NAME_____ ROLLNO_____

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY-2008

III B.TECH SUPPLIMENTARY EXAMINATIONS
COMPUTER ORGANIZATIONS
(ELECTRONICS COMMUNICATION & ENGINEERING)

AUG/SEP-2008

MARK-3 HOUR
MARK-80

ANSWER ANY FIVE QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

MARKS [16*5=80]

1. (a) Define PCI. Explain the applications of PCI

(b) Describe any ten mandatory PCI signals.

2. Write an algorithm to substract binary numbers represented in normalized floating point mode with base 2 for exponent

3. Discuss various key design issues of an instruction format.

4. (a) Differentiate between large register file versus cache.

(b) Discuss how compiler based register optimization is done.

(c) Explain various characteristics of reduced instruction set architectures.

5. (a) Explain the functioning of ROM cell

(b) Draw and describe the working of CMOS memory cell.

(c) Draw and explain about a single-transistor of dynamic memorycell.

6. (a) What is 'data striping' ?

(b) Discuss about the recent disk system developments.

(c) Explain the control command operations enabled by magnetic at pe drive controller. Also explain about cartridge tape system.

7. (a) List sequencing and branching control fields of IBM 3033 microinstruction.

(b) Discuss the functioning of micro sequencer with example

8. (a) What is branch folding technique in pipelining

(b) . Discuss how operand forwording is done in a pipelined processor.

(c) What do you mean by speculative execution