Time: 3 hours   **Max. Marks: 80**
==

Instructions:
1) Solve any FOUR questions.
2) All question carries equal marks.
3) Figures to the right indicate full marks.
4) Assume suitable additional data, if necessary and clearly state it.

Q. 1 a) Discuss IOTWF Standardized Architecture.   (5 M)
   b) Explain Raspberry Pi with diagram.   (5 M)
   c) Describe Zigbee protocol stack using IEEE 802.15.4.   (10 M)

Q.2 a) What are gateways and backhaul sub layers?   (5 M)
   b) Briefly explain Adapting SCADA for IP.   (5 M)
   c) What do you mean by SoC? Also explain its applications.   (10 M)

Q.3 a) Describe various health & lifestyle domain specific IOT.   (5 M)
   b) Explain the different pin/parts of Arduino Uno board.   (5 M)
   c) Describe data vs. network analytics for an IoT network.   (10 M)

Q.4 a) Write short notes on BLE.   (5 M)
   b) Differentiate between Sensors and actuators with neat diagram.   (5 M)
   c) What is IoT? Explain IoT blocks in detail. List out the different IOT Challenges. (10 M)

Q.5 a) Explain IOT Application layer with a neat diagram.   (5 M)
   b) Discuss the concept of Edge computing.   (5 M)
   c) Explain MQTT. Compare - COAP and MQTT.   (10 M)

Q.6 a) Describe Architecture of Wireless Sensor Network.   (5 M)
   b) Explain different Energy related IOTs Domain with example.   (5 M)
   c) What are IOT software platform? Explain in short with an example.   (10 M)

****

Engineeringkeeda.com

27003