



17627

11819

3 Hours / 100 Marks

Seat No.

--	--	--	--	--	--	--	--

-
- Instructions :*
- (1) *All questions are **compulsory**.*
 - (2) *Illustrate your answers with neat sketches **wherever** necessary.*
 - (3) *Figures to the **right** indicate **full** marks.*
 - (4) *Assume suitable data, if **necessary**.*
 - (5) *Mobile Phone, Pager and any other Electronic Communication devices are **not permissible** in Examination Hall.*

Marks

1. Attempt **any five** of the following. **20**
 - a) Distinguish between Hardware Interrupt and Software Interrupt.
 - b) List any eight features of 80386 processor.
 - c) Explain the basic features of RISC processor.
 - d) Enlist any eight salient features of Pentium processor.
 - e) Describe any four DOS Interrupts.
 - f) Describe debug register of 80386 microprocessor.
 - g) Explain branch prediction in Pentium.

2. Attempt **any two** of the following. **16**
 - a) Draw and explain Internal architecture of 80386 processor.
 - b) Explain any four floating point exceptions in Pentium processor.
 - c) Explain any four DOS functions of INT 21 H with suitable example.

3. Attempt **any four** of the following. **16**
 - a) Draw and explain Interrupt Vector Table (IVT) of X86 processor.
 - b) Describe the features of Sun Ultra SPARC.
 - c) Draw and explain the format of CR₀ register of 80386.
 - d) Describe the General purpose register of Pentium processor.
 - e) Explain the hybrid architecture of RISC and CISC processors.

P.T.O.



- 4.** Attempt **any two** of the following. **16**
- a) Describe the loading sequence of MS-DOS in memory with neat diagram.
 - b) What is paging ? Explain concept of paging in 80386.
 - c) Draw and explain Architecture of Pentium processor.
- 5.** Attempt **any four** of the following. **16**
- a) Describe address generation PVAM mode of 80386 with neat diagram.
 - b) Explain any four features of Intel MMX.
 - c) Write Advantages of the RISC processor.
 - d) Difference between 80386 and Pentium processor (any 8 points).
 - e) Write difference between real mode and protected mode.
- 6.** Attempt **any two** of the following. **16**
- a) Draw the format of flag register and explain it in detail.
 - b) What are the design issues of RISC processor.
 - c) Describe the eight stage pipelining mechanism in floating point unit of Pentium.
-