JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, January/February - 2023
INTERNET OF THINGS
(Computer Science and Engineering)

Time: 3 Hours   **Max.Marks:75**

Note: i) Question paper consists of Part A, Part B.

    ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

    iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A

(25 Marks)

1.a)	What is the scope of IoT?	[2]
b)	Give the example of Big Data generated by IoT.	[3]
c)	Write the limitations of Conventional networks.	[2]
d)	What is SDN and List out its advantages?	[3]
e)	Give an example type conversion in Python.	[2]
f)	What is pass control structure in Python?	[3]
g)	List out Linux flavors on which Raspberry Pi works?	[2]
h)	Give LED status in Raspberry and write each status function.	[3]
i)	What is WAMP protocol?	[2]
j)	Write Amazon services for IoT.	[3]

PART – B

(50 Marks)

2.a)	Describe General block diagram of IoT.	
b)	Explain application layer protocols in IoT.	[5+5]

OR

3.a)	Explain IoT level-2 and compare with IoT level-6.	
b)	Elaborate how IoT is useful in smart irrigation.	[5+5]

4.a)	Distinguish between M2M and IoT.	
b)	Explain NFV architecture in detail.	[5+5]

OR

5.a)	"IoT Management is required", Justify it?	
b)	Explain the architecture of Software Defined Network.	[5+5]

6.a)	Describe the features of Python language.	
b)	What is JSON? Explain encoding and decoding a message in Python using JSON.	[5+5]

OR

7.a)	What is List in Python and explain its operations.	
b)	Explain function creation and definition in Python and illustrate with an example.	[5+5]

8.a) Explain components of Raspberry Pi Board.
  b) Give code for LED on/off on Raspberry Pi using switch.   [5+5]
OR
9.a) Describe Raspberry Pi interfaces in detail.
  b) List out and explain functions used in Raspberry Pi.   [5+5]

10.a) Explain key elements of WAMP protocol.
  b) Describe the interactions in WAMP protocol.   [5+5]
OR
11.a) Analyze Django template in detail.
  b) Write the services of Amazon EC2.   [5+5]

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