2111000104020002
Second Yea .B.C.A. (Sem –IV)
Examination March-2023
Internet of Things (IoT)

Seat No:

Student's Signature

[Time: Three Hours]   [Max. Marks: 70]
Instructions: 1.   Provide examples and diagrams wherever necessary.
                              2.   Figures to the right indicate full marks.

Q.1   Answer the following in detail. (Any seven)   **[14]**
   1)   What is Request-Response Communication Model?
   2)   What is Web Socket?
   3)   What is Analog Sensor?
   4)   Define Gas Detector.
   5)   What is Embedded Systems?
   6)   What is Active IR Sensor?
   7)   Define Raspberry Pi.
   8)   What is the use of GPIO pins?
   9)   List out basic building blocks of an IoT Device.

Q.2   Answer in detail.(Any three)   **[18]**
   1)   Explain the difference between IoT and M2M in detail.
   2)   Discuss physical design of IoT.
   3)   How is Raspberry Pi different from Desktop Computer? Explain.
   4)   Differentiate between Sensors and Actuators in detail.

Q.3   Answer the following. (Any two)   **[14]**
   1)   What are the characteristics of IoT? Explain in detail.
   2)   Write a note on security for IoT.
   3)   List out and explain each type of Sensors in detail.

Q.4   Do as directed. (Any two)   **[14]**
   1)   What is an IoT device? Explain the basic building blocks of an IoT device.
   2)   Explain Wireless Sensor Networks in detail
   3)   Discuss various communication model used in IoT.

Q.5   Do as directed.
   A. Write a case study on IoT for Smart City applications.   **[10]**
                                                       Or
   A. 1) Write a detailed note on Big Data Analytics.   **[05]**
        2) Explain various types of Actuators in detail.   **[05]**

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