

Time: 3 Hours

Marks: 80

Note

1. Question No. 1 is compulsory
2. Attempt any 3 questions from remaining five question
3. Figures to the right indicate full marks

Q.1 Solve any 4 out of 6 (20)

- a. Explain characteristics of IoT (5)
- b. Compare TCP and UDP. (5)
- c. Draw level 1 diagram for any IoT based system? (5)
- d. Explain different types of OLTP (5)
- e. State specifications of LoRA (5)
- f. What are the different communication models? (5)

Q.2 a) Explain a few physical parameters and sensors to measure them (10)

b) Explain the WSN IoT Network Architecture with its application (10)

Q.3 a) What is data analytics and explain various methods of the same in IoT (10)

b) What is role of various cloud services in IoT. (10)

Q.4 a) List the main features of MQTT protocol and explain its working. (10)

b) What are ACID rules? (10)

Q.5 a) Explain the AMQP protocol in IoT (10)

b) Draw and explain i) process specification and ii) Information model for IoT based home Light automation system. (10)

Q.6 Write Short notes on any 4 out of 5 (20)

- a. Features of Beaglbone
- b. Various applications of IOT with example
- c. HTTP protocol
- d. Websocket
- e. Tomography and layered attacker model in IoT

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