



Course Outcomes & CO-PO-PSO Mapping and Justification

Subject	Microprocessor and Microcontroller	15CS44
COURSE OUTCOMES:		
CO No.	On completion of this course, students will be able to:	Cognitive Level
15CS44.1	Understand the architecture, features and basic instructions of 8086	Understand L2
15CS44.2	Apply 8086 assembly language code to solve problems for arithmetic operations, code conversion and handle interrupts	APPLY L3
15CS44.3	Apply 8086 assembly language code to handle strings and overflow conditions and I/O programming interface using 8255 PPI	APPLY L3
15CS44.4	Understand the architecture and features of ARM Embedded systems	Understand L2
15CS44.5	Apply arm assembly code to solve problems related to Embedded systems	APPLY L3

CO-PO-PSO MAPPING

CO No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
15CS44.1	1	1	1	-	-	-	-	-	-	-	-	1	-	-	2
15CS44.2	2	1	1	-	-	-	-	-	-	-	-	2	-	-	2
15CS44.3	2	1	1	-	-	-	-	-	-	-	-	2	-	-	2
15CS44.4	1	1	1	-	-	-	-	-	-	-	-	1	-	-	2
15CS44.5	2	1	1	-	-	-	-	-	-	-	-	2	-	-	2
Avg. Mapping	1.6	1.0	1.0	-	-	-	-	-	-	-	-	1.6	-	-	2.0

CO-PO-PSO JUSTIFICATION

CO No.	PO/PSO	CL	Justification
15CS44.1	PO1	1	Understand the fundamentals of 8086 architecture and instruction set. Hence apply the same to solve engineering problems.
	PO2	1	Able to Identify functionalities and computing resources of 8086 processor.
	PO3	1	Able to design variety of solution to solve problem using 8086 assembly code.
	PO12	1	Identify the deficiencies and demonstrate the need of updating for the current architecture to overcome the deficiency.
	PSO3	2	Understand the architecture of 8086 processor.
15CS44.2	PO1	2	Able to understand the fundamentals of interrupts, arithmetic & code conversion instructions and apply the same to solve the problems.
	PO2	1	Able to analyze the problem and identify the logic and parameter to solve problem related arithmetic and interrupt handling.
	PO3	1	Able to design variety of solution to solve problem using 8086 assembly code.
	PO12	2	Apply the knowledge of 8086 instruction set to design a better solution.
	PSO3	2	Understand the 8086 instructions and able to apply in writing a program at low level.
15CS44.3	PO1	2	Able to understand the fundamentals of string handling & overflow condition instructions and I/o programming and apply the same to solve the problems.
	PO2	1	Able to analyze the problem and identify the logic and parameter to solve problem related string handling, overflow conditions and I/O interfacing.
	PO3	1	Able to design variety of solution to solve problem using 8086 assembly code to handle string and overflow condition.
	PO12	2	Apply the knowledge of 8086 instruction set to design a better solution.
	PSO3	2	Understand the 8086 instructions and able to apply in writing a program hardware interface
15CS44.4	PO1	1	Understand the fundamentals of ARM architecture and its features.
	PO2	1	Able to Identify functionalities and computing resources of ARM7 processor.
	PO3	1	Able to design variety of solution to solve problem using ARM7 assembly code.
	PO12	1	Identify the deficiencies and demonstrate the need of updating for the current architecture to overcome the deficiency.
	PSO3	2	Understand the architecture of ARM processor.

15CS44.5	PO1	2	Able to understand the fundamentals of ARM instructions and apply the same to solve problem related to embedded systems
	PO2	1	Able to analyze the problem and identify the logic to solve problem related Embedded systems.
	PO3	1	Able to design variety of solution to solve problem related embedded systems using ARM assembly code.
	PO12	2	Apply the knowledge of ARM instruction set to design better embedded systems.
	PSO3	2	Understand the ARM7 instructions and able to apply in writing a program for Embedded systems

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