

SE (C.M.P.N) sem IV 'C' scheme Summer 2025 Exam

Date -23/5/25

Duration: 3hrs

[Max Marks:80]

- Q.1 (a) Design 8086 microprocessor-based on following Specifications: 10
1. MP 8086 working at 8MHz minimum mode.
2. 64 KB EPROM using 32 KB Devices
3. 64 KB SRAM using 16KB device
(b) Explain Addressing modes of 8086 microprocessor. Explain Programming Model of 8086. 10
- Q.2 (a) Explain the Initialization command words (ICWs) and Operational command words(OCWs) of the 8259 PIC. 10
(b) Explain the interrupt structure of the 8086 processor(IVT) and differentiate between Hardware and Software interrupts 10
- Q.3 (a) Comparison 80386 ,Pentium 1 ,Pentium 2 and Pentium 3 Processor 10
(b) Write an assembly language program for searching a Character in a Given String.(Consider your own String) and Explain the following instructions: LODSB, NOP,,RCR,CLR related to 8086. 10
- Q.4 (a) List the features of Pentium 4 processor. Explain Net burst microarchitecture. 10
(b) Explain MESI Protocol 10
- Q.5 (a) Draw and explain architecture of 8086. 10
(b) Differentiate between real Mode , Virtual Mode and Protected Mode of 80386 Processor .Explain the Floating point Pipeline of Pentium Processor 10
- Q.6 (a) Explain Modes of 8259. 10
(b) Write an ALP for 8086 to transfer the block of data. 10
