210254: Microprocessor

Question Bank

Unit 1

1. **Explain features of 80386 DX.**
2. Explain flat and segmented memory model
3. Draw the functional architectural diagram of 80386 DX processor & Explain the functions of each block.
4. **Draw and explain general purpose registers of 80386 (programmer's model)**
5. **Draw and explain EFLAGs register of 80386 (**).**
6. Explain different operating modes of 80386 (Real mode, Protected mode, Virtual mode)
7. **Difference between Real mode, Protected mode, Virtual mode.**
8. **Explain various data types supported by 80386**.
9. **With syntax and examples explain the different addressing modes of 80386 (**).**
10. **Explain the following instructions (**)**

    (Any instruction can be asked prepare it **(generally 4 to 6 Marks weightage in Insem)**

    e.g: XCHG, CWD, AAA, IMUL,IDIV, SHR,SAR,SHLD,RCL,ROL,LEA,XLAT, Bit manipulation Instructions etc

Unit 2

1. **Explain 80386 processor state after RESET (**)**
2. Difference **OR** between I/O Mapped I/O & Memory Mapped I/O.
3. **Dram and Explain Pin Diagram of 80386 DX (**)**
4. **Draw & explain Read/Write Bus cycle timing diagram for pipeline structure(**).**
5. Explain how test registers are used in testing TLB.
6. **Draw and explain the control registers.**
7. Explain memory management register.
8. **Draw and Explain Debug registers of 80386 DX with their format**

   (DR6 and DR7 are very Important).
9. **Explain various system instructions.**

**** Indicates very Important**