Code No.: DS851PE

R20	H.T.No.			8	R					

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–II–Semester End Examinations (Regular) – April - 2025
INTERNET OF THINGS
(CSD)

[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)	List various application areas of IoT.	[2M]
b)	Mention IoT Levels.	[2M]
c)	What is SDN and List out its advantages?	[2M]
d)	Define IoT with an example?	[2M]
e)	Outline the features of Python language.	[2M]
f)	Write about lists in python.	[2M]
g)	What is the use of SPI and I2C interfaces on raspberry pi?	[2M]
h)	List out Linux flavors on which Raspberry Pi works?	[2M]
i)	What are cloud offerings in the context of IoT?	[2M]
j)	What is the importance of cloud storage models.	[2M]

PART-B   (50 Marks)

2.	Discuss the Wireless Sensor Networks.	[10M]
	OR	
3.	Explain the IoT Communication APIs IoT enabaled Technologies	[10M]
4.	Distinguish between IoT and M2M.	[10M]
	OR	
5.	Explain the process how SDN can be used for various levels of IoT	[10M]
6.	What are the data types and data structures available in python? Explain List and sets with suitable examples.	[10M]
	OR	
7.	What is JSON? Explain encoding and decoding a message in Python using JSON.	[10M]
8.	Demonstrate programming with Raspberry Pi with a suitable program.	[10M]
	OR	
9.	Model Python program with Raspberry PI with a focus on interfacing external gadgets.	[10M]
10.	Elaborate Web server for IoT.	[10M]
	OR	
11.	Explain about REST full Web Services in detail.	[10M]

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