

NAME \_\_\_\_\_

ROLLNO \_\_\_\_\_

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY-2008**

**III B.TECH SUPPLEMENTARY EXAMINATIONS  
ADVANCED COMPUTER ARCHITECTURE  
(COMPUTER SCIENCE & ENGINEERING)**

**AUG/SEP-2008**

**MARK-3 HOUR  
MARK-80**

**ANSWER ANY FIVE QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.**

**MARKS [16\*5=80]**

1. Write short notes on:

(a) Server Benchmar.

(b) Desktop benchmark.

2. (a) What are the reasons for emergence of general purpose registers?

(b) Distinguish between little endian and big endian format?

3. Write notes on finite registers.

4. What are the basic compiler techniques for exposing ILP?

5. Where can a block be placed in upper level? How is a block found if it is in upper level? Which block should be replaced on a miss?

6. (a) On what factors does Flynn's classifications of computer is based. Explain the categories.

(b) What do you mean by thread level parallelism?

7. (a) Give the relation between the throughput and response time.

(b) Derive the Little's law for calculating the mean number of tasks.

8. (a) Write short notes on:

i. Fibre optic Components

ii. Fibre Optic Cables

iii. Wavelength division multiplexing.

(b) Briefly Write about the performance parameters of interconnection networks.