

(2½ Hours)

[Total Marks: 75]

N. B: (1) All questions are compulsory.(2) Make suitable assumptions wherever necessary and state the assumptions made.(3) Answers to the same question must be written together.(4) Numbers to the right indicate marks.(5) Draw neat labeled diagrams wherever necessary.(6) Use of Non-programmable calculators is allowed.**1. Attempt any four of the following:****20**

- Discuss the state of the art of an IoT architecture.
- Write a note on Deployment and Operational view of an IoT system.
- Discuss the functional view of an IoT system.
- Describe an IoT architecture
- Define IoT and its functioning.
- Explain the Information view of an IoT system

2. Attempt any four of the following:**20**

- Explain in brief about TCP
- Explain the OSI Model.
- Write a short note on IPv4 and IPv6.
- Explain in brief about UDP
- Explain the Data link layer.
- Explain Wireless HART. Advantages of Wireless HART.

3. Attempt any four of the following:**20**

- What is the need for ETSI framework in IOT service layer?
- Explain the concept of OneM2M in detail?
- Explain the HTTP Protocol in detail?
- Explain the importance of XMPP in IOT session layer.
- Determine why there is need of SCTP protocol in IOT
- Explain DCCP in Transport layer.

4. Attempt any three of the following:**15**

- Write a note on building blocks of IoT architecture.
- Explain the reference Model and architecture
- Explain in detail the OMA framework?
- Explain the importance of MPTCP in IOT
- Write a short note on Z wave.
- What are the main design principles and needed capabilities of an IoT system?