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Roll No.2399001.....

TCS-331

B. TECH. (CSE) (THIRD SEMESTER)

MID SEMESTER

EXAMINATION, Dec., 2023

FUNDAMENTALS OF IoT

Time : 1½ Hours

Maximum Marks : 50

Note : (i) Answer all the questions by choosing any *one* of the sub-questions.

(ii) Each sub-question carries 10 marks.

1. (a) What is Internet of Things (IoT) ? Draw the neat and clean block diagram of IoT and explain about each the blocks ? (CO1)

OR

- (b) Describe some specific IoT applications in the healthcare industry, and how do they benefit patients and providers ? (CO1)

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2. (a) When and where did the concept of the Internet of Things (IoT) first originate, and what were the early developments in this field ? (CO1)

OR

- (b) What are the key components of IoT architecture, and how do they enable the communication and interaction of IoT devices ? (CO1)
3. (a) What are the structural components that make up the Internet of Things, and how do they work together to enable IoT functionality ? (CO1)

OR

- (b) How are IoT objects and services typically identified within an IoT ecosystem, and why is this identification important for IoT applications ? (CO2)
4. (a) How does the ITU-T contribute to the standardization and development of IoT technologies, and what is its role in the IoT ecosystem ? (CO1)

(3)

OR

- (b) How do sensors play a critical role in IoT, and explain the numerous features required for the sensor used in IOT devices. (CO2)
5. (a) What is meant by “device intelligence” in IoT, and how do intelligent devices contribute to the overall functionality of IoT systems ? (CO2)

OR

- (b) Write short notes on the following : (CO2)
- (i) RFID
 - (ii) Satellite Technology