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**BTECH**  
**(SEM VII) THEORY EXAMINATION 2024-25**  
**IOT SYSTEM ARCHITECTURE**

**TIME: 3 HRS****M.MARKS: 100****Note:** Attempt all Sections. In case of any missing data; choose suitably.**SECTION A****1. Attempt all questions in brief. 2 x 10 = 20**

| Q no. | Question   | CO | Level |
|-------|--|----|-------|
| a.    | Define Protocol with example.                        | 1  | K1    |
| b.    | Discuss the use of database in IoT.                  | 1  | K2    |
| c.    | Write about the Cost of Ownership in respect of IoT. | 2  | K3    |
| d.    | List the various devices used in IoT.                | 2  | K1    |
| e.    | Explain the Industrial Internet of Things.           | 3  | K2    |
| f.    | Specify the "4.0" in Industry 4.0 in respect of IoT. | 3  | K2    |
| g.    | Write on reliability in Internet of Things.          | 4  | K2    |
| h.    | How Real time monitoring is important aspect of IoT? | 4  | K3    |
| i.    | Define Testing concept in IoT.                       | 5  | K1    |
| j.    | List the various type of Testing used in IoT.        | 5  | K1    |

**SECTION B****2. Attempt any three of the following: 10 x 3 = 20**

|    |  |   |    |
|----|--|---|----|
| a. | Define Wireless Network. Write the different Security and Privacy issues in IoT.     | 1 | K2 |
| b. | Describe the Environmental Interaction Modeling in Internet of Things with example.  | 2 | K3 |
| c. | Describe the different kind of Technologies used in the industry internet of Things. | 3 | K3 |
| d. | Discuss in brief about the ARMET approach used for the security in IoT.              | 4 | K4 |
| e. | Explains the process of Fuzz testing used in the security concept of IoT.            | 5 | K3 |

**SECTION C****3. Attempt any one part of the following: 10 x 1 = 10**

|    |   |   |    |
|----|---|---|----|
| a. | Describe the IoT system architecture with proper diagram. Why security of IoT is necessary? | 1 | K3 |
| b. | Illustrate the different IoT oriented Protocols with example.                               | 1 | K3 |

**4. Attempt any one part of the following: 10 x 1 = 10**

|    |   |   |    |
|----|---|---|----|
| a. | Differentiate between Single hub and Multi hub Network in IoT.                      | 2 | K3 |
| b. | Define Migration Process. Discuss the various event analysis in Internet of things. | 2 | K4 |

**5. Attempt any one part of the following: 10 x 1 = 10**

|    |   |   |    |
|----|---|---|----|
| a. | Illustrate the Architecture of Industrial Internet of things and also write its challenges. | 3 | K2 |
| b. | Illustrate the various process for the implement of Internet of Things in Industry.         | 3 | K2 |

**6. Attempt any one part of the following: 10 x 1 = 10**

|    |  |   |    |
|----|--|---|----|
| a. | Explain the term Dependability in IoT. Write the different application of network security.  | 4 | K3 |
| b. | Illustrate the Reliable and secure by design application in Internet of things with example. | 4 | K3 |

**7. Attempt any one part of the following: 10 x 1 = 10**

|    |  |   |    |
|----|--|---|----|
| a. | Differentiate between White box and Black box fuzzing in Internet of Things. | 5 | K3 |
| b. | Describe the Fuzzing Industrial Control Network Systems with proper diagram. | 5 | K3 |