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

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

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech III Year I Semester Regular Examinations December-2021

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	Explain the role of things in IoT.	L2	6M
	b	Mention the applications of IoT.	L1	6M
		OR		
2	a	What are the protocols associated with network/internet layer of IoT? Explain them in detail.	L1	6M
	b	Explain the request-response communication model of IoT with neat diagrams.	L2	6M

UNIT-II

3	a	Explain the implementation of IoT technology in following areas: (i) Smart Parking (ii)Smart Lightening	L2	6M
	b	Explain how the IoT technology is impacting the healthcare sector and changing our everyday lifestyle with the Health & Fitness monitoring example.	L3	6M
		OR		
4	a	Explain how IoT technology can used in the following application areas: (i) Structural health monitoring (ii) Surveillance	L2	6M
	b	Explain how IoT technology can used in the following application areas: (i) Weather monitoring (ii) Noise pollution monitoring.	L2	6M

UNIT-III

5	a	Explain the differences between Machines in M2M and Things in IOT?	L2	6M
	b	Sketch the structure of M2M Gate way Network.	L3	6M
		OR		
6	a	List the communication protocols used for M2M local area networks.	L2	6M
	b	Describe how NFV can be used for virtualizing IoT device?	L2	6M

UNIT-IV

7	a	Justify how Raspberry Pi is different from a desktop computer.	L4	6M
	b	Describe various features of a Raspberry Pi device.	L2	6M
		OR		
8	a	Explain the various frequently used commands during operation of Linux OS.	L2	6M
	b	List the flavors of Linux OS supported by Raspberry pi device.	L2	6M

UNIT-V

9	a	Design a smart home automation system using IoT With mode REST service.	L5	6M
	b	Define Information model specifications for the Intrusion Detection system.	L2	6M
		OR		
10	a	Define Domain model specifications for the Intrusion Detection system.	L2	6M
	b	Write a python code for IoT printer to Raspberry Pi.	L4	6M

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