Introduction to IoT

SIMP Questions -22SCHEME

BY TIE REVIEW TEAM -SVIT and KSIT

Average time to be spent per module- 60 Mins

Module-4 (Study any 7/all questions)

1. Explain the classification of cloud models.
2. What is an SLA? Why is it important in cloud computing? What are its metrics?
3. Explain about different types of cloud implementations.
4. What is a sensor cloud?Explain its architecture? State its advantages of sensor cloud over traditional WSN?
5. Explain the different components of agricultural IoT with a neat figure, explain its stages and state the obvious advantages of agricultural IoT
6. Explain the Assessment of Leaf Area Index (LAI) using IoT-based agricultural systems.
7. Explain Smart Irrigation Management system.

Module- 5(Study any 7 questions)

1. Explain the architecture, different components and advantages of a vehicular IOT
2. Explain the Architecture of smart IoT transportation system (fog-FISVER)
3. Explain the architecture, different components and advantages of Healthcare IoT with a neat figure.
4. What are the risks in Healthcare IoT?
5. Explain the objectives,architecture and hardware of AmbuSens System
6. What is machine learning (ML)? Why do we use ML? State its advantages
7. What are the major challenges in ML? Explain.

Module-1(Study any 5 Questions)

1. Write short notes on the following topology networks: a) Star b) Ring c) Bus d) Mesh.
2. Differentiate IoT versus M2M vs CPS vs WOT
3. Write a short note on Various Technological Interdependence of IoT

4. Write a short notes on evolution of IoT.

5. Discuss briefly about OSI Layered and IPS Network Model.

6. Differentiate between point to point and point and multipoint connection types.

7. Write a note on IoT network components with a neat diagram.

Module-2 and 3(study any 5q/mod)

1. Give any 4 Comparisons between Sensors & Transducers & Actuators
2. Explain Simple sensing operation with a neat diagram
3. Explain the characteristics of a Sensor.
4. Discuss typical sensor node in IoT with a neat diagram.
5. Explain outline of a simple actuation mechanism with a neat diagram.
6. Explain different Considerations required during Sensing Operations.
7. Discuss about different sensing types commonly encountered in IoT.
8. Give Classification of sensors/actuators based on Power requirements and also based on the Output Consideration.
9. Give the Comparison between Structured & Unstructured data Format.
10. Explain about Offload decision making and considerations in processing offloading paradigm.
11. Discuss about IOT device design and selection considerations.
12. Explain Event detection using an Collaborative Processing Topology.
13. Explain about various data generating and storage sources connected to the Internet with a neat diagram.