

Code No.: EC57104PE22

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CMR ENGINEERING COLLEGE: : HYDERABAD

UGC AUTONOMOUS

I-M.TECH-I-Semester End Examinations (Regular) - March- 2023

IOT AND ITS APPLICATIONS (PE-II)

(VLSISD)

[Time: 3 Hours]

[Max. Marks: 60]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 10 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A

(10 Marks)

1. a) Define IoT. [1M]
- b) Write about the importance of Link layer. [1M]
- c) List the key features of M2M. [1M]
- d) What is Software Defined Networking? [1M]
- e) What is Physical Entity? [1M]
- f) Write the four stages of IoT architecture. [1M]
- g) What is the importance of IoT in Air Pollution Monitoring? [1M]
- h) How IoT is used in oil and gas industry. [1M]
- i) What is IoT Security. [1M]
- j) What is meant by IoT privacy and governance? [1M]

PART-B

(50 Marks)

2. Discuss in detail about Request-response, Publish-subscribe and Push-pull communication models with diagrams. [10M]
- OR**
3. Discuss in detail about IoT strategic research and innovation directions. [10M]
4. Explain about an IoT architecture and its main design principles. [10M]
- OR**
5. How do data collection and analysis approaches differ in M2M and IoT. Elaborate on this. [10M]
6. Explain about the various steps involved in IoT system design methodology. [10M]
- OR**
7. Explain about IoT reference model and IoT and IoT reference architecture. [10M]
8. Draw the process diagram, domain model and information model for the home intrusion detection system and explain it. [10M]
- OR**
9. Explain Four Aspects in your Business to Master IoT in detail. [10M]
10. Explain in detail about the key challenges for Governance, Security and Privacy in IoT applications. [10M]
- OR**
11. Discuss about the Three Main Criteria of an IoT Governance Model. [10M]
