RV College of Engineering

Academic Year 2023-2024 (ODD) Semester

USN

Department of Artificial Intelligence and Machine Learning

Course Code:
Sem: III Semester
Duration: 90 Minutes

Date:
Maximum Marks: 50

CIE-I (LE)
Foundation of Cyber-Physical Systems

SL. No		Questions	M	BT	CO
1	a)	Discuss the components of the Embedded System.	5	2	1
	b)	Highlight the Essential Properties of CPS.	5	2	1
2	a)	Consider Smart Homes as a complex CPS, Identify the Sensors, Actuators and Communication Protocols used in Smart Agriculture.	5	2	2
	b)	Analyze the advantages of the Advanced CPS Architecture.	5	3	1
3	a)	Describe the requirements of Air CPS.	5	2	3
	b)	Discuss the Software Layers of Desktop Computers, Complex Embedded Computer and Embedded Computer.	5	2	2
4	a)	Differentiate Micro-Processor and Microcontrollers	5	2	1
	b)	Discus Basic Computer System Architecture.	5	2	2
5	a)	Analyze the Complex embedded Computer and Embedded Computer Architecture in detail.	10	3	1

Course Outcome	
CO1	Understand and apply the knowledge of engineering specialization to address the complex engineering problems
CO2	Analyze the various Cyber-Physical components used in solving the real-world problem
CO3	Design solution for complex engineering problem using Cyber Physical Systems
CO4	Communicate effectively and collaborate in group to carryout Cyber Physical System activities
CO5	Demonstrate design skills to solve inter-disciplinary problems using modern tools effectively by exhibiting teamwork through oral presentation and written reports.

M-Marks, BT-Blooms Taxonomy Levels, CO-Course Outcomes

Marks Distribution	Particulars	CO1	CO2	CO3	CO4	L1	L2	L3	L4	L5	L6
	Max Marks	25	15	10	-	-	40	10			

ALL THE BEST

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