

## 6TH SEM. / ECE / ETC /2022(S)

### TH4 Internet of Things

Full Marks: 80

Time- 3 Hrs

Answer any five Questions including Q No.1& 2  
Figures in the right hand margin indicates marks

1. Answer **All** questions 2 x 10
  - a. Define IoT.
  - b. List any four types of sensors and actuators used in IoT.
  - c. Distinguish between IPv4 and IPv6. (any 4)
  - d. Name any four types of component present in IoT devices.
  - e. Define Data Acquisition.
  - f. Write any four applications of Cloud computing.
  - g. Mention any four differences between Traditional TV and Smart TV.
  - h. Write the name of operating systems used in Smart TV.
  - i. Briefly describe about the security aspects of IoT.
  - j. Specify any four applications of IoT.
  
2. Answer **Any Six** Questions 6 x 5
  - a. Differentiate between M2M and IoT technology (any 10).
  - b. Write short note on (i) Arduino (ii) Rasberry Pi
  - c. Explain about Structured and Unstructured data storage in cloud of IoT devices.
  - d. Define protocol and explain any 5 types of protocols used in different layers of IoT design.
  - e. Name any five components used inside the smart TV and Explain briefly about each component.
  - f. Draw the building block of IoT and briefly describe about each block.
  - g. List the IoT devices used for implementation of Smart Home and explain.
  
3. With a neat block diagram, Explain Data Management system used in IoT. 10
4. Explain in detail IoT Framework with suitable diagram. 10
5. Define communication and Explain different types of communication models of IoT. 10
6. With suitable diagram, explain about integration of smart TV into IoT. 10
7. Explain in detail about the application of IoT in Industrial automation. 10