

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS

III-B.TECH-II-Semester End Examinations (Supply) - December- 2025
INTERNET OF THINGS
(IT)

[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) Differentiate between Logical and physical design of IoT.	[1M]
c) Demonstrate YANG -2.	[1M]
d) Examine whether M2M and IoT are same?	[1M]
e) How complex is, logical design with PYTHON for an IoT application?	[1M]
f) List the basic operations in IoT.	[1M]
g) What is the use of SPI?	[1M]
h) How is Raspberry Pi different from a desktop computer?	[1M]
i) Design a Restful web API.	[1M]
j) What is the importance of cloud storage models?	[1M]

PART-B

(50 Marks)

2. Generalize on Big data analytics and embedded systems.	[10M]
OR	
3. Explain the IoT protocols with block diagram.	[10M]
4. Illustrate in detail about the architecture of SDN.	[10M]
OR	
5. Analyze in detail the steps for IoT device Management with NETCONF-YANG.	[10M]
6. What are packages? Give an example of package creation in Python.	[10M]
OR	
7. What is an Exception? Explain types of exceptions and give an example.	[10M]
8. Describe the use of SPI and I2C interfaces on raspberry pi?	[10M]
OR	
9. Elaborate the external gadgets and controlling of any IOT system.	[10M]
10. With a neat block diagram, explain the cloud storage model.	[10M]
OR	
11. Formulate python web application framework and design a web with API.	[10M]
