Code No.: R22EC57104PE   R22   H.T.No. [| | 8 | R | | | |]

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
I–M.TECH–I–Semester End Examinations (Supply) - September- 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 disadvantages of IoT?   [1M]
   c) What is M2M?   [1M]
   d) Define sensor?   [1M]
   e) Name three main components of IoT?   [1M]
   f) What are functional groups in IoT?   [1M]
   g) What are actuators?   [1M]
   h) What is brownfield and greenfield in IoT?   [1M]
   i) What are the challenges of IOT security?   [1M]
   j) What are the three types of IoT security?   [1M]

PART-B   (50 Marks)

2. Draw and explain IoT architecture?   [10M]

OR

3. Explain the various emerging IoT applications.   [10M]

4. Explain the levels of IOT.   [10M]

OR

5. Describe how a solution is designed for a particular problem by making use applied   [10M]
    architecture in M2M/IoT and explain the use of partitioning the architectural work
    and solution work into two domains.

6. Explain IoT deployment and operational view of the IoT reference architecture.   [10M]

OR

7. What is the functional view of IoT reference architecture?   [10M]

8. How IoT is used in oil and gas industry?   [10M]

OR

9. What is smart manufacturing concept and its application?   [10M]

10. Explain security architecture in detail with diagram.   [10M]

OR

11. What are the 5 types of security attacks that can be cause in IoT?   [10M]

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