

Name of Lab: Antenna Lab

Floor Area: 66 Sq.m.

S. No.	Items	Specifications	Make	Qty.		
1.	Transmitter	Frequency	5MHz-2GHz.	Falcon	01	
		Frequency Resolution	50,100,250,500KHz, 1& 10 MHz.			
		Frequency Accuracy	0.01 %.			
		Display	LCD.			
		Memory	1000 individual freq. should be store.			
		Receiver	Modulation Fm			Internal1KHz/External Microphone
			Rf Level			100dB $\mu$ V.
			Attenuator			40dB.
			O/P Impedance			75 Ohms.
			Power Supply			220 V AC $\pm$ 10 %.
			Stepper Motor Controller			Frequency
	Frequency Resolution			50,100,250,500KHz, 1& 10 MHz		
	Frequency Accuracy			0.01 %.		
	Display			LCD		
	Memory			1000 individual freq. should be store		
	Measurements			RF level in dB $\mu$ V with 0.1 dB resolution		
	Dynamic Range	110 dB (70 dB logarithmic + 40 dB attenuator).				
	Input Impedance	75 Ohms.				
	Speaker	Inbuilt for Audio O/P.				
	PC Interface	Easy connectivity to PC (RS 232) for polar plotting using supplied software.				

		Power Supply	220 V AC $\pm$ 10 %.		
		Display	LCD for angular position.		
		Rotation	0-359 degrees.		
		Angular Steps	User selectable steps of 1, 5, 10, 45 degrees.		
		Memory	1000 for storing angular positions for quick recall.		
		Auto Mode	Automatic rotation in user selectable steps.		
		Indication	Beep on reaching the selected position.		
	Antenna:-	(1) Monopole (2) Dipole (2 Nos.) (3) Folded Dipole. (4) Crossed Dipole (LHCP). (5) Crossed Dipole (RHCP) (6) Yagi (3 ele). (7) Yagi (4 ele). (8) Biconical. (9) Discone (10) Log periodic (2 Nos.). (11) Sleeve (12) Slot (13) End Fire (14) Broad Side (15) Helix (RHCP) (16) Helix (LHCP) (17) Whip (18) Square Loop (19) Quad (20) Spiral (21) V Antenna (22) Patch GPS (23) Parabolic Dish (24) Ground Plane with Reflector & Director (25) Collinear (26) L/4 Phase Array (27) Blade (28) Conical Horn (29) Batwing (30) Stacked Yagi			
	Windows Software:-	Antenna plotting in Polar & Cartesian planes with cursor measurement facility, Data logging facility via RS-232 interface. Edit, Save, Print, Overlay facilities, Software on CD			
	Accessories:-	Antenna fabrication Kit. Directional Coupler with 0.1 to 2 GHz frequency response and 20 dB mid-band directivity for antenna VSWR estimation. Power divider for diversity reception. Non-conducting and non-radiating tripod for mounting Antenna. Stepper motor controlled non-conducting and non-radiating tripod for receiving Antenna. Condenser Microphone. All necessary connectors and cables. Students activity. Teachers Reference and theory manuals. Sniffer Probe. 03 Noise Generator 0.01-2GHz (optional).			