

FUNCTIONAL AND PERFORMANCE TESTING

Date	21 March 2025
Team ID	PNT2025TMID06956
Project Name	Predicting Plant Growth Stages with Environmental and Management Data
Maximum Marks	4 Marks

FUNCTIONAL AND PERFORMANCE TESTING:

Performance testing evaluates how the system performs under expected and peak loads.

The following aspects are tested:

- **Load Testing** – Determines how the system handles multiple users accessing the dashboard simultaneously.
- **Stress Testing** – Assesses system behavior under extreme conditions, such as high data input or network lag.
- **Scalability Testing** – Ensures the system can efficiently handle increasing amounts of data and user interactions.
- **Response Time Analysis** – Measures the time taken to process and display reports in Power BI.
- **Data Processing Speed** – Evaluates how quickly large datasets are imported, cleaned, and visualized.
- **System Resource Utilization** – Monitors CPU, memory, and network usage during peak operations.