

LNCT UNIVERSITY

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Enroll No.....

Class Roll No.....

Second Mid Semester Examination, JAN 2024

Computer Architecture (CS-103)

Branch CSE- I Semester

Time 1:30 Hrs

Max. Marks 20

Q.1a) Explain functioning of DMA in detail with diagram.

b) Explain SCSI I/O interface in detail.

• (CO3 7 marks)

OR

Q.1a) Explain PCI I/O interface in detail.

b) Differentiate synchronous and asynchronous communication.

(CO3 7 marks)

Q.2a) Explain working of SRAM in detail. Explain Page replacement algorithms.

b) Write a short note on

(CO4 7marks)

i) TLB

ii) Virtual memory

(CO4 marks)

OR

Q.2 a) What is Cache Memory? Explain the types of mapping procedures.

b) Draw block diagram of memory hierarchy. Why 3 level hierarchy is necessary.

(CO4 7marks)

Q.3 a) Define Vector Processing. Enlist its applications.

b) Differentiate RISC and CISC. Explain Inter-processor Communication.

(CO5 6marks)

OR

Q 3 a) What is Flynn's Taxonomy? Write characteristics of multiprocessor.

b) Explain Array processing. Explain concept of pipelining in multiprocessors.

(CO5 6 marks)