

[Time:2.30 Hrs]

[ Marks:75 ]

Please check whether you have got the right question paper.

- N.B:
1. All question are compulsory.
  2. Figures to the right indicate full marks.

- Q.1 Attempt any four of the following. 20**
- A Explain the Information view of an IoT system.
  - B Explain the reference Model and architecture
  - C What are the main design principles and needed capabilities of an IoT system?
  - D What are the standards considerations of an IoT system?
  - E Describe an IoT architecture
  - F Explain the reference Model and architecture.
- Q.2 Attempt any four of the following. 20**
- A State 6LoWPAN functions and characteristics.
  - B Compare between passive and active RFID with the help of Dash7 network.
  - C Explain in short note RPL and CORPL.
  - D What are the difference between IPv4 and IPv6 Protocol?
  - E Write a short note on HART.
  - F Discuss the working of ZigBee and its topologies with devices.
- Q.3 Attempt any four of the following. 20**
- A Explain the concept of OneM2M in detail?
  - B What is the need for ETSI framework in IOT service layer?
  - C Explain in detail the OMA framework?
  - D Illustrate the concept of BBF in brief. Justify its protocols which are a part of BBF?
  - E Explain the importance of XMPP in IOT session layer.
  - F Illustrate the concept of COAP in brief
- Q.4 Attempt any three of the following. 15**
- A Explain why MQTT is better than HTTP
  - B Explain the HTTP Protocol in detail?
  - C Explain the importance of MPTCP in IOT.
  - D Illustrate the use of DCCP in IOT.
  - E Explain in brief about TCP.
  - F Write a short note on AMQP and its working.

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