INDUSTRIAL VISIT REPORT
OF
ELECTRIC LOCO-SHED, VADODARA
&
MUNI SEVA ASHRAM, VADODARA
ON
10\textsuperscript{TH} MARCH 2016

VISIT CO-ORDINATOR:
PROF. HIRAK SHAH

VISITED FACULTIES:
PROF. MANISH PATEL
PROF. NISHA LODHA

DEPARTMENT OF E.E.E / ELECTRICAL ENGINEERING
GROW MORE FACULTY OF ENGINEERING
Industrial Visit plays a vital role for the Engineering Students to showcase all the real working environments of the equipment, machinery, construction and its operation and every other thing that students will come across in their respective field.

The department of E.E.E & Electrical Engineering, Grow More Faculty of Engineering, Himatnagar organized an industrial visit to “Electric Loco Shed, Vadodara” & “Muni Seva Ashram, Vadodara” on 10th March 2016 for 3rd Year Degree E.E.E & Electrical Engineering students. The visit was organized as per GTU university guidelines and recommendations regarding syllabus of Electrical Engineering.

Our main purpose for this visit was that the students improve their practical knowledge and get benefited their theoretical knowledge in Electric Traction & Renewable Energy subject which they studied in last semester.

A total 36 students of 3rd Year (6th Semester) E.E.E & Electrical visited Electric Loco shed and Muni Seva Ashram.

On 10th March, 2016 at 05:00 AM, the students along with the faculties started their journey from Motipura, Himatnagar.

At 09:00 AM, they reached Vadodara, where first the students were given breakfast.

At 09:30 AM, all the students entered Electric Loco Shed with all the Faculty Members. The visit started with welcome address by Mr. Pradip Gupta, Principal of Z.E.T.C Locoshed Vadodara (Zonal Electric Training Centre). The Students were given some basic information and some rules by Mr. P.K. Negi Chief Instructor.

The visit was divided in 3-Sections basically:

i. Electric Loco Model Room

ii. Train Lighting Systems & Air Conditioning Systems

iii. Traction Distribution (T.R.D) of a Loco Motive

Firstly, the Electric Loco Model Section was guided by one of their instructor Mr. Jayesh Parikh. A brief introduction about Loco Motive and its working was explained to the students. He also explained the various parts of an Electric Loco-Motive.
MODEL OF INDIAN LOCOMOTIVE CLASS WAG-5

After the explanation, one of the students himself started and drove the Electric Loco Motive. Many other students also tried and made the practical run of the Electric Loco Motive. Thereafter, the students went to the other section which was about Train Lighting Systems and Air-Conditioning System of a Loco Motive. This Section was guided by Mr. Divyang Master, Instructor of Loco Lighting Systems.
The main points discussed during visit to Electric Loco Shed were:

- Basic Working & Construction of an Electric Loco Motive
- Various Indian Electric Loco Motive Class WAG-5 & WAG-7
- Working Principle & Applications of all the equipments in a Loco Motive.
- Train Lighting Systems & Air Conditioning Systems
- Details regarding Traction Distribution Systems

The following various parts of Indian Loco Motive which were explained are:

- Traction Motor
- Transformers & Rectifiers
- Pantographs
- Smoothing Reactor
- Sandboxes
- Auxiliaries
- Compressors, etc.

After covering that section, the students finally went to Traction Distribution Model Room where all the equipment related to Traction Distribution Systems were explained by Mr. Jayesh Parikh.
Finally the visit was completed at 01:00 PM with the discussion session. Thus the students enhanced their knowledge on Electric Traction Systems. Thus the Students got a chance understand the subject matter regarding Electric Traction Systems. The Faculties along with students would like to extend the gratitude to the staff of Z.E.T.C of Loco Shed for the permission and support they gave to make our visit a success.

After the visit, the students were given Lunch and thereafter they went to Muni Seva Ashram for another visit. The Ashram is at Goraj village near the town of Waghodia, near Vadodara in Gujarat. It is about 22 miles (35 Kms) east of Vadodara. Muni Seva Ashram (MSA) was established near a village called Goraj in Dist. Vadodara to implement the integrated community welfare programmes. MSA is presently working in sectors like health care, education, family centres and training activities.

The Main Goal of visiting Muni Seva Ashram was to make students aware of the Renewable Technologies used in the Ashram like Gobegas Plant, Solar Thermal Heating, Green house Farming, etc. Mr Sunil Solnaki made the students understand about the various Renewable Technologies used in the Ashram.