

## **Detailed Problem Statement**

### **Design Model/Prototype for Resilient Infrastructure**

Develop a working model/prototype that monitors and predicts failures in building/ bridge /road /water pipelines before they happen. The solution will help prevent catastrophic failures, reduce maintenance costs, and enhance the resilience of urban infrastructure.

Participants are encouraged to use digital tools (trial/ licensed/ student versions) or any simulation software for analysis and visualization.

The final submission should include scope, drawings/design, material used for working model/prototype, working principles and methodology.