Code No: 156BJ **R18**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year II Semester Examinations, July - 2023
INTERNET OF THINGS
(Common to IT, CSE(AI&ML))

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)	List out applications of IoT.	[2]
b)	Write the perspectives of IoT.	[3]
c)	Define M2M.	[2]
d)	Write the limitations of conventional network architecture.	[3]
e)	Write a python code to get type of data type.	[2]
f)	Write the features of Python.	[3]
g)	List out LED status of Raspberry Pi.	[2]
h)	What are the interfaces of Raspberry Pi?	[3]
i)	What is WAMP?	[2]
j)	Write the services of Amazon EC2.	[3]

PART – B

(50 Marks)

2.a)	Explain general block diagram of IoT device with a neat sketch.	
b)	Describe REST based communication API for IoT.	[5+5]
	OR	
3.a)	Discuss about functional block of IoT.	
b)	Explain any two levels of IoT including their pros and cons.	[5+5]
4.a)	Explain M2M gateway architecture with suitable diagram.	
b)	Explain the need of IoT management.	[5+5]
	OR	
5.a)	List out YANG node types and write each node purpose.	
b)	What is SNMP? Explain its advantages and disadvantages.	[5+5]
6.a)	What is List? Explain different operations on List in Python with examples.	
b)	Give a note on range, pass and break statements in Python.	[5+5]
	OR	
7.a)	Define a function in Python programming and pass the values by reference.	
b)	What is SMPT Lib in Python? Explain its purpose using Python code.	[5+5]

8.a) Explain block diagram of IoT device.
b) Describe flavors of Linux on Raspberry Pi. [5+5]

OR

9.a) Explain various components of Raspberry Pi.
b) Write python code for controlling an LED on Raspberry Pi. [5+5]

10.a) Describe various protocols of web application messaging protocol.
b) Write steps to create Django frame work. [5+5]

OR

11.a) Give Python code for starting to send data for Amazon EC2.
b) Explain steps to receive data from Xively cloud. [5+5]

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