Backlog

PRN:		Course Code:	ECE 401

Final Year **B. Tech** End Semester Examination Summer 2023

Internet of Things

Day and Date: Monday, 12/6/23 Max Marks: **100**

Time: 2:00 PM – 5:00 PM Duration: **03** hrs

Instructions: All questions are compulsory.

		Marks	Bloom's Level	CLO
Q.1	**Attempt the following**			
a)	Illustrate the level 4 of IoT in detail.	08	L3	CLO2
b)	List and explain the characteristics of IoT	08	L4	CLO1
	OR			
b)	Elaborate the Generic IoT Architecture			
Q.2	**Attempt the following**			
a)	Comment on challenges in IoT	08	L4	CLO1
b)	Discuss the type of sensors used in IoT.	08	L3	CLO3
	OR	08	L2	CLO1
b)	Discuss the process specification and service specification of IoT design methodology in detail.	08	L2	CLO1
Q.3	**Attempt any two from the following**			
a)	List and explain the features and pins of Arduino Uno	08	L4	CLO2
b)	Elaborate the I/O commands for Arduino Uno	08	L4	CLO2
c)	Explain the following terminal commands for Raspberry Pi with example i. cd ii. pwd iii. ping iv. rmdir	08	L4	CLO3
Q.4	**Attempt any two from the following**			
a)	Interface DHT11 with Arduino Uno and write a program to measure values of temperature and humidity	08	L5	CLO3
b)	Interface relay with Raspberry Pi and write a program for turning ON and turning OFF the LED every 5 sec.	08	L5	CLO3
c)	Develop a program to measure temperature and humidity using DHT11 sensor and Raspberry Pi.	08	L5	CLO3
Q.5	**Attempt any Two of the following**			
a)	Write a program for DHT11 Data Logger with ThingSpeak Server using Raspberry Pi.	09	L2	CLO3
b)	Comment on Blynk application	09	L2	CLO2
c)	Write a short note on RemoteXY application.	09	L2	CLO2
Q.6	**Attempt any Two of the following**			
a)	Comment on the use of IoT in smart cities	09	L3	CLO4
b)	Write a short note on applications of IoT for retail	09	L3	CLO4
c)	Explain the applications of IoT for environment	09	L3	CLO4

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