



Indira Gandhi Delhi Technical University For Women

Department of Electronics and Communication Engineering

NETWORK ANALYSIS & SYNTHESIS LABORATORY



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| FACULTY INCHARGE | Ms. Neha Singh |
| TECHNICAL ASSISTANT | Mr. Balwan Singh |



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FACILITIES (HARDWARE)

| S. NO. | EQUIPMENT | QUANTITY |
|--------|---------------------|-----------|
| 1 | Auto Transformer | 5 |
| 2 | DC Power Supply | 11 |
| 3 | Digital Multi Meter | 40 |
| 4 | Rheostat | 4 |
| 5 | Ammeter | 10 |
| 6 | Voltmeter | 10 |
| 7 | Wattmeter | 5 |
| 8 | Bread Board | 10 |
| 9 | RLC Component | 400 |
| 10 | Hook up Wire | 5 bundles |
| 11 | Plier | 3 |



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SEMESTER-III (B.TECH- ECE)

SUBJECT CODE : BEC- 205

Room No.- E-210

LIST OF EXPERIMENTS

1. To implement the given circuit on the breadboard and verify Thevenin's theorem.
2. To implement the given circuit on the breadboard and verify the Maximum power transfer theorem.
3. To implement the given circuit on the breadboard and verify the Reciprocity theorem.
4. To implement the given circuit on the breadboard and verify the Superposition theorem.
5. To implement the given circuit on the breadboard and find the Z-parameter (open circuit parameter) of a two-port resistive network.
6. To implement the given circuit on the breadboard and find the Y-parameter (short circuit parameter) of a two-port resistive network.
7. To implement the given circuit on the breadboard and find the ABCD-parameter (transmission parameter) of a two-port resistive network.
8. To implement the given circuit on the breadboard and find the H-parameter (hybrid parameter) of a two-port resistive network.
9. To implement the given circuit on the breadboard and find the G-parameter (hybrid parameter) of a two-port resistive network.
10. To implement the given circuit on the breadboard and find the Z-parameter of a series-series connected two port resistive network.
11. To implement the given circuit on the breadboard and find the ABCD-parameter of a cascade-connected two-port resistive network.
12. To implement the given circuit on the breadboard and find the Y-parameter of a parallel-parallel connected two port resistive network.



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DO'S AND DON'TS

DO'S

- Enter and leave the lab as per the timetable.
- Maintain strict discipline and silence in the lab.
- Disconnect the power source before servicing or repairing electrical equipment.
- 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.
- Powered equipment can be hot! Be cautious when handling equipment after it has been operated.
- Do your wiring, setup, and a careful circuit checkout before applying power.

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 make circuit changes or perform any wiring when power is on.
- Do not touch anything if your hands are wet. The "one-hand" approach is safest.
- Do not modify or delete any system files on any lab computer.
- Do not pull wires out until you are absolutely sure that the circuit is completely dead.