



Indira Gandhi Delhi Technical University For Women

Department of Electronics and Communication Engineering

DIGITAL ELECTRONICS LABORATORY



FACULTY INCHARGE

Dr. Richa Yadav

TECHNICAL ASSISTANT

Mr. Madhur Gupta



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FACILITIES (HARDWARE)

S. NO.	EQUIPMENT	QUANTITY
1	IC TESTER (SILICOM)	01
2	Bread Board Trainer Kit	05
3	NAND Gate IC – 7400	50
4	NOR Gate IC – 7402	50
5	NOT Gate IC – 7404	50
6	AND Gate IC – 7408	50
7	OR Gate IC – 7432	50
8	EX-OR Gate IC – 7486	50
9	Multiplexer IC – 74153	25
10	De-Multiplexer IC – 74139	25
11	Comparator IC – 7485	25



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SEMESTER-II (B.TECH) - ECE AI

SUBJECT CODE : BEC-104

Room No.- E-315

LIST OF EXPERIMENTS

1. Study the front panel of Bread Board Trainer kit and Digital IC Tester.
2. Design and verify the truth table of AND & NAND gate ICs.
3. Design and verify the truth table of OR & NOR gate ICs.
4. Design and verify the truth table of NOT & EX-OR gate ICs.
5. Design and verify the truth table of Half Subtractor Circuit using digital ICs.
6. Design and verify the truth table of Half Adder Circuit using digital ICs.
7. Design and verify the truth table of Full Subtractor Circuit using digital ICs
8. Design and verify the truth table of Full Adder Circuit using digital ICs.
9. Design and verify the truth table of Binary to Gray code & Gray code to Binary Circuit using digital ICs.



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DO'S AND DON'TS

DO'S

- Enter and leave the lab as per the time table.
- Maintain strict discipline and silence in the lab.
- Proper handling of computer systems must be done.
- Check the connections properly as per circuit diagram before switching on the power supply.
- Be a keen observer while performing experiments in the lab.
- Keep your bags in the rack and the consumable items back to their original position after finishing off the experiment in the lab.

DON'TS

- Do not leave the lab without prior permission of the Lab In-charge or Technical Assistant.
- Do not bring or eat any eatable item in the lab.
- Do not make noise or shout in the lab.
- Do not disturb the decorum or aesthetic view of the lab.
- Do not tamper with the lab or system settings.
- Do not perform the experiment with wet hands on the apparatus.