

University Department of Electronics

Subject: ADVANCED MICROPROCESSORS

Name of Faculty: Suvarna Jain

Semester/Year/Branch: 7th/4th/EIC

Lecture Plan

Unit	Name of Unit	Topic of Lecture	No. of lecture
I	THE 8086 MICROPROCESSOR FAMILY	8086 ARCHITECTURE- Hardware specifications	1
		Pins and signals	2
		Internal data operations and Registers	2
		Minimum and maximum mode	1
		System Bus Timing	1
		Linking and execution of Programs	1
II	SOFTWARE & INSTRUCTION SET	Introduction of Assembly language programming	1
		Addressing mode	1
		Instructions of 8086	1.5
		Strings, Procedures and Macros	1.5
		8086 interrupts	1
		Assembler Directives and operators	2
III	ANALOG INTERFACING	A/D converter interfacing	1
		D/A converter interfacing	1
		keyboard and display interfacing	2
		RS 232 & IEEE 488 communication standards	2
		An 8086 based Process Control Systems	2
IV	DIGITAL INTERFACING	Programmable parallel ports	2
		Interfacing microprocessor to keyboard and alphanumeric displays	2
		Memory interfacing and Decoding	2
		DMA controller	2
V	MULTIPROCESSOR CONFIGURATIONS	Multiuser / Multi tasking operating system concepts	2
		8086 based Multiprocessor systems	2
		Introduction and basic features of 286 processors	1

		Introduction and basic features of 386 processors	1
		Introduction and basic features of 486 processors	1
		Basic features of Pentium processors	1
Total Lectures			40

TEXT BOOKS:

1. A Nagoor Kani “Microprocessors and Microcontrollers” Mc Graw Hill Education 2ed. (2012)
2. Douglas V. Hall “Microprocessors and Interfacing Programming and Hardware” Tata Mc Graw Hill. (2000)

REFERENCE BOOKS:

SN	Name of Authors /Books /Publisher	Publication Year
1.	A. Ray & K. Bhurchandi. “Advanced Microprocessors and Peripherals” Tata Mc Graw Hill.	2012
2.	A Nagoor Kani “Microprocessors and Microcontrollers” Mc Graw Hill Education 2ed.	2012
3.	Introduction to Microprocessors, A. P. Mathur Mc Graw Hill.	2011
4.	The Intel Family of Microprocessors: Hardware and Software Principles And Applications, Antonakos, cengage learning.	2012
5.	The 8086 Microprocessor: Programming & Interfacing the PC, Ayala, cengage learning.	2007

Prepared By:

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