DRONACHARYA COLLEGE OF ENGINEERING

KHENTAWAS, FARRUKHNAGAR, GURGAON, HR

Department: ECE

Lecture Plan with Asssignment questions

Subject with code: Microcontrollers (PCC-ECE210G)

Name of Faculty with designation : Mrs. Neha Verma Assistant Professor

S.No.	Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Write Lecture Wise Questions
1	May		IV ECE	I	Overview of microcomputer systems and their building blocks,	Q1) Question related to example of MC Q2) Question on components of MC
2	May		IV ECE	I	memory interfacing and its types	Q1) Example of interfaces connectable to MC Q2) What are various mode of interfacing
3	May		IV ECE	I	Concepts of interrupts - Types like maskable and non-maskable, Interrupt Service Routine	Q1) What is maskable interrupt? Q2) Explace the ISR for handling interrupts
4	May		IV ECE	I	Direct Memory Access , based problems and concept	Q1) Is DMA possible in 8085, if not which mp allow it? Q2) What are various segments in DMA?
5	May		IV ECE	I	Architecture of 8086, building blocks, functionality of each block	Q1) Modes of 8086 functionality. Q2) What is the use of segmentation in Memory?
6	May		IV ECE	I	Instruction set of microprocessors -8086. Address mapping and related concepts	Q1) Branching, Call, Mapping instructions Q2) Process of finding address in 8086
7	May		IV ECE	I	Revision of Unit I	Q1) Problem solving session Q2) Numerical
8	May		IV ECE	II	Concepts of virtual memory and Cache memorywith examples	Q1) List advantages of Virtual memory Q2) Give examples
9	May		IV ECE	II	Architecture & Instructions set of 80186	Q1) Questions related to Instructions Q2) Difference between this family of x86 w.r.t others
10	May		IV ECE	II	Architecture & Instructions set of 80286,	Q1) Questions related to Instructions Q2) Difference between this family of x86 w.r.t others
11	May		IV ECE	II	Architecture & Instructions set of 80386	Q1) Questions related to Instructions Q2) Difference between this family of x86 w.r.t others

12	May		IV ECE	II	Architecture & Instructions set of 80486	Q1) Questions related to Instructions Difference between this family of x86 w.r.t others	Q2)
13	May		IV ECE	III	Revision of Unit II	Q1) Problem solving session Numerical	Q2)
14	May		IV ECE	III	Enhanced features of Pentium	Q1) Point of difference b/w pentium and others Q2)Related technical differences	
15	June		IV ECE	III	Features and details of Pentium Pro,	Q1) Point of difference b/w pentium-pro and others Q2)Related technical differences	
16	June		IV ECE	III	Features and details of Pentium-II,	Q1) Point of difference b/w pentium-II and others Q2)Related technical differences	
17	June		IV ECE	III	Features and details of Pentium-III,	Q1) Point of difference b/w pentium-III and others Q2)Related technical differences	
18	June		IV ECE	III	Features and details of Pentium-IV,	Q1) Point of difference b/w pentium-IV and others Q2)Related technical differences	
19	June		IV ECE	III	Multi-core Technology, Mobile Processor	Q1) Functionality of multicore MC Q2) Advantages of using mobile processor	
20	June		IV ECE	III	Revision of Unit III	Q1) Problem solving session Short Quiz	Q2)
21	July		IV ECE	IV	Basics of Interfacing with peripherals	Q1) Explain the difference Name 5 peripheral devices	Q2)
22	July		IV ECE	IV	Serial I/O, parallel I/O,	Q1) Draw the basic layout of Serial communication Which one is fastest, which one is more realiable?	Q2)
23	July		IV ECE	IV	concept and working of A/D & D/A converters	Q1) Practical use of A/D convertor? Practical use of D/A convertor?	Q2)
24	July		IV ECE	IV	PPI chip, DMA controller	Q1) How Does DMA controller works? Q2) how can PPI chip be helpul in communication over MC.	
25	July		IV ECE	IV	Programmable Interrupt Controllers and its types	Q1) What is PIC and ISR? Q2) Which one is mostly used ?	
26	July		IV ECE	IV	Study of various Programmable interval timer chips.	Q1) Name a PIT chip Q2) Which is the most commonly known brand in segment?	
27	July		IV ECE	IV	Introduction to RISC processors	Q1) Adv of RISC Q2) Why we sometimes need CISC?	
28	July		IV ECE	IV	Introduction to CISC processors	Q1) Difference between RISC and CISC. .	
29	July		IV ECE	IV	ARM microcontrollers design	Q1) Design example 1 Q2) Design example 2	

30	July		IV ECE	IV	Introduction to 8051 microcontrollers	Q1) Basic Properties of 8051 Q2) Application areas	
31	July		IV ECE	IV	Revision of Unit IV	Q1) Problem solving session Test	Q2)