

MICROWAVE ENGINEERING LAB (BECT-701)

Course Outcomes:

This laboratory helps the student in each of the design, simulation, fabrications and measurements of Microwave circuits.

List of Programs:

- 1. Study of various microwave components and instruments like frequency meter, attenuator, and detector & VSWR meter.
- 2. Draw V-I characteristics of microwave source like Gunn diode/ Reflex Klystron.
- 3. Measurement of frequency and wavelength in a rectangular waveguide.
- 4. Measurement of VSWR (small as well as large values) & reflection coefficient.
- 5. Measure unknown impedance with smith chart.
- 6. Draw the following characteristics of Gunn Diode:
 - (i) Output power and frequency as a function of voltage:
 - (ii) Square wave modulation by PIN diode.
- 7. Drawing polar pattern of Horn antenna.
- 8. To observe the action of directional coupler and its use in separating incident & reflected wave.

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