



GIET UNIVERSITY, GUNUPUR - 765022

B. Tech (Sixth Semester Regular) Examinations, May - 2024

21BMEOE36001 - Internet of Things

(Mechanical)

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. What does WSN stand for in Internet of Things concept?	CO1	K1
b. Define SDN controller.	CO2	K2
c. List the different data types of python.	CO3	K1
d. List out any 2 conversion examples in data types.	CO3	K1
e. State any two advantages using Raspberry Pi.	CO4	K1

PART - B

(15 x 4 = 60 Marks)

Answer **ALL** questions

	Marks	CO #	Blooms Level
2. a. Describe an example of IOT service that uses publish - subscribe communication model.	7	CO1	K2
b. What is the role of things and Internet in IOT?	8	CO1	K2
(OR)			
c. Determine the various communication models that can be used weather monitoring system. Which is more appropriate model for this system? Describe its pros and cons.	7	CO1	K1
d. Determine the IoT levels for designing structural health monitoring system.	8	CO1	K2
3. a. How do data collection and analysis approaches differ in M2M and IOT?	7	CO2	K1
b. Describe the role of YANG and Trans API modules in device management.	8	CO2	K2
(OR)			
c. Differentiate between Machine in M2M and things in IOT.	7	CO2	K4
d. Describe how NFV can be used for virtualizing IoT devices?	8	CO2	K2
4. a. What is the difference between procedure-oriented programming and object-oriented programming?	7	CO3	K1
b. How is function over riding implemented in Python? Give examples.	8	CO3	K1
(OR)			
c. What are the various characteristics of python language?	7	CO3	K1
d. What is the purpose of the information model in M2M configuration, justify with example.	8	CO3	K1
5. a. Explain a simple python program for controlling an LED with a switch.	7	CO4	K2
b. What is the use of SPI and I2C interfaces on Raspberry Pi?	8	CO4	K1
(OR)			
c. How Raspberry Pi is different from Desktop computers?	7	CO4	K1
d. Explain with a simple program to control LED with Raspberry Pi.	8	CO4	K2

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