LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION - **COMPUTER SCIENCE**

FOURTH SEMESTER - APRIL 2023

UCS 4604 - INTERNET OF THINGS

Date: 06-05-2023	Dept. No.	Max. : 100 Marks
Time: $0.000 \text{ AM} = 1.2.00$	NOON └	

0.34	PART – A	$(10 \times 2 = 20 \text{ Marks})$			
Q. No	Answer ALL the Questions				
1	Define IoT.				
2	What are the major components of IoT system?				
3	List out any four layers of IoT.				
4	Define M2M.				
5	What is Data Acquiring?				
6	What is Transaction?				
7	Define sensor.				
8	What is Actuator?				
9	Define Physical device.				
10	Define Gateway.				
	PART – B	$(5 \times 8 = 40 \text{ Marks})$			
Answer ALL the Questions					
11	(a) Illustrate the IoT conceptual framework with its diagram.				
	(Or)				
	(b) Illustrate M2M communication with its diagram.				
12	(a) Describe the various wireless communication technologies in IoT.				
	(Or)				
	(b) Interpret the concept of IP addressing in IoT.				
13	(a) Explain the organising the data in IoT.				
	(Or)				
	(b) Interpret three types of analytics phases with examples.				
14	(a) Demonstrate RFID technology with its application.				
	(Or)				
15	(b) Describe embedded computing basics with an example.				
13	(a) Examine basic building blocks of an IoT device.				
	(Or)				
	(b) Explain the Raspberry Pi IDE.				

		PART – C	$(2 \times 20 = 40 \text{ Marks})$		
	Answer any TWO Questions				
16	(a)	Explain the various technologies in IoT.	(10)		
	(b)	Evaluate the IoT architectural view with its diagram.	(10)		
17	(a)	Explain Industrial IoT and Automotive IoT.	(10)		
	(b)	Write a detailed note on participatory sensing in industrial IoT with its diagram.	(10)		
18	(a)	Illustrate Interfacing a Light sensor LDR with Raspberry Pi.	(10)		
	(b)	Simulate controlling LED with Raspberry Pi.	(10)		

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