

District Telecom Training Centre

III Flr, Telephone Exge Bldg., 36th C- Cross, 4th Block

Jayanagar, BANGALORE- 560011



भारत संचार निगम लिमिटेड
(भारत सरकार का उपक्रम)

BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

To
The Principal,

Dear Sir/Madam,

Sub: AICTE-BSNL-EETP Course Procedures – reg

As you are aware, EETP (Employability Enhancement Training Program) is a joint initiative by BHARAT SANCHAR NIGAM LIMITED and AICTE to enhance the competence and employability of the students by providing skill-based training in the Telecommunication Domain at the state of the art training facilities of BSNL. District Telecom Training Centre, Jayanagar, Bangalore is one among them and has been designated to train the students of your institution.

The program pedagogy and other related details are presented below in a nutshell.

EETP

The EETP selected students will be subjected to dual mode of learning on 3 Certification programs, to be covered progressively in 5th Semester (2 Courses), 6th Semester (3 Courses), 7th Semester (2 Courses), for the same set of students. The dual mode of training includes online content assimilations by students for the respective semester and practical hands on exposure on high end telecom equipment to prepare the students for industry exposure through face to face sessions. During online content assimilation, students can get clarification from SMEs of BSNL through e-mail/online portal.

The following table illustrates the above 3 Certificate Courses.

Sl. No	Level of Certification	Semester	Course Name	Contact Hours
1.	BSNL Silver Certified Engineer	5 th Semester	Transmission Switching System Telecom Support Infrastructure	72
		6 th Semester	Digital Switching System	
2.	BSNL Gold Certified Engineer	6 th Semester	Broadband Technology Optical Fibre Technology	56
3.	BSNL Platinum Certified Engineer	7 th Semester	Mobile Communication IP Networking and Security	56

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bangalore - 560 057

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BHARAT SANCHAR NIGAM LIMITED

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SCHEDULE OF PROGRAMME

In order to operationalise the program, we have made the following schedule.

First Batch commences on 16.09.2013 and the last batch ends on 30.11.2013.

Contact classes will be conducted at DTTC, Jayanagar, Bangalore- 560011

Classes will be conducted on every Wednesday from 18th Sept, between 14:00 hrs - 18:00 hrs. for your institution.

From BSNL side L Sreenath, SDE will be coordinating who can be reached through his mobile 9449017171 and email id lsree7171@gmail.com.

Further to drive the program smoothly the following information from your side may be furnished.

1. Nominate a suitable faculty member from your institution in the enclosed Proforma 1. The role of such an Officer will be crucial and include the following.

ROLE OF INSTITUTIONAL NODAL OFFICER :-

- Providing and verifying the bio data of the students.
 - Student's registration and updating in Training Centre website.
 - Attestation of the student's bio data.
 - Ensuring the attendance of the students, since the attendance is compulsory.
 - Communicating the schedule and other instructions to the students then and there.
- Certificate for the selection of students based on the criteria (Proforma 2).
 - Main List of Students selected (Proforma 3)
 - Waitlist of eligible students (Proforma 4)

These data may be furnished to us at the earliest not later than 16.09.2013

We seek your enduring cooperation to make the program a grand success.

Thanking You,

Encl: As above.

Yours Sincerely,

Sd.....

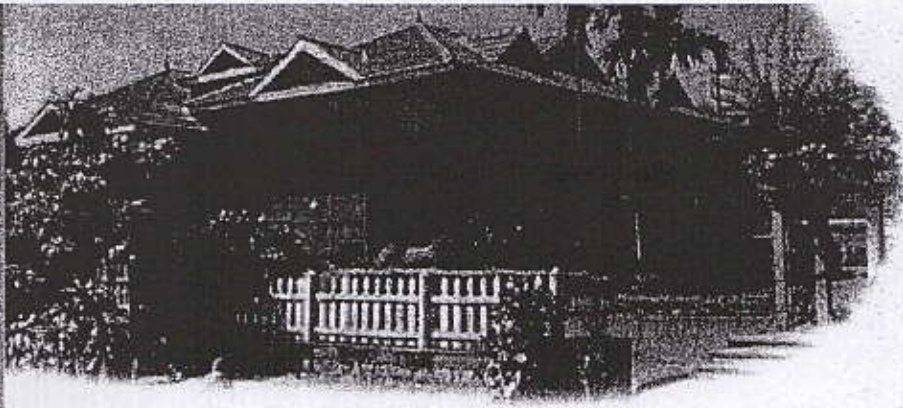
PRINCIPAL, DTTC

Off : 080-26646000 ; Fax: 080-26646001

Visit : learntelecom.bsnl.co.in

Principal

Sapthagiri College of Engineering
14/5, Chikkasandra, Heeraghatta Main Road
Bengaluru - 560 057



To

The DGM (TM),

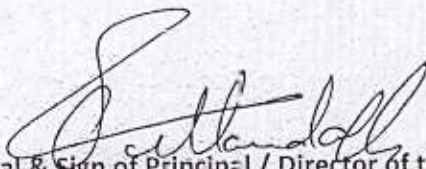
BFERAITT, Ridge Road, Jabalpur.

