Mini Project Video Report and Coding Submission: **26 Jan 2026**
Pls submit your youtube video link (not more than 15 mins), powerpoint slide and coding to elearning.

A) Introduction

1. Course code and semester
2. Project title and selected IoT theme
3. Team name and member details (name, ID, role)

B) Background / Problem Statement / Objective

1. Describe the real-world application area
2. Explain the motivation, issues addressed, and intended outcomes

C) Methodology / Proposed Work

1. Flowchart of process and data flow
2. Block diagram (high-level IoT architecture)
3. Prototype setup (hardware and network overview)

D) IoT System Architecture & Design Discussion

1. Describe the microcontroller, sensors, and actuators used
2. Explain the communication protocol (MQTT, Wi-Fi, Bluetooth, LoRa, etc.)
3. Compare advantages and limitations (e.g., signal impairment, range, delay, or security issues)
4. Specify relevant IEEE standards, transfer rate, power consumption, and range limits
5. Demonstrate your data visualization and system optimization, including:
6. Cloud services— overview, dashboard, data, and limitations

E) Results & Analysis

1. Graphical representation of sensor data (input/output trends)
2. Data visualization from cloud/app dashboard
3. Show alerts, notifications, or system intelligence features (if any)
4. Performance results (e.g., signal strength, packet loss, delay, reliability)

5. Benchmarking or comparative analysis
6. Functional demonstration of the working prototype

F) Conclusion & Recommendation

Summarize system performance, limitations, and improvement opportunities

G) Reflection

Briefly describe challenges faced, lessons learned, and team collaboration highlights

H) References

Cite relevant research papers, standards (IEEE, ITU), technical documentation, and online resources