Basic Technical Training - Sem Second

Theory Papers	Theory Paper Module Name	Unit Serial No	Unit Names	Syllabus Details	Total Marks	Total Classes
1	Computer Based Networks	1	Hand On Repairing of Computers	Computer Systems: Study of Computer Hardware's, assembling & dissembling of Computer Parts, fault diagnostic, driver and other software installation, OS repairing, peripherals repairing, Circuit understanding of Different Printers used in department.	15	125
		2	POLNET	POLNET System: Complete Study of PONET System. Maintenance of Each Computer Peripherals attached with the system. Complaint booking System. VSAT Integral Parts Minor Tuning., VSAT alignments, Shifting of VSAT Site, Cabling Details, Ports Details, Electrical Power Requirements, EPABX Basics, Lay outing, MDF etc.	10	125
		3	IDT System	IDT System: Integrated data terminal (IDT) circuitry of MODEM, Cabling, Power Requirements & Basic Modem Troubleshooting, Reinstallation of IDT software, Windows OS repairing, Application of Team Viewer Like software's, Basic trouble shooting and Operation handling. Connected Media HF/VHF/EMAIL/POLNET basic Interface troubleshooting.	25	125
2	Basic Installations of Solar & Aerial	4	Solar Systems	Basics of Solar Energy, Details Study of Solar Panels, Hand on Experience on installing the solar panels, Precautions taken during installation. Interconnection with battery banks, Solar Charge Controller: Basic & Circuit Details, Use of MCB, Requirements of Wire in solar Panels with relation to gauge & threads as per ISI specifications. Solar Panel Maintenance at PS/OP Level, Auto Cut switch PCB: Circuit Fabrication & Maintenance.	25	125
		5	Aerial Installation	Aerial Mast / Tower installation practices, site selection, Check Test Fundamentals, Schematic Diagram Study of 25 Meter Self supported tower.	25	45
3	Technical Exposer Visit	6	Technical Exposers	1.Visit to Mumbai's Radio Trunking System, 2.Visit To Delhi AVLS System, 3.POLNET HUB visit at New Delhi	50	50
4	Circuit Level Repairing of Radio's	7	GM 300 Radio	GM300 Radio Basic Operation, Different parts PA stage, Logic Board, RF Board & Display. Schematic Reading with Circuit Analysis & part level Repairing. Programming of Radio, Cloning Procedure & Repeater Fabrication with two GM 300 radios.	15	80
		8	GM 338 Radio	GM338 Radio Basic Operation, Different parts PA stage, Logic Board, RF Board & Display. Schematic Reading with Circuit Analysis & part level Repairing. Programming of Radio, Cloning Procedure & Repeater Fabrication with two GM 338 radios.	25	80
		9	GP 338/328 Radio	GP 338/328, Kenwood Man pack Radio's Basic Operation, Different parts PA stage, Logic Board, RF Board & Display. Schematic Reading with Circuit Analysis & part level Repairing. Programming of Radio & Cloning Procedure.	10	66
5	R.F.Coverage Analysis	10	Communication Problems	Interference Problem identification in VHF Communication, Neighbouring State interference problem, Troubleshooting at Repeater level, Squelch tuning, RX Frequency shifting in Hz.	15	50
		11	Coverage Calculations	Effective RF Converge determination by adjusting Height of TX antenna and Transmitted Power adjustments.	10	40

		12	Repeaters	Preparation / fabrication of universal patch cards, programming rib / kits as per requirements.	25	45
6	Case Studies & use of Advanced Technology	13	Advance Searching Techniques	Usefulness Of Internet, Searching The New Techniques Of Repairing's, **Computer Added Designs, Circuit Making .** Maintenance & Troubleshooting From Google Search. **Recognition Of Modern Tools , And Operations. Procedural Innovations .**	25	50
		14	Case Studies	Case Study Of Sihasth Communication Plan **(Ref: Ujjain)**, Communication Plan During International Match**(Ref : Indore)** Events, Programs & Admiration. Communication .Plan During Anti Naxal Operations,**(Ref: Balaghat)** Anti Decoit Operations**(Ref: Bhind , Satna, Panna)** & Special Operation Of Policing**(Ref: Huge Festivals)** . Communication Coordination With SPG Team During VVIP Visits. **Election Duties ,Mela Duties (Ref:Gwalior), Disaster Management :Arrangements During Natural Calamities (Flood , Earth Quack,(Ref: Jabalpur)) & Riots (Ref: Bhopal),L/O Disorders Agitations train, control room**	25	50
				Total	300	1056

लिखित परीक्षा	300
प्रायोगिक परीक्षा	25
प्रोजेक्ट वर्क	50
तकनीकी साक्षात्कार	25
कुल अंक	400