



# Indira Gandhi Delhi Technical University For Women

Department of Electronics and Communication Engineering

## MICROWAVE & RADAR ENGINEERING LABORATORY



**FACULTY INCHARGE**

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## FACILITIES (HARDWARE)

S.NO.	EQUIPMENT	QUANTITY
1	Klystron Based Bench X-Band with DSO	06
2	Microwave Integrated Circuit Trainer with DSO	01
3	Radar Trainer with DSO	01
4	Antenna radiation Pattern with Microstrip	01





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SEMESTER-VII (B.TECH) - ECE

SUBJECT CODE : BEC-401

Room No.- E-315

## LIST OF EXPERIMENTS

1. To study of various Microwave waveguides and Bench.
2. To study of measurement of frequency using tunable probe & detector mount using DSO/ VSWR meter.
3. To study of frequency and wavelength measurement in TE 10 mode.
4. To study of Standing wave pattern of :
  - (a) Open circuit
  - (b) Short Circuit
  - (c) Match termination
5. To study of an Isolator, its insertion loss and isolation.
6. To study of an Attenuator, its insertion loss and measurement of attenuation.
7. To study the characteristics of the Reflex Klystron Tube and determine its tuning range.
8. To study the function of the Multihole – Directional coupler by measuring the following parameters:
  - (a) Insertion Loss
  - (b) Coupling Factor



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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.