

**2006-GURU GOBIND SING INDRAPRASTHA UNIVERSITY**  
**VISEMESTER B.TECH SECOND TERM EXAMINATION**  
**MICROPROCESSOR SYSTEM-II**

TIME-11/2HOUR  
MARKS-40

**Note: Answer all questions. Each question carries 10 marks.**

- 1 ( a ) List the features of PC/XT and PC/AT systems.
- ( b ) Draw and discuss the functional block diagram of a PC system.
- ( c ) Convert the decimal number 28.75 to a single precision floating point number.
- 2 ( a ) Using a 32x8 SRAM, determine the minimum number of chips required to construct a memory interface to each of the following processor. For each interface calculate the total memory capacity provided.
- i) 8088 ii) 8086 ii) 80386 iv) Pentium
- ( b ) Design a memory system to interface 64KB SRAM to 8086 CPU using 32KB SRAM IC
- 3 ( a ) What is a bus?
- ( b ) Explain the address and data buses available in PC/XT and PC/AT system.
- ( c ) List the features of the VESA and PCI bus.
- 4 ( a ) Using neat diagrams, explain daisy chainng, polling and independent request bus arbitration schemes.
- ( b ) Draw and discuss the interface between 8086 and 8087.