



INDUSTRIAL VISIT

ORGANIZED BY DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR: 2024-25

NAME OF THE INDUSTRIAL VISITED	: BSNL- Rajiv Gandhi Memorial Telecom Training Centre
PLACE OF THE INDUSTRIAL VISITED	: Chennai
DATE OF VISITED	: 03/02/2025
YEAR OF STUDENTS	: III YEAR (A, B & C)
STRENGTH OF STUDENTS APPROVED	: 140
NAME OF THE FACULTY'S VISITED	: Mr. V. S. MOHAMMAD SHAHIL (IV-INCHARGE,CSE) Dr. R. Karunia Krishnapriya(HOD-CSE) Mr. N.Vijaya Kumar(ASSISTANT PROFESSOR,CSE) Mr. P.Praveen(ASSISTANT PROFESSOR,CSE) Mr. A. VENKATESAN (ASSISTANT PROFESSOR,CSE) Mr. V.P.Manikandan (ASSISTANT PROFESSOR,CSE) Ms. Deepika (ASSISTANT PROFESSOR,CAI)

An industrial visit to BSNL was scheduled for III year Computer Science & Engineering on 03/02/2025. A total of 140 students visited the firm. Sub-divisional engineer Mr. S. Balakrishnan divided the students into four groups and explained the different modules namely switching, transmission, and MDF (Main distribution function). In the switching module, students learned on practical aspects of call-making and receiving. They were taught how to create the calling number and how to check the dial tone. In the transmission module, students were briefed about OFC communication and its uses, advantages, and applications. The students were shown the real cables and their working procedures. In the MDF module, students learned about the requirement of the main distribution function. They were briefed about the line side and exchange side of MDF. The students were shown the functioning parts of the distribution unit. The industrial visit ended by 1:30 PM.

ABOUT THE BSNL- Rajiv Gandhi Memorial Telecom Training Centre:

Rajiv Gandhi Memorial Telecom Training Centre is one of the prime training centres of BSNL in Tamilnadu telecomm circle. The Centre is an ISO 9001:2008 Certified Institute. The Institute is constantly making endeavours to provide customized as well as tailor made quality training to the outside agencies in the field of Mobile Communication, Optical Fibre Communication, Fibre optics and IP Addressing, Broadband, Wi-Fi , WiMax etc.

Switching, transmission and MDF (Main distribution function). In switching module, students learnt on practical aspects of call making and receiving. They were thought on how to create the calling number and how to check the dial tone. In transmission module, students were briefed about OFC communication and its uses, advantages, applications. The students were shown the real cables and its working procedure. In the MDF module, students learnt about the requirement of main distribution

function. They were briefed about line side and exchange side of MDF. The students were shown the functioning parts of distribution unit.

Various labs of RMTTC :

Communication Lab	Switching Lab
Broadband Lab	Digital Telephone Exchange - C-Dot Lab
Fiber Optics Lab	ISP Lab
Transmission Lab	CDMA Lab
MDF (Main Distribution Frames)	GSM Lab

A telephone exchange consists of 4 functional blocks:

- ❖ SWITCH ROOMS
- ❖ MDF (Main Distribution Frames)
- ❖ TRANSMISSION ROOMS
- ❖ TELECOM SUPPORT INFRASTRUCTURE.

SWITCH ROOMS

- it consists of digital electronic switches that guide the user to the destination by identifying a physical communication path.
- This identification is done with the help of logical or directory numbers.
- We were shown, how the switches work in real-time, with an operating terminal

MDF (MAIN DISTRIBUTION FRAME):

- All subscriber lines are terminated at the end of MDF.
- It consists of a front (line) end and a back (switch) end which are interconnected with the help of a jumper.
- A safety point is created in MDF to avoid damages caused due to faults at the customer's end. The jumper of an MDF consists of gas discharge tubes which eliminates the faults.

TRANSMISSION ROOMS:

- The main function of transmission rooms is the interconnection of 2 exchanges set up within or outside the town. It involves optical fiber communication.
- Voice signals are first identified. 30 voice channels are combined with the help of first-order European multiplexers technology which can handle a speed of 2.048Mbps.
- Pulse Code Modulation of voice signals is carried out with digitization. Voice signals of frequency 0-4 KHz are converted to 64Kbps. The industrial visit was very helpful in providing us with a better understanding of the theoretical concepts of the subject Digital Switching Systems.

PHOTO'S at BSNL- RAJIV GANDHI MEMORIAL TELECOM TRAINING CENTRE:











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