Integral University

Department of Civil Engineering

A Report on Educational Tour to Chandigarh, Shimla and Manali from 18th to 24th December 2019

An Educational tour not only enhances the knowledge of the students but also broaden their outlook towards the outside world. It is for this reason universities conduct educational tours



to educate the students about things that are beyond the textbooks. Department of Civil Engineering, Integral University also organizes educational tours every year to make students aware of the challenges faced by engineers in different terrains and environmental conditions. This year a tour was organised to Chandigarh, Shimla and Manali from 18th to 24th December 2019. The tour began on 18th of December by boarding a train from Lucknow to Chandigarh with thirty students and two teachers.

The group visited the Indian Institute of advance Research in Shimla. It was set up by the Minister of education, Government of India in 1965. The building that houses the institute was originally built as a home for Lord Dufferin, Viceroy of India from 1884-1888. The building

was designed in Indo-Gothic style by Henry Irwin, an architect in the Public Works Department. The lawn in front of the building is above a water tank. All the rainwater from the building goes to this water tank. This rainwater harvesting system goes back to the 18th century. Students visited narrow gauge railway track of Kalka-Shimla railway route. Next day the group left for Manali. Mountains present a challenge for Civil Engineers to work and require special construction techniques not easily seen on plains. On the tour from



Shimla to Manali, Students had a chance to visit a tunnel construction present in Sunder Nagar district. Processes like Tunnel Boring, Rubble removal using bentonite solution, Grouting, Tunnel Ventilation etc were shown to students. It greatly enhanced the knowledge of students who asked questions to the site engineers to clear their doubts.



In Manali, students went for site seeing which included Solang Valley as well as the historical temple of Hadimba which is made completely from Deodar wood. At Solang Valley, students experienced skiing, snow biking paragliding, yak riding, horse riding etc.

While returning from Manali to Chandigarh students visited a cable suspended bridge on the river Beas. It has a span of 81 metres and constructed in the year 1998. Students saw the basic structural components of a suspension bridge system include stiffening trusses, the

main suspension cables, and the anchorages for the cables at each end of the bridge. Students also had a chance to visit road constructions site of NH 21 (Pandoh to Takoli section 89.7 km in length) which is being widened into 4 lanes. The Site Engineers explained the challenges faced during construction due to hilly terrain.

The tour concluded with a visit to Sukhna Lake and Rock Garden in Chandigarh. Sukhna lake is the largest artificial lake in India with an area of 3 square kilometres. Rock garden is entirely made out of industrial, home waste and discarded items like bottle glasses, bangles, tiles, ceramic pots etc. It presented the students with an example "3R" (Reduce, Recycle and Reuse) of waste management. Students returned with a memorable experience as this tour was informative and taught them about the beauty and importance of mountains. It also taught them to love and care for nature.



