A Report on Industrial Visit to "Rajiv Gandhi Memorial Telecom Training Centre (RGMTTC), BSNL Meenambakkam, Chennai"

Organized by Department of Computer Science and Engineering

On 09.09.2026

Report Submitted By: Mrs. M. Srilakshmi Preethi, Assistant Professor, Department of Computer Science and Engineering

Faculty Accompanied

- **Mrs.M.Srilakshmi Preethi, Assistant Professor, Department of CSE**
- **Mr. K H Shabbeer Basha, Associate Professor, Department of CSE**

Mode of Conduct: Offline
Student Participation: III B.Tech CSE–B – 52 Students
Report Received on 16.09.2026

1. COMPANY DETAILS

Particulars	Details
Organization Name	Rajiv Gandhi Memorial Telecom Training Centre (RGMTTC), BSNL
Organization Type	Telecommunication and FibreNet Technologies
Location	Meenambakkam, Chennai – 600 027, Tamil Nadu, India
Nature of Activities	Telecommunication training, networking, broadband, optical fibre and telecom infrastructure

2. Objectives:

The industrial visit to Rajiv Gandhi Memorial Telecom Training Centre (RGMTTC), BSNL, was organized with the following objectives:

- To bridge the gap between classroom learning and real-world industrial practices by providing students with practical exposure to telecommunication networks, communication infrastructure, networking equipment, and telecom operations.
- To understand the practical implementation of Computer Science and Engineering concepts in the telecommunication domain, particularly in optical fibre communication, Passive Optical Network (PON) architecture, broadband technologies, access networks, and network infrastructure.
- To provide students with exposure to modern communication technologies, telecom equipment, network components, and transmission systems.
- To facilitate interaction between students and technical professionals and provide insights into real-time network operations, maintenance, troubleshooting practices, and industry requirements.
- To create awareness among students about the technical skills, professional competencies, and career opportunities available in the networking and telecommunication sector.

3. Report Summary:

The Department of Computer Science and Engineering organized an industrial visit to Rajiv Gandhi Memorial Telecom Training Centre (RGMTTC), BSNL, Meenambakkam, Chennai, on 09.09.2026
The visit was organized to provide students with practical exposure to the telecommunication, networking, and communication infrastructure environment and to enable them to relate academic concepts with their real-world industrial applications.

During the visit, the students attended technical sessions and interacted with technical personnel from RGMTTC. The sessions provided valuable insights into telecommunication networks, optical fibre communication, Passive Optical Network (PON) architecture, broadband technologies, access networks, telecom equipment, and network infrastructure.

Students were also provided an opportunity to observe the telecommunication and networking laboratory and associated communication equipment. The demonstrations and technical discussions helped students understand how concepts related to Computer Networks, Data Communication, Transmission Systems, and Network Infrastructure are implemented in practical environments.

The interaction with technical professionals further enhanced students' understanding of network maintenance, troubleshooting, operational practices, communication technologies, and the skills expected by the telecommunications industry.

4. Technical Topics Discussed:

The following major technical areas were covered during the industrial visit:

1. Telecommunication Networks and Infrastructure
2. Optical Fibre Communication
3. Passive Optical Network (PON) Architecture
4. Broadband Technologies and Access Networks
5. Telecom Equipment and Network Components
6. Telecom Switching and Transmission Systems
7. Network Operations and Maintenance
8. Network Troubleshooting and Fault Management
9. FibreNet Technologies and Connectivity
10. Practical Applications of Networking and Communication Systems

5. Practical Exposure and Outcomes of the Visit:

The industrial visit provided students with valuable practical exposure to modern telecommunication technologies and network infrastructure. It enabled them to understand how theoretical concepts acquired through their academic curriculum are applied in real-world communication networks.

The students gained practical awareness of optical fibre communication, PON architecture, broadband connectivity, access networks, telecom equipment, transmission systems, and networking infrastructure.

The laboratory exposure and technical demonstrations provided students with a better understanding of the functioning and interconnection of various network components. The visit also helped them appreciate the importance of network reliability, maintenance, monitoring, troubleshooting, and efficient communication infrastructure.

Interaction with technical professionals provided students with insights into the current industry environment, technical competencies, operational practices, and career opportunities in networking and telecommunication.
Overall, the visit strengthened the connection between academic knowledge and industrial applications, thereby enhancing students' practical and professional understanding.

6. Key Learning Outcomes:

At the end of the industrial visit, students were able to:

- Gain practical exposure to telecommunication networks and communication infrastructure.
- Understand the basic principles and applications of optical fibre communication.
- Develop an understanding of Passive Optical Network (PON) architecture.
- Gain knowledge of broadband technologies and access networks.
- Identify and understand the functions of various telecom equipment and network components.
- Gain awareness of telecom switching and transmission systems.
- Understand basic network operations, maintenance, and troubleshooting practices.
- Relate concepts studied in Computer Networks and Data Communication to real-world telecom infrastructure.
- Interact with technical professionals and gain insights into industry practices and technical requirements.
- Develop awareness of career opportunities and emerging technologies in networking and telecommunication.
- Enhance their understanding of the importance of practical skills and industry exposure for professional development

7. Conclusion:

The industrial visit to Rajiv Gandhi Memorial Telecom Training Centre (RGMTTC), BSNL, Meenambakkam, Chennai, was highly informative and beneficial for the participating students.

The technical sessions, laboratory exposure, demonstrations, and interaction with technical professionals provided students with valuable practical knowledge of telecommunication networks, optical fibre communication, PON architecture, broadband technologies, telecom equipment, transmission systems, and networking infrastructure.

The visit successfully enabled students to understand the relationship between academic concepts and their practical implementation in the telecommunications industry. It also enhanced their awareness of network operations, maintenance, troubleshooting, and the technical competencies required in the professional environment.

The Department of Computer Science and Engineering sincerely appreciates the support, guidance, and technical assistance extended by RGMTTC/BSNL, Meenambakkam, Chennai, and the technical personnel who interacted with the students and facilitated their learning during the industrial visit.

The visit served as an effective platform for experiential learning, industry interaction, and professional skill development, motivating students to explore advanced technologies and career opportunities in computer networks, communication systems, fibre-optic technologies, and telecommunications.