

Duration: 3Hrs

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)

- 1) Explain features (constraints) of REST Architectural style of designing Software components. (5)
- 2) Compare HTTP and CoAP protocol. (5)
- 3) Features of SQL (5)
- 4) Explain different types of OLTP (5)
- 5) Compare Iot and M2M with suitable examples (5)
- 6) What are characteristics of IoT? (5)

Q.2 a) Explain various sensors and actuators in IoT based systems (10)

b) Design and Draw process and domain model for IoT based car parking system. (10)

Q.3 a) What are data stores and different ways of organizing data? (10)

b) What is cloud computing? Explain various features of cloud computing. (10)

Q.4 a) List the main features of Beaglebone and PcDUINO (10)

b) Explain various types of transactions processing with an example? (10)

Q.5 a) Explain the MQTT protocol with an example highlighting the functions Of broker. (10)

b) Draw and explain level 1 IOT design with an example? (10)

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

- a. LoRA
- b. Various applications of IOT with example
- c. Various cloud models
- d. AMQP protocol
- e. Tomography and layered attacker model in IoT
