

Roll No.

Total No. of Pages : 02

Total No. of Questions : 08

M. Tech. (ECE) (Sem.-2nd)
**ADVANCED MICROPROCESSOR &
EMBEDDED SYSTEMS**

Subject Code : EC-510

Paper ID : [E0569]

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTION TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carry TWENTY marks.

1. Show and explain internal configuration of 8086 microprocessor. (20)
2. (a) What is effective address ? (5)
(b) Give advantages of segment registers. (5)
(c) How program relocation can be done using CS register ? (5)
(d) Discuss the structure of PSW register. (5)
3. (a) Discuss general format of an assembler instruction. (10)
(b) Discuss basic transfer instructions with the help of examples for 8086 microprocessor. (10)
4. What is the need of addressing modes ? Explain data addressing modes for 80186 up. (20)
5. Explain 8259 A programmable interrupt controller in detail. (20)

6. (a) Discuss DMA operation by showing HOLD and HLDA timing for microprocessor. (10)
- (b) Discuss internal registers of DMA controller. (10)
7. (a) Show the pin diagram of 80188 microprocessor. Also discuss the function of its pins. (12)
- (b) Discuss memory subsystem of 80186 up in detail. (8)
8. (a) Show and explain the interface of up 8096 with PC. (10)
- (b) With the help of 8255A block diagram, discuss parallel communication. (10)