



## **Government Girls' Polytechnic, Bilaspur**

Name of the Lab: **Communication Lab**

Practical: **Antenna & Microwave Communication Lab**

Class : **V Semester (ET&T)**

Teachers Assessment: 10    End Semester Examination:30

### **List of Experiments**

1. Performance of Gunn Diode & Gunn Oscillator.
2. Performance of Klystron & Reflex Klystron Tubes.
3. Study of Magnetron.
4. Study of Isolators, Directional Couplers (Cross Directional & Multihole) slotted line & Block diagram of basic microwave bench.
5. Performance of VSWR meter.
6. Measurement of frequency of microwave.
7. Measurement of guide wavelength.
8. Measurement of Standing Wave Ratio (VSWR).
9. Measurement of Reflection Coefficient.
10. Measurement of cutoff wavelength (TE<sub>10</sub> mode) Using  $C=2/(m/a) + (n/b)=2a$ .
11. Study of E-plane, H-plane and Magic Tee.
12. Performance of Pin diode and Pin modulator.
13. Measurement of guided power.
14. Measurement of attenuation in dB for a given component.
15. Study of wave-guide.
16. Measurement of load impedance.
17. Measurement of characteristics of Klystron tube & Gunn Oscillator.
18. Measurement of radiation through Horn antenna.
19. Assembling the microwave bench.
20. Study of UHF & VHF Transmitters.
21. Study of radiation pattern for different antennas.
22. Measurement of characteristic for different antennas.