

CURRICULUM FOR SPECIAL INTERNSHIP ON

TRIPLE PLAY SERVICES THROUGH FTTH (ONE WEEK)

DAY 1	THEORY	INTRODUCTION TO BROADBAND →What is Broadband →Different Technologies used in wired and wireless media . →Broadband Architecture →Disadvantages in offering Triple play services via DSL →Why we go for FTTx
DAY 1	HANDS ON PRACTICALS	BROADBAND NETWORK ARCHITECTURE →Demonstration of network components used in Broadband →Demonstration of different types of modems and cables
DAY 2	THEORY	OPTICAL FIBER CABLES →OFC Theory, Principles, Advantages, Applications →Construction of cables →Splicing Theory
DAY 2	HANDS ON PRACTICALS	DIFFERENT TYPES OF OPTICAL FIBER CABLES, FIBER SPLICING →Identification of different types of Optical Fiber Cables →Identification of components of Optical Fiber Cables → Connectors,Couplers, patch cords, →Tools used for Optical Fiber cable preparation and jointing →Optical fiber Splicing
DAY 3	THEORY	TESTING AND MEASURING INSTRUMENTS USED IN OPTICAL FIBER COMMUNICATION →Working principle and functions of Optical Power Meter → Working principle and functions of Optical Time Domain Reflectometer → Working principle and functions of Light Source
DAY 3	HANDS ON PRACTICALS	HANDS ON PRACTICALS ON TESTING AND MEASURING INSTRUMENTS →Identification and working of different types of Meters used - Optical Power Meter, OTDR, Stabilized Light Source, etc.
DAY 4	THEORY	FTTH ARCHITECTURE AND DEVICES →GPON and GEPON Technology →Components in IP Core, Aggregation, Access, ODN, CPE →Hardware description, Configuration and Functions of OLT →Functions of Optical Splitter
DAY 4	HANDS ON PRACTICALS	DEMONSTRATION AND CONFIGURATION OF OLT AND OPTICAL SPLITTER →Demonstration of Components used in FTTH →Identification of different cards in GEPON OLT →Configuration of GEPON OLT →Latest OLT devices →Identification of different types of Optical Splitter
DAY 5	THEORY	CONFIGURATION OF ONU FOR TRIPLE PLAY SERVICE, IPTV →What is ONU/ Configuring ONU →Delivery of Digital Television Service (IP TV) through Internet Protocol Technology via Internet connection →What is VoD, Saving Bandwidth by using Caching System
DAY 5	HANDS ON PRACTICALS	TRIPLE PLAY SERVICE CONFIGURATION IN CPE →ONU Configuration →Different types of ONUs