

Question Paper



MANIPAL UNIVERSITY

**SCHOOL OF INFORMATION SCIENCES (SOIS)
FIRST SEMESTER MASTER OF ENGINEERING- ME (EMBEDDED SYSTEMS)
DEGREE EXAMINATION - APRIL/ MAY 2017**

Wednesday, 26,2017

Time :10:00AM- 1:00PM

Internet of Things [ESD 615.9]

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) With neat diagrams, explain a) IOT LEVEL - 3 b) IOT LEVEL - 4 (10)
(5+5)
- 2) With a neat diagram explain, inferring information and knowledge from data in IOT. (10)
- 3) With a neat diagram, explain IOT functional blocks. (10)
- 4) List the components of the IOT system. Explain briefly. (10)
- 5) With a neat figure, explain the Abstract Layering of COAP. (10)
- 6) Considering the phonebook database and table, explain the Update and Delete operation using python. (10)
- 7) What are ARGPARSE in Python? Give an example for reading the data from input file and find the factorial and writing into the output file using ARGPARSE concept (10)
- 8) What are Command Line Arguments? Write a simple program led on(1) or off(0) value from CLA and control the LED based on it. ? How CLA is different from ARGPARSE. (10)
- 9) What are IPV4 and IPv6? Explain A. Unicast B. Multicast C. Anycast (1+3+3+3)
- 10) A. What are the available channel frequencies (10)

available in Zigbee? (3)

B. Explain the network topology in Zigbee?
(4)

C. Briefly explain the role of a) FFD b) RFD c) Coordinator.
(3)