

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 1st Semester Examination, 2022

CC2-COMPUTER SCIENCE (13L) (PRACTICAL)

COMPUTER SYSTEM ARCHITECTURE LAB

Time Allotted: 2 Hours

Full Marks: 20

The questions are of equal value.

Answer any one question on lottery basis	
1.	Implement a SR Flip-Flop using ICs.
2.	Implement an OR gate using NAND gate and explain its working principle.
3.	Implement an AND gate and explain its working principle.
4.	Implement an OR gate and explain its working principle.
5.	Implement a 4×1 multiplexer using ICs.
6.	Implement an AND gate using NAND gate and explain its working principle.
7.	Implement an OR gate using NOR gate and explain its working principle.
8.	Implement a NAND gate and explain its working principle.
9.	Implement a Full-Adder and explain its working principle.

UG/CBCS/B.Sc./Hons./1st Sem./Computer Science/COMSCC2/Prac./2022 10. Implement a D Flip-Flop using ICs. _____ 11. Implement an AND gate using NOR gate and explain its working principle. _____ 12. Implement a JK Flip-Flop using ICs. _____ Implement a NOR gate and explain its working principle. 13. _____ 14. Implement a Half-Adder and explain its working principle. _____ 15. Implement a XOR gate and explain its working principle. _____ _×_