



**I Semester M.Tech. (IT) Examination, June/July 2010
ADVANCED COMPUTER ARCHITECTURE**

Time : 3 Hours

Max. Marks : 80

Instructions : Answer all questions from Part A, and answer any five questions from Part B.

PART – A

(6×5=30)

1. Explain relative mode of addressing and index mode of addressing.
2. Explain the difference between CISC and RISC.
3. Distinguish between segmentation and paging.
4. Explain the characteristics of cache memory.
5. How is DMA used in computer system ? Explain.
6. What are interrupts ? Explain their mechanism.

PART – B

(10×5=50)

1. What are the different registers used in ALU ? Illustrate the mechanism of devising fixed point addition and subtraction unit.
 2. Explain different types of reallocation mechanisms.
 3. Explain microprogramming and micro instruction with examples.
 4. Describe the term memory references ? What is the principle behind address mapping ?
 5. Define associative memory. Discuss any two types of associative memory.
 6. Discuss the role of DMA in data transfer.
 7. Explain the difference between multiprocessing and multiprogramming.
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