

## Sem - V - choice based.

Time : 3 Hours

Marks: 80

N.B. :

- 1) Question No.1 is **compulsory**.
- 2) Attempt any **three** from the remaining **five** questions.
- 3) Illustrate answers with neat sketches wherever required.
- 4) Answers to questions should be **grouped** and written **together**

- Q.1 (a) Explain IoT value chain 10
- (b) Explain IoT in terms of Smart Cities 10
- Q.2 (a) What are different IoT enabling technologies? Explain Wireless Sensor Network (WSN) in detail 10
- (b) Explain one open source prototyping platform for IoT 10
- Q.3 (a) Explain Architecture Reference Model for IoT. 10
- (b) Explain Service Oriented Architecture (SOA) for IoT 10
- Q.4 (a) Explain technical design constraints involved in Devices and Networks in terms of Functional Requirements, Sensing and communications field 10
- (b) What is M2M? Explain key application areas of M2M. 10
- Q.5 (a) Explain IoT in terms of Retail 10
- (b) Explain in detail functional model in IoT reference model 10
- Q.6 Write short notes on (any four) 20
- (a) Difference between IoT and M2M
  - (b) ETSI M2M/ one M2M state of art architecture
  - (c) Cloud Computing
  - (d) Motion Sensor
  - (e) Constraints in IoT data representation and visualization