

# J.B. INSTITUTE OF ENGINEERING & TECHNOLOGY

UGC Autonomous

## DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

### Report on Industrial Visit on 21/02/25

#### India Meteorological Department, Begumpet, Hyderabad

#### 1. Introduction:

The industrial visit of 80 students to the India Meteorological Department (IMD) in Begumpet Hyderabad was organized to provide students with insights into weather forecasting, meteorological observations, and the role of the IMD in disaster management. The visit aimed to bridge the gap between theoretical knowledge and practical applications in meteorology.

#### 2. Objective of the Visit:

- To understand the functioning of the IMD and its significance.
- To learn about various meteorological instruments and technologies.
- To gain knowledge of weather forecasting methods and disaster management.
- To explore career opportunities in meteorology.

#### 3. Overview of IMD Hyderabad:

The India Meteorological Department, Hyderabad, is a regional center responsible for monitoring and analyzing weather conditions in the region. It provides crucial information related to weather forecasting, climate studies, and disaster preparedness.

#### 4. Activities Conducted:

- **Introduction Session:** Officials briefed us about the history and functions of the IMD.
- **Tour of Facilities:** We visited different sections, including weather monitoring stations, radar systems, and data analysis centers.



- **Demonstration of Instruments:**

Experts explained the working of instruments like barometers, anemometers, rain gauges, and weather radars.

- **Understanding Weather Forecasting:**

Meteorologists demonstrated how satellite data, Doppler radars, and computer models are used for weather predictions.

- **Discussion on Disaster Management:**

Officials shared insights on how IMD plays a crucial role in predicting and mitigating natural disasters like cyclones, floods, and droughts.



### 5. Key Learnings:

- The importance of meteorological data in aviation, agriculture, and disaster management.
- How advanced technologies like satellite imagery and weather radars help in accurate forecasting.
- The role of IMD in issuing early warnings for natural calamities.
- Career opportunities in meteorology and atmospheric sciences.



### 6. Conclusion:

The visit to IMD Hyderabad was highly informative and insightful. It helped us understand the real-world applications of meteorological studies and the importance of weather forecasting in daily life. The knowledge gained during this visit will be valuable for students interested in atmospheric sciences, environmental studies, and related fields.