PRN:		Course Code:	MCA 2051

Second Year M.C.A. End Semester Examination Summer 2023

Internet of Things

Day and Date: Wednesday, 21/06/2023 Max Marks: 100

Time: 2.00 to 5.00 PM Duration: 03hrs

Instructions: All Questions are compulsory

			Marks	Bloom's Level	CO
Q.1		**Attempt the following**			
	a)	Explain the following Communication Models in detail. 1. Request – Response Communication model 2. Publish- Subscribe Communication Model	08	L2	CO1
	b)	Summarize IoT Functional Block in detail.	08	L3	CO1
		OR			
	b)	Identify the different characteristics of Internet of things and explain each of them	08	L3	CO1
Q.2		**Attempt the following**			
	a)	Illustrate the architecture of Machine 2 Machine with neat diagram.	08	L2	CO1
	b)	Summaries Cloud computing in IoT	08	L5	CO1
		OR			
	b)	Distinguish Cloud Computing with Edge Computing	08	L4	CO1
Q.3		**Attempt any two from the following**			
	a)	Demonstrate the SCADA system in detail with neat diagram	08	L2	CO2
	b)	Show diagrammatically and explain the CoAP protocol	08	L2	CO2
	c)	Determine the role of MODBUS protocol in IoT.	08	L2	CO2
Q.4		**Attempt any two from the following**			
	a)	Design a neat sketch and discuss about Raspberry Pi in detail.	08	L6	CO3
	b)	Compare Raspberry pi with Arduino	08	L5	CO3
	c)	Summarize the basic building blocks of IoT	08	L4	CO3
Q.5		**Attempt any Two of the following**			
	a)	List and explain different types of data analytics in detail	09	L4	CO3
	b)	Determine the role of Hadoop Ecosystem in Internet of Things.	09	L5	CO3
	c)	Compare between structured and unstructured data.	09	L6	CO3
Q.6		**Attempt any Two of the following**			
	a)	Explain the different Smart Home components.	09	L2	CO4
	b)	Identify the challenges faced by industry related IoT Applications	09	L3	CO4
	c)	Construct a neat sketch of eHealth system IoT Applications and explain in detail	09	L3	CO4

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