## LNCT UNIVERSITY

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Enroll No.....

Class Roll No...

First Mid Semester Examination, Dec 2023

Computer Architecture (LNCS-103)

Branch: B.Tech CSE Semester: I

Time 1:30 Hrs

Max. Marks 20

Note: All questions are compulsory

Q.1 Explain (i) MAR (ii)MBR (iii)IR (iv)PC (v)AC. Also explain Stack organization (CO 1 5marks)

OR

Differentiate between hardwired control unit and micro programmed control unit

Q.Z. Explain addressing modes and its types.

(CO1 5 marks)

OR

Explain (i)Fetch and Execute cycle (ii)Bus Structure.

Q.3 Explain the design of Arithmetic Unit.

(CO2 5 marks)

OF

Explain Booth's algorithm and also multiply +15 and -6 using Booth's method.

Q.4 Convert the following pairs of decimal numbers to 5 bit 2's complement binary number and add them. State whether overflow has occurred (i)-5 and 7 (ii)-10 and -13 (iii)-14 and 11 (CO2 5 marks)

OR

Explain multiplication of floating point numbers with example and flowchart?