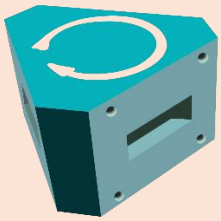
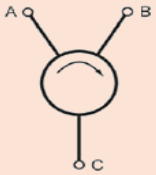
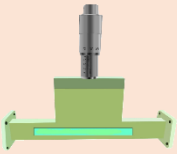
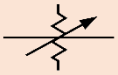
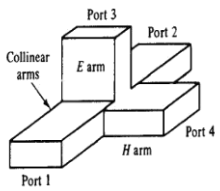
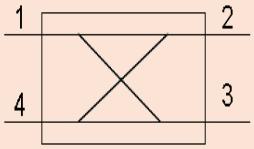
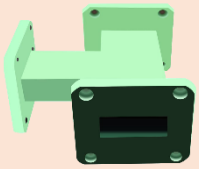
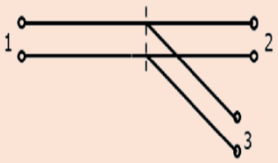
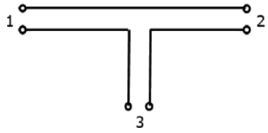
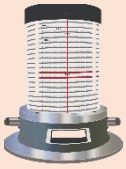
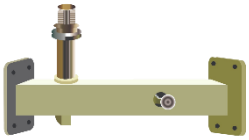
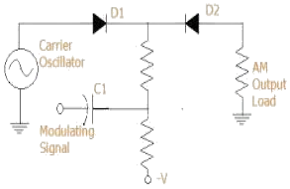
Familiarization with the Microwave Laboratory Apparatus

S.No.	Name of the Equipment	Image	Symbol	Function
1	Circulator			It transports radio frequency or microwave signals from one port to another.
2	Isolator			It transmits microwave or radio frequency power in one direction only. It is used to shield equipment on its input side, from the effects of conditions on its output side.
3	Attenuator			It decreases the strength of the input signal either continuously or step by step without appreciable signal distortion while substantially maintaining constant impedance match
4	Magic Tee			The magic-tee can be used as a power combiner or divider, depending on the needs of the application.
5	Directional Coupler			The basic function of a directional coupler is to operate on an input so that two output signals are available.
6	Horn Antenna			A horn antenna is used to transmit radio waves from a waveguide (a metal pipe used to carry radio waves) out into space, or collect radio waves into a waveguide for reception.

7	H-Plane Tee			It is used to either divide or combine power in a waveguide system. It is a two way in-phase power divider/combiner i.e it is additive in nature. When two input signals are fed to port 1 & 2, the output at port 3 is in phase and additive and when the input signal is fed to port 3, the signal is split in to two equal parts that are in-phase at port 1 & 2.
8	E-Plane Tee			It is similar to a power divider. The outputs we get in this type of tee are 180° out of phase with each other, irrespective of from which port the input is fed.
9	Frequency Meter			A frequency meter is an instrument that displays the frequency of a periodic electrical signal.
10	Pin Modulator			sIt accepts a low frequency (base band) signal that modulates the output of e.g. a generator, typically in amplitude, frequency or phase. Its use is that this is the signal you are actually interested in. The high frequency signal is just a carrier: without modulation it is useless.