

PRACTICAL TRAINING SYLLABUS FOR S.I. (RADIO) TECH.

S. NO.	Practical List for Basic Training Program
1	Cold Testing of Resistance, Diode, Capacitor, Inductors, Basic TTL IC's and Transistors, Including determination of value of RC.L., Identification of Anode, Cathode, Emitter, Base, Collector etc.
2	Fabrication of RC coupled amplifier and study the frequency response of circuit with gain .
3	Study the various types of Transformers and Coils.
4	Fabrication of half and full wave rectifiers, fabrication of 5 Volt Power Supply, Study of basics SMPS circuitry .
5	Circuit study of difference SMPS being used in department and circuit tracing as per service manuals .
6	Fault diagnosis of 6 to 72 Volt secondary battery chargers and its repairing methodology.
7	Study of different measuring instruments Multi meter, SWR Meter, SG Meter, CRO, RF Test Meter.
8	Use and operation of Radio Test Set as per user manual.
9	Circuit tracing and study of different sections of Motorola GM 300 Radio Set as from service manuals.
10	Circuit Tracing and study of different sections of Motorola GM 338 Radio Set as from Service Manuals.
11	Circuit Tracing and study of different sections of GP 328/338 Radios.
12	Physical identification of different types of antennas and its basic tuning.
13	Installations of 60/80 feet mast for vhf antenna with identification of its total accessories and use of Derrick, Pulley, Base Rope, Laying and Erection with safety precautions.
14	Installation of HF Antennas including antenna matching unit and alignments of direction with the help of GPS and Compass.
15	Installation of temporary VHF/HF Radio Station in a view to V.V.I.P. Duties
16	Fabrication of repeaters (Patch, 1-D, 2-D) using Universal Patch Repeater Chord.
17	Measurement of squelch and sensitivity voltages and its tuning and adjustment as per requirement of communications.
18	Radio programming of different radios.(VHF/Radio Trunking)
19	Use of Radio Mobile Software in Radio Coverage calculation and LOS Problems Analysis
20	Installation of POLNET, ID1, Radio Mobile Software in computer and its basic configuration
21	Repeater programming of GM 300/338, Enabling PTT, CSQ and auto on features of radio
22	Auto PCB cut switch fabrication and use in Solar Panel and Power Supply
23	Multimode charge controller for Solar System

APPROVED BY DGPMP



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