

**B. TECH. (COMPUTER SCIENCE & BUSINESS SYSTEMS) (CBCS - 2018 COURSE)**  
**B.Tech. (CSBS) Sem - VII : SUMMER : 2024**  
**SUBJECT: INTRODUCTION TO IoT**

Day : Thursday  
Date : 16/05/2024

**S-20482-2024**

Time : 02:30 PM-05:30 PM  
Max. Marks : 60

**N.B.**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Draw neat diagrams **WHEREVER** necessary.

**Q.1** Discuss IOT challenges with a net diagram architecture of IOT. (10)

**OR**

**Q.1** How can one compare and contrast the functionalities and applications of consumer Internet of Things (IOT) devices with Industrial IOT (IIOT) system? Explain the emphasizing their respective impacts on everyday life and industrial operations. (10)

**Q.2** Explain in detail IOT Gateways and Data Ingestion in detail. (10)

**OR**

**Q.2** How can evaluate the effectiveness of proximity networking technologies in facilitating communication and data exchange between IOT devices. Explain in detail. (10)

**Q.3** What is a Sensor Technologies? Explain in detail integrating sensors to sensor processing. (10)

**OR**

**Q.3** Define sensors and it characteristics. List out the most useful classification scheme for the pragmatic application of sensors in an IOT network. (10)

**Q.4** What is a proximity Network? Explain ZigBee, Bluetooth and Serial Communication in detail. (10)

**OR**

**Q.4** How can analyze and evaluate the process of mapping IOT architecture to the architecture mode. (10)

**Q.5** Draw and Explain in detail web services and TCP/ IP. (10)

**OR**

**Q.5** What is message encoding? Draw and explain in detail. (10)

**Q.6** Discuss in detail noisy and missing data. What is anomaly and outlier detection? Explain in detail. (10)

**OR**

**Q.6** What is IOT data processing? Explain Time Series data and their characteristics. (10)

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