R18

ANURAG Engineering College
(An Autonomous Institution)
IV B. Tech II Semester Advanced Supplementary Examinations, August - 2024
INTERNET OF THINGS
(COMPUTER SCIENCE AND ENGINEERING)

Time: 3 Hours   **Max. Marks: 75**

Section – A (Short Answer type questions)   (25 Marks)
Answer All Questions

		Course Outcome	B.T Level	Marks
1.	Define IoT.	CO1	L1	2M
2.	State the characteristics of IoT.	CO1	L2	3M
3.	Define Arduino.	CO2	L1	2M
4.	What is the use of SPI and I2C interfaces on raspberry pi?	CO2	L2	3M
5.	Short notes on Semantic Model.	CO3	L1	2M
6.	List out few cloud analytics.	CO3	L2	3M
7.	What are Design challenges?	CO4	L1	2M
8.	Mention the communication protocols used for M2M local area networks.	CO4	L2	3M
9.	What is a smart home?	CO5	L1	2M
10.	Define how the IoT technology can be implemented in smart lightening and intrusion detection systems.	CO5	L2	3M

Section B (Essay Questions)
Answer all questions, each question carries equal marks.   (5 X 10M = 50M)

			Course Outcome	B.T Level	Marks
11.	A)	Illustrate the generic block diagram of an IoT device and explain it briefly.	CO1	L3	10M
	B)	With a neat sketch, explain the push-pull communication model of IoT.	CO1	L3	10M
12.	A)	Explain and Justify how Raspberry Pi is different from a desktop computer.	CO2	L2	10M
		OR			
	B)	Explain how to interface a LED to raspberry pi and write a program to blink.	CO2	L2	10M
13.	A)	Compare Data Normalization and Protocol Translation.	CO3	L3	10M
		OR			
	B)	Compare and Contract of Messaging and the IoT.	CO3	L3	10M
14.	A)	Compare and contract Challenges and Legal challenges.	CO4	L3	10M
		OR			
	B)	Explain in detail about Security challenges of IoTs.	CO4	L2	10M
15.	A)	Explain the implementation of IoT technology in following areas: i) Smart Parking ii) Smart Lightening iii) Emergency response iv) smart roads in smart cities	CO5	L2	10M
		OR			
	B)	Describe how the IoT technology can be implemented in smart appliances and smoke/gas detection systems.	CO5	L3	10M