# Answer the following questions and do upload Unit-1

- 1. Define IoT and what are the things in IoT
- 2. Discuss the characteristics and challenges of IoT
- 3. Explain the IoT stack with all the levels
- 4. Discuss the 5 levels in IoT
- 5. What is the role of cloud in IoT

- 1. Write the procedure to control a sensor through a webpage with an example
- 2. List out few differences between a microprocessor and a microcontroller
- 3. Draw the architecture of 8051 and explain all its features.
- 4. What is the program counter and how it will work.
- 5. What is the difference between URN and URL?
- 6. Explain Timers and counters in 8051

- 1. Explain the transport protocol and explain each with an example
- 2. What is the principle and advantages of Li-Fi
- 3. What is Internet Protocol? Explain different classes in IPv4.
- 4. Explain about layout of IPv6
- 5. Explain the importance of MQTT protocol with respect to IOT infrastructure.
- 6. what is uniform resource identifier

- 1) Mention Differences between Private Cloud and Public Cloud and What are advantages and disadvantages of Public cloud deployment
- 2) Explain the challenges of IOT with cloud.
- 3) Elaborate on Fog computing and mention the advantages of fog computing.
- 4) Discuss about service models of cloud computing.
- 5) Elaborate on parameters to be considered for selecting cloud service providers.
- 6) List out deployment models of cloud computing.

- 1. What is the data analysis? mention steps involved in Data Analysis Process and Name some data analysis tools.
- 2. Define Machine learning and explain Different Algorithm Methods for Machine Learning? Mention some applications also.
- 3. Describe the following algorithms of machine learning
  - (a) Decision tree (b) Logistic regression (c)K-Means Clustering
- 4. Explain in detail about smart retail and Smart Healthcare-Elderly Fall Detection with IoT and Sensors.