GIET UNIVERSITY, GUNUPUR – 765022

B. Tech (Fifth Semester Regular) Examinations, December – 2023

21BELOE35001 – Internet of Things

(EE & EEE)

Time: 3 hrs   Maximum: 70 Marks

(The figures in the right hand margin indicate marks)

PART – A   **(2 x 5 = 10 Marks)**

Q.1. Answer **ALL** questions

		CO #	Blooms Level
a.	Why do IOT systems have to be self-adapting and self –configuring ?	CO1	K2
b.	What does 3 V's (V…,V….,V….) represent in BIGDATA ?	CO1	K2
c.	How is YANG used by NETCONF ?	CO2	K3
d.	Define the role of Service Specifications in IOT design.	CO3	K3
e.	State any two advantages using Raspberry Pi	CO4	K3

PART – B   **(15 x 4 = 60 Marks)**

Answer **ALL** questions

		Marks	CO #	Blooms Level
2. a.	Describe an example of an IoT system in which information and knowledge are inferred from data.	7	CO1	K2
b.	Briefly explain the communication with REST based API	8	CO1	K3
	(OR)			
c.	What is the role of communication functional block in an IOT system?	7	CO1	K2
d.	Determine the various communication models that can be used weather monitoring system. Which is more appropriate model for this system? Describe the pros and cons.	8	CO1	K3
3.a.	How do data collection and analysis approaches differ in M2M and IOT?	7	CO2	K3
b.	What is the role of NETCONF server? Explain its implementation using NETOPEER?	8	CO2	K2
	(OR)			
c.	Which limitation makes SNMP unsuitable for IoT system?	7	CO2	K2
d.	Which communication protocols are used for M2M local area network?	8	CO2	K3
4.a.	What is a keyword argument in Python and explain the various conversion types in Python?	7	CO3	K2
b.	What are the various characteristics of python language ?	8	CO3	K2
	(OR)			
c.	What is the difference between a Python module and a package?	7	CO3	K2

d.	Describe a use of Python dictionary, lists and Tuples.	8	CO3	K2
5.a.	How Raspberry Pi is different from Desktop computers?	7	CO4	K2
b.	Explain with a simple program to control LED with Raspherry Pi	8	CO4	3

<div align="center">(OR)</div>

c.	Explain a simple python program for controlling an LED with a switch	7	CO4	K3
d.	What is an IoT Device? Explain the basic building blocks of IOT device	8	CO4	K2

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