

**6<sup>TH</sup> SEM./ CS&E /IT/ 2023(S)**  
**TH-2 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 RFID?
  - b. Name the different connectivity layers of IoT.
  - c. What is 6LoWPAN?
  - d. What is a sensor? Name its types.
  - e. Name the challenges involved in IoT.
  - f. What is Open Flow Protocol?
  - g. List the various versions of Raspberry Pi.
  - h. Write down any two differences between IoT LAN and IoT WAN..
  - i. Define interoperability.
  - j. What is sensor web enablement?
  
2. Answer **Any Six** Questions 6 x 5
  - a. Discuss about different components of IoT.
  - b. Define multi-homing. Discuss briefly about multi-homing.
  - c. Portray the architecture of ZigBee.
  - d. Define HAN. Write the advantages & disadvantages of HAN.
  - e. What is IDE? Explain the various basic components of Arduino Board.
  - f. Explain the different types of sensor detection modes with suitable diagram.
  - g. Explain the components of sensor node used in WSN.
  
3. What is the role of actuator in IoT? Explain about the various types of actuator in IoT. 10
  
4. Define IIoT. How does IIoT work? Outline the benefits of IIoT. 10
  
5. Define smart parking. Why we need smart parking system? Discuss the technologies used in smart parking. 10
  
6. Define SDN. Portray the architecture of SDN. 10
  
7. Explain the pin configuration of Raspberry Pi. 10