



Course: M.Tech. (Electronics & Communication Engineering)		Name of Faculty: Dr. Tripti S Warriar	
Topic: 16-305-0108 Microprocessors & Microcontrollers		Semester: FIRST	
Lecture Hall: 116		Timings: as per CBCS	
<i>Week and date</i>	<i>Lecture topics</i>	<i>Assignments</i>	<i>Remarks</i>
Week 1 (8 th July 19)	Module 1 - Introduction <ul style="list-style-type: none"> History of Microprocessor Basic computer Architecture 		
Week 2 (15 th July 19)	<ul style="list-style-type: none"> Architecture of 8086 		
Week 3 (22 nd July 19)	Module 2 - Instruction Set and programming <ul style="list-style-type: none"> Instruction Set – instruction format 	Assignment 1: <i>Programming Assignment on 8086</i>	
Week 4 (29 th July 19)	<ul style="list-style-type: none"> - Use of MASM – Programing concepts 		
Week 5 (5 th Aug 19)	<ul style="list-style-type: none"> Procedures, Macros high level language constructs ASCII operations, 		
Week 6 (12 th Aug 19)	First Internals		
Week 7 (19 th Aug 19)	<ul style="list-style-type: none"> I/O instructions-Modular programming 		
Week 8 (26 th Aug 19)	Module 3 – Peripheral Interfacing <ul style="list-style-type: none"> PPI 8255 Stepper motor interfacing 		
Week 9 (2 nd Sep 19)	<ul style="list-style-type: none"> Timer 8253 Keyboard Display Interface 8279 	Assignment 1 submission	
Onam Vacation			
Week 10 (16 th Sep 19)	<ul style="list-style-type: none"> DMA Controller 8237 Programmable Interrupt Controller 8259 		
Week 11 (23 rd Sep 19)	Module 4 - Microcontroller – Intel 89C51 <ul style="list-style-type: none"> Architecture Features – internal block schematic – pin and I/O 	Assignment 2: <i>Programming Assignment on 8951</i>	
Week 12 (30 th Sep 19)	<ul style="list-style-type: none"> Memory Organization – on chip peripherals interrupt structure & functioning 		
Week 13 (7 th Oct 19)	<ul style="list-style-type: none"> Programming model – Program Status Word Programming examples 		
Week 14 (21 st Oct 19)	Module 5 Input Interfacing – key switches, ADC, sensors etc.		
Week 15 (4 th Nov 19)	<ul style="list-style-type: none"> Output Interfacing – LED, 7 segment, LCD 	Assignment 2 submission	

	<ul style="list-style-type: none">• Programming and flowcharts (using assembly language)		
Week 16 (28 th Oct 19)	Second Internals		
Week 17 (4 th Nov 19)	<i>Publication of Sessional</i>		