USN:

B. N. M. Institute of Technology

An Autonomous Institution under VTU

Department of Computer Science and Engineering

Internal Test – III

Sem: VIII   Date: 12/05/2023
Sub: Internet of Things   Time: 12:30 pm -2:00 pm
Sub code: 18CS81   Max Marks: 50

Note: Answer TWO full questions selecting one full question from each part.

Q.No		QUESTIONS	Marks	COs	POs / PSOs	Bloom's Cognitive Levels
		PART A				
1	a	Discuss OCTAVE and FAIR formal Risk Analysis	10	CO4	PO1,PO2,PO4,PO7 PO12, PSO1	Apply
	b	Analyze the Purdue model for control hierarchy and OT network characteristics	10	CO4	PO1,PO2,PO4,PO7 PO12, PSO1	Analyze
	c	List the challenges in IT security.	5	CO4	PO1,PO2,PO4,PO7 PO12, PSO1	Analyze
		OR				
2	a	Make use of a case study to analyze the concept of securing IOT.	10	CO4	PO1,PO2,PO4,PO7 PO12, PSO1	Analyze
	b	Examine in detail how IT and OT security practices and systems vary in real time.	10	CO4	PO1,PO2,PO4,PO7 PO12, PSO1	Analyze
	c		5	CO4	PO1,PO2,PO4,PO7 PO12, PSO1	
3	a	List different layers of Smart City Architecture.	10	CO5	PO1,PO2,PO4,PO7, PO12,PSO1	Analyze
	b	Construct a Python program to detect the current room temperature and record the temperature using Raspberry Pi by using Python code.	10	CO5	PO1,PO2,PO4,PO7, PO12,PSO1	Create
	c	Analise the functionality Raspberry Pi operating system.	5	CO5	PO1,PO2,PO4,PO7, PO12,PSO1	Analyze
4	a	Build a Python program on Raspberry Pi to blink an led.	10	CO5	PO1,PO2,PO4,PO7, PO12,PSO1	Create

	b	Examine with respect to Arduino programming. 1. Structure 2. Function 3. Variable and Data types 4. Digital I/O	10	CO5	PO1,PO2,PO4,PO7, PO12,PSO1	Analyze
	c	Analyze smart city traffic control architecture	5	CO5	PO1,PO2,PO4,PO7, PO12,PSO1	Analyze

Course Outcomes

CO4: Analyze different IoT Applications using Arduino UNO and Raspberry Pi board.

CO5: Design a real-world application scenario of IoT along with its societal and economic impact.

Prepared By	Scrutinized by: Course Coordinator and Scrutinizer	Head of the Department
Signature:	Signature:	Signature:
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