Q.P. Code: 19EC0450 **R19**

Reg. No: | | | | | | | | | | |

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech III Year I Semester Supplementary Examinations August-2022

INTRODUCTION TO IOT

(Open Elective- III)

Time: 3 hours Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	**a**	Describe the characteristics of IoT.	**L1**	**6M**
	b	Describe an example of an IoT system in which information and knowledge are inferred from the data.	**L1**	**6M**
		OR		
2	**a**	Describe the levels of IoT with suitable examples.	**L1**	**6M**
	b	List the applications of IoT.	**L3**	**6M**
		UNIT-II		
3	**a**	Explain how IoT technology can used in the following application areas: (i) Emergency response (ii) Weather monitoring	**L1**	**6M**
	b	Describe how the environment can be more protected with the help of IoT technology in the following categories: (i)Forest fire detection (ii) River flood detection	**L1**	**6M**
		OR		
4	**a**	Define how the IoT technology can be implemented in smart lightening and intrusion detection systems.	**L1**	**6M**
	b	Describe how the IoT technology can be implemented in smart appliances and smoke/gas detection systems.	**L1**	**6M**
		UNIT-III		
5	**a**	Describe how SDN can be used for various levels of IoT.	**L2**	**6M**
	b	Sketch the structure of M2M Gate way Network	**L1**	**6M**
		OR		
6	**a**	List the communication protocols used for M2M local area networks.	**L3**	**6M**
	b	Mention the advantages of IoT design methodology contrast to traditional designing of IoT.	**L4**	**6M**
		UNIT-IV		
7	**a**	Explain the various frequently used commands during operation of Linux OS.	**L1**	**6M**
	b	Write a short note on various raspberry pi interfaces used for data transfer.	**L2**	**6M**
		OR		
8	**a**	Illustrate how Raspberry Pi is different from a desktop computer.	**L3**	**6M**
	b	List the uses of GPIO pins in a IoT device?	**L3**	**6M**
		UNIT-V		
9	**a**	Explain service specification for home automation system in state service.	**L1**	**6M**
	b	Define Process specifications for the Intrusion Detection system.	**L1**	**6M**
		OR		
10	**a**	Write a python program for room and door REST services using serializes.	**L2**	**6M**
	b	Implement the analytics component for the forest fire detection system.	**L2**	**6M**

*** END ***