

Syllabus of Two Weeks Vocational Training Online Mode

Day	Topic	Mode
1.	Telecom Switching Network <ul style="list-style-type: none"> • Telecommunication Network • Evolution Of Electronic Exchange • Components Of PSTN Network • PCM Principles 	Online- Zoom
	Job Aid 1&2 <ul style="list-style-type: none"> • Identification of different telecom components • Identification of different customer premise equipment & Outdoor Equipment 	Supported by Video
2.	Overview of Digital Transmission Technology <ul style="list-style-type: none"> • Evolution of transmission systems • Transmission fundamentals, Types of multiplexing, Pulse Code Modulation • Evolution of digital multiplexing • Transport network and the road analogy 	Online- Zoom
	JobAid-3(Identification of different types of Transmission Media) <ul style="list-style-type: none"> • Standard Installation practice used for equipment • Identify the different types of Transmission media like CAT-5/CAT-6,Optical Fiber Cable, Antenna • Understand application of different Transmission media and Components. • Identify the different types of feeder Cable used in Radio Communication JobAid-4 (Identification of different types of Transmission System) <ul style="list-style-type: none"> • Identify the different types of Transmission media like PDH,SDH, Radio Systems, VSATe • Understand the Network Architecture and application of different Transmission System 	Supported by Video
3.	Overview of Telecom Infrastructure & PowerPlant <ul style="list-style-type: none"> • Components of telecom support infrastructure • Sources of power • Commercial ac power supplies • Major subsystems of power plants 	Online- Zoom
	Job Aid 5& 6 <ul style="list-style-type: none"> • Identify different Components of telecom support infrastructure and their role • Identify different parts of SMPS power plant • To trouble shoot with the help of trouble shooting chart 	Supported by Video
4.	Broadband Network Overview <ul style="list-style-type: none"> • Broadband Overview • Broadband Network Architecture &Components • Physical Layer Components 	Online- Zoom
	Job Aid 7 & 8 (Demonstration & understanding of Network components used in Broadband)	Supported by Video

	<ul style="list-style-type: none"> • Understanding broadband Network Architecture • Identify the different cards in the DSLAM • Identify the different interfaces on the cards in the DSLAM • STM to Ethernet converters, Tier-1/Tier2 Switches, OCLAN Switches, BRAS/BNG etc 	
5.	<p>DSL Technologies, ADSL CPE & Security in WiFi Broadband access</p> <ul style="list-style-type: none"> • IPv4 Addressing • DSL Technologies • ADSL CPE • Securing WiFi BB Connection 	Online-Zoom
	<p>Job aid 9 & 10 (DSL Modem configuration and Wireless access)</p> <ul style="list-style-type: none"> • Understand the Steps To Configure TCP/IP settings in the PC/Laptop • Steps Configure Modem in Bridge/Dial-Up/Single-User Mode • Steps for making Broad Band Dialer at PC/Laptop • Understand Steps for securing wireless access of Broadband through DSL modem using WEP encryption 	Supported by Video
6.	<p>Optical Fiber Communication-an Overview</p> <ul style="list-style-type: none"> • Application area • Principle of operation • Types of fiber, types of cable, • FDF, FDMS, connectors, splice closures etc 	Online-Zoom
	<p>JobAid-11 (Identification of different types of Optical Fiber Cables, ducts and their applications)</p> <ul style="list-style-type: none"> • Different types of cable application wise • Laying methods • Types of ducts <p>JobAid-12 (Identification of components of OF cable, splice closures, Single mode and multimode pig tails and patch cord)</p> <ul style="list-style-type: none"> • Identification of component of OF cable • Types of Splice closures • Single mode and multi-mode pigtail and patch cord 	Supported by Video
7.	<p>Optical fiber splicing, connectors and couplers</p> <ul style="list-style-type: none"> • Different splicing techniques • Intrinsic and extrinsic splice losses • Principle of fusion splicing • Optical fiber cable splicing procedure 	Online-Zoom
	<p>Job Aid 13 (Cleaving of Optical fiber before splicing and operation of fusion splicing machine)</p> <ul style="list-style-type: none"> • Cleaving of Optical fiber before splicing • Operation of fusion splicing machine Method of cable end preparation <p>Job Aid 14 (Splicing of OF Cable)</p> <ul style="list-style-type: none"> • Splicing of OF Cable by Automatic Fusion Splicing Machine 	Supported by Video
8.	<p>3G/4G and 5G Mobile Communication</p>	Online-

	<ul style="list-style-type: none"> • Introduction to 3G UMTS • 4G Mobile Communication • Mobile Future Trends 5G 	Zoom
	<p>JobAid-15 [Study and Analysis of GSM Radio Parameters]</p> <ul style="list-style-type: none"> • Understand the purpose and method to use Engineering Handset • Explain important Radio Parameters in GSM network. <p>JobAid-16 [Optimization of Network performance-Drive Test for GSM network & KPI monitoring]</p> <ul style="list-style-type: none"> • Understand the purpose and method to conduct Drive test for network optimization. • Explain and understand how to monitor important KPIs in GSM network 	Supported by Video
9.	IoT and Industry 4.0	Online-Zoom
	<p>Job Aid 17 and 18</p> <ul style="list-style-type: none"> • Industry Case Study 	Supported by Video
10.	<p>Assessment and Group Discussion , Presentation</p> <ul style="list-style-type: none"> • Assessment will be done • Group Presentation by Trainees- Online • Doubt Clearing • Certificate distribution -Online 	Online-Zoom
	<p>Job Aid 19 and 20</p> <ul style="list-style-type: none"> • Presentation by Trainees 	