

**CMR ENGINEERING COLLEGE: : HYDERABAD**  
**UGC AUTONOMOUS**

**IV-B.TECH-I-Semester End Examinations (Regular) - November- 2024**

**INTERNET OF THINGS**

**(Common for CSE, CSM)**

**[Time: 3 Hours]**

**[Max. Marks: 70]**

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

Part A is compulsory which carries 20 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**

**(20 Marks)**

1. a) Define Big Data Analytics. [2M]
- b) Explain various Applications of IoT. [2M]
- c) Explain SNMP NETOPEER. [2M]
- d) Explain M2M in IoT. [2M]
- e) Explain any two data types in Python. [2M]
- f) Discuss The control flow statements. [2M]
- g) List peripherals of Raspberry Pi. [2M]
- h) List the IoT Physical Devices and Endpoints. [2M]
- i) Illustrate the cloud for IoT? [2M]
- j) List the web server for IoT. [2M]

**PART-B**

**(50 Marks)**

2. Define IoT. Describe IoT levels and deployment templates in detail. [10M]
- OR**
3. List the different types of IoT enabling Technologies. Describe them in detail. [10M]
  4. Explain SDN architecture in detail with an example. [10M]
- OR**
5. Explain how NFV can be used for virtualizing IoT devices. [10M]
  6. Discuss in detail about functions, modules and packages in Python. [10M]
- OR**
7. Explain about JSON, XML, HTTP Lib and URL Lib in Python with respect to IoT. [10M]
  8. Determine the relative strengths and limitations of Building IOT with RASPBERRY PI. [10M]
- OR**
9. Demonstrate how Raspberry Pi used for IoT devices? How to program Raspberry Pi using Python? [10M]
  10. Explain in detail about the service models of a cloud computing. [10M]
- OR**
11. Discuss the process of designing a RESTful web API. [10M]

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