

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-V • EXAMINATION – WINTER 2013

Subject Code: 150701**Date: 27-11-2013****Subject Name: Advance Processors****Time: 10.30 am - 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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|------------|--|-----------|
| Q.1 | (a) Draw and explain architecture of 8086 | 07 |
| | (b) What is segmentation? List the various segment registers in 8086 and explain their role | 07 |
| OR | | |
| Q.2 | (a) Write an ALP to find factorial of given number | 07 |
| | (b) Explain the addressing modes of 8086 with example | 07 |
| OR | | |
| | (b) Explain Minimum mode operation of 8086. | 07 |
| Q.3 | (a) Differentiate between 16 bit and 32 bit Microprocessors. | 04 |
| | (b) Find physical address for CS:IP 3000:123A H | 03 |
| | (C) Explain different categories of Assembly Language Instruction Set | 07 |
| OR | | |
| Q.3 | (a) Explain different interrupts available in 8086. | 07 |
| | (b) Explain Protected Virtual Address Mode of 80286 | 07 |
| Q.4 | (a) What is descriptor table? What is its use? Difference bet GDT and LDT. | 07 |
| | (b) Compare CISC Vs RISC | 07 |
| OR | | |
| Q.4 | (a) Explain paging mechanism of x86 family processors. (80386 & 80486) | 07 |
| Q.4 | (b) Explain the features of 80386. | 03 |
| | (c) Explain Cache memory & Virtual memory | 04 |
| Q.5 | (a) Explain the Page Table and Page Directory Entry with example Explain addressing mode calculation for x86 family processor. (80386 & 80486) | 07 |
| | (b) Explain the architecture of SUN SPARC processor | 07 |
| OR | | |
| Q.5 | (a) What is Gate? Explain general Gate Descriptor format. | 07 |
| | (b) Explain the Hyper Threading and core-2-duo regarding Intel pentium processor | 07 |
