

Trades Details Summary

Trade Name	Description	Duration (Days)
Communication Network & Surveillance System (CNSS)	To give Technical Training in Communication Network & Surveillance System (CNSS)	18

Theory (Communication Network & Surveillance System (CNSS))

Topic	Keylearning Outcomes	Equipment Required	Duration
Registration of Participants	Self-declaration of Covid-19 measures guidelines Participants Profile Describe the role of a Telecom Technician	White Board/ Interactive Boards & Powerpoint Presentation	2:0
Introduction to Computer Hardware	Introduction to Computer hardware system components, Motherboard, Processor, RAM, Cabinet, SMPS, Harddisk, DVD-RW, Keyboard, Mouse, Graphics Card, Monitor, Sound Card, Speaker and Mic. Printer, Scanner	White Board, Interactive Boards & Powerpoint Presentations	2:0
Introduction to Computer Software	Introduction to Computer Software system: Operating systems- DOS, Windows, Anti-Virus, and other related tools like Microsoft office, pdf. Installation of softwares	White Board, Interactive Boards & Powerpoint Presentations	2:0
Computer Networking Basics-1	Introduction to Computer Network, Why Computer Network is required, Types of Network. Introduction to Ethernet, Private & Public Network. Network Topology.	White Board, Interactive Boards & Powerpoint Presentations	2:0
Computer Networking Basics-2	Study of Switch, Hub, Router, Modem, Network Protocols, Data Cables and application of multimedia	White Board, Interactive Boards & Powerpoint Presentations	2:0
Broadband	Introduction to Broadband, DSL devices and IPDSLAM, Network connectivity. Study of Modem and configuration.	White Board, Interactive Boards & Powerpoint Presentations	2:0
WiFi	Introduction to Wi-fi modems, routers and other devices.	White Board, Interactive Boards & Powerpoint Presentations	2:0
Introduction to IP address	Introduction of IP Address, study of IPV4 & IPV6 , Classifications of IP Address, Study of subnet mask & TCP/IP protocol,	White Board, Interactive Boards & Powerpoint Presentations	4:0
Introduction to Ms office, Word, Excel, power point	Introduction to Computers. Generation of computers. Working in Ms Office, Word, Excel & Power point. Preparation of Small PPT's.	White Board, Interactive Boards & Powerpoint Presentations	4:0
Introduction to CCTV and Surveillance system	Introduction to CCTV System Analog & IP Based. Requirement of CCTV system for public safety. Study of Equipments and components of CCTV system. Installation of CCTV system. Testing, Maintenance & Fault finding.	White Board, Interactive Boards & Powerpoint Presentations	5:0
Introduction to PA system	Introduction to PA system. Role of PA system in Railways. Introduction of PA system equipments and components (Mike, Amplifier, Speaker,	White Board, Interactive Boards & Powerpoint Presentations	4:0
Optical Fibre communication	What is OFC. Advantages of OFC. Uses & Implementation of OFC in telecom. Different types of OFC cables. Working Principle of OFC. Laying, Testing & Maintenance of OFC. Jointing Procedure of OFC. Introduction to OFC equipments.	White Board, Interactive Boards & Powerpoint Presentations	5:0
Financial Management	• Financial Management • Resources / Fund availability by Bank • Loan Scheme like Mudra Loan	Presentations, Trainer's Guide	2:0
Orientation Programme & Introduction about Entrepreneurship	• Entrepreneur, Entrepreneurship and Enterprise • Scheme & Types of Entrepreneurship • Importance of Entrepreneurship • Entrepreneurship Opportunities & Challenges • Startup Business • Cash Flow * Incubation Centre like DIC & IIT (BHU)	Presentations, Trainer's Guide	2:0

Practical (Communication Network & Surveillance System (CNSS))

Topic	Keylearning Outcomes	Equipment Required	Duration
Introduction to Computer Hardware	Assembling of Computer & testing and working of computer. Installation of Windows and application software.	Sufficient No. of Desktop PC's	6:0
Computer Networking	Formation of LAN, WAN & MAN. Configuration of switch, modem and router. Network setup, testing and fault finding.	Ethernet Switch, Modem, Router and data cables	6:0
Broadband and WiFi	Installation of IPDSLAM and MODEMs. Configuration of IPDSLAM, MODEM & Wi-fi routers.	IPDSLAM equipment, Wireless Router, Modem and access points.	8:0
Introduction to IP address	Configuration of IP Address in PC, Modam and other networking device	PC, Modem, Router, Switch and other networking devices.	8:0
Introduction to Ms office, Word, Excel, power point	Introduction to Computers. Generation of computers. Working in Ms Office, Word, Excel & Power point. Preparation of Small PPT's.	Sufficient No. of Desktop PC's	6:0
Introduction to CCTV and Surveillance system	Introduction to CCTV System Analog & IP Based. Requirement of CCTV system for public safety. Study of Equipments and components of CCTV system. Installation of CCTV system. Testing, Maintenance & Fault finding.	Analog and IP based CCTV Surveillance System with at least 4 No. of CCTV Camera along with all other accessories and connecting cables. (DVR, NVR, L3 Switch, L2 Switch, Media Convertor, Cat 6 Lan cable, 6 Fiber OFC & Power Cables) UPS to provide power supply to the system.	8:0
Introduction to PA system	Installation of PA system (Manual , Automatic and Cordless). Maintenance and Fault findings.	PC for Auto Announcement with required software. PA system complete set (MIC, Speaker, Amplifier, LMT, Connecting Wires and Power Supply arrangement.	6:0
Optical Fibre communication	Testing of OFC by using VFL, Power Meter & OTDR. Splicing of OFC. Termination of OFC on STM & MUX.	OFC cable, VFL, OTDR, Splicing Machine, STM, MUX along with rack, connecting cables and power supply.	12:0