finish work" in civil engineering.

4. SITE 2: LS SAKURA, SARJAPUR

Following the architectural study, the group visited LS Sakura, an ongoing residential apartment project in Sarjapur. This site provided a direct look at the "skeleton" of a modern high-rise.

Project Overview:

Structure Type: RCC (Reinforced Cement Concrete) Framed Structure.

Project Phase: Active construction, allowing for the observation of formwork, reinforcement tying, and masonry infill.

Layout: The site staff briefed the students on the overall layout, including the positioning of columns, shear walls, and service shafts.

5. BUILDING MATERIALS AND OBSERVATIONS

At LS Sakura, students observed the practical handling and storage of various materials:

Reinforcement Steel: TMT (Thermo-Mechanically Treated) bars of varying diameters were observed being cut and bent into stirrups and main reinforcement.

Concrete: The use of Ready-Mix Concrete (RMC) was discussed, including the importance of maintaining workability during transit.

Masonry Units: The transition from traditional bricks to modern Solid Concrete Blocks and AAC (Autoclaved Aerated Concrete) blocks was observed, highlighting their role in reducing building dead load.

Aggregates: Samples of M-Sand (Manufactured Sand) were inspected, noting its consistency compared to river sand.

6. CONSTRUCTION METHODOLOGIES

The visit provided a clear visualization of how a building is assembled:

Formwork and Shuttering: Students observed the assembly of plywood and steel formwork for beams and slabs, noting the importance of "props" and "centring" for structural stability during casting.

Concreting Process: The group observed the pouring process and the critical role of mechanical vibrators in ensuring concrete compaction and preventing honeycombing.

Structural Components: The layout of beams, columns, and slabs was examined to understand how loads are transferred from the roof down to the foundation.

7. QUALITY CONTROL AND SITE SAFETY

Lecturers emphasized that engineering is not just about construction but also about maintaining rigorous standards:

On-Site Testing: The importance of the Slump Test for checking concrete consistency and the casting of cubes for compressive strength testing was discussed.

Safety Measures: The site featured essential safety protocols, including the use of safety helmets for all personnel and the installation of safety nets around the building perimeter to prevent accidents.

Storage Management: Students saw how cement is stored in moisture-proof environments to prevent hydration before use.

8. CONCLUSION AND LEARNING OUTCOMES

The industrial visit to the Jain Temple and LS Sakura was a highly educational experience that successfully bridged the gap between theoretical textbooks and field execution.

Learning Outcomes:

Enhanced understanding of the properties and applications of different building materials.

Practical insight into the sequence of activities in high-rise RCC construction.

Appreciation for the precision required in both traditional architecture and modern structural engineering.

Improved awareness of the challenges faced in managing active construction sites, including material logistics and worker safety.

The Department of Civil Engineering at B.M.S.C.E. and the accompanying faculty are thanked for organizing this informative visit.

9. PHOTO GALLERY

Students were taken to the site and were explained in detail about architectural features and details in design


SIGMA 42