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**B. TECH.**  
**(SEM VI) THEORY EXAMINATION 2018-19**  
**INTERNET OF THINGS**

*Time: 3 Hours**Total Marks: 70*

**Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.

**SECTION A**

**1. Attempt all questions in brief.** **2 x 7 = 14**

- (a) What is Zigbee?
- (b) Differentiate between Raspberry Pi and desktop computer.
- (c) What are different challenges of IoT.
- (d) Explain different characteristics of IoT.
- (e) What is the role of things and Internet of IoT?
- (f) What is requirement of IoT protocol standardization?
- (g) Why do IoT system have to be self-adapting and self configuring?

**SECTION B**

**2. Attempt any three of the following:** **7 x 3 = 21**

- (a) What is relation between WSN and IoT? Explain with example.
- (b) Why security required in IoT? Explain detail various security in Internet of Things.
- (c) Write in detail business model scenario for Internet of Things.
- (d) Explain Data visualization and its importance in IoT.
- (e) Explain layered IOT architecture using a figure.

**SECTION C**

**3. Attempt any one part of the following:** **7 x 1 = 7**

- (a) Explain the application of IoT in home automation systems.
- (b) What is threat analysis in Internet of Things? Explain detail threat analysis.

**4. Attempt any one part of the following:** **7 x 1 = 7**

- (a) Explain in detail access control and message integrity of Internet of Things.
- (b) How Big Data can be used in IoT? Explain in detail.

**5. Attempt any one part of the following:** **7 x 1 = 7**

- (a) What is Role of the Internet of Things for Increased Autonomy and Agility in Collaborative Production Environments?
- (b) Explain the concepts and terminology of RFID Application.

**6. Attempt any one part of the following:** **7 x 1 = 7**

- (a) Explain with example MQTT Protocol. What is role of MQTT protocol in IoT?
- (b) What is Identity management in Internet of Things? Explain any 2 Identity management techniques of Internet of Things.

**7. Attempt any one part of the following:** **7 x 1 = 7**

- (a) Discuss What are the components and communication media required for making smart building.
- (b) Explain about Internet of Thing using PLC technology.