Sub: Nomination of Nodal Officer for AICTE-BSNL Employability Enhancement Training Program.

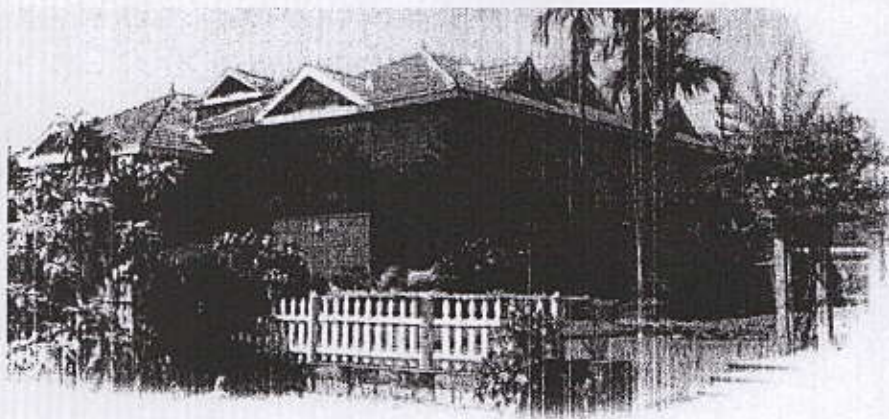
Ref: F.No: AICTE/DD(A)/Finishing School/2012

With reference to the above cited letter the following officer is hereby nominated as the Nodal Officer for AICTE – BSNL Employability Enhancement Training Program:

Name of the Nodal Officer	Designation	Mobile No	Email ID
Sandhya Rani M.H.	Associate professor & HOD	9902828538	hodece@sapthagiri.edu.in


 (Seal & Sign of Principal / Director of the Institute)
Principal 17/9/13
Sapthagiri College of Engineering

Copy to: AICTE – South Western Regional Office, P. K Block, Palace Road, Bangalore - 560009.



Proforma - 2

To

The DGM (TM),
BRBRAITT, Ridge Road, Jabalpur.

Sub: List of students for AICTE-BSNL Employability Enhancement Program 2014-15.

Ref: AICTE Ltr

Kindly find enclosed herewith the list of students as per the seat allocation done by AICTE in prescribed format along with the additional waitlist of eligible students for AICTE – BSNL Employability Enhancement Training Program 2014-15.

Further, it is certified that all these students are selected based on the criteria given by AICTE i.e. Aggregate Marks of previous semesters.

- 1) Students have cleared all the previous semesters
- 2) Students do not have any job at the time of enrollment of the program.

(Seal & Sign of Principal)

Dr. Uttamadappa C

Principal

Sapthagiri College of Engineering

No. 14/5, Chikkasandra,

Hesaraghatta Main Road,

BANGALORE-560 057

Encl: Main and Wait List of students for AICTE – BSNL Employability Enhancement Program.

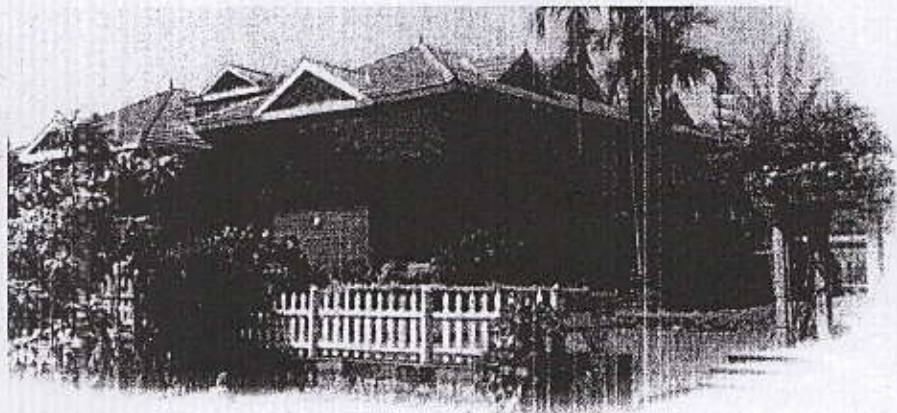
Copy to: AICTE – South Western Regional Office, P. K Block, Palace Road, Bangalore - 560009

Principal

Sapthagiri College of Engineering

14/5, Chikkasandra, Hesaraghatta Main Road

Bangalore - 560 057



Proforma - 3

Main List of students selected for AICTE -BSNL EETP 2014-15 as per the criteria given by AICTE

Name of the college : **SAPTHAGIRI COLLEGE OF ENGINEERING**

S.No	Name of students	USN	Mobile No	Email Id	CGPA
1	Arun R	1SG12EC020	9731319066	Arungowda249@gmail.com	8.784(87.84)
2	Arpith D Bhat	1SG12EC017	7760314742	Arpith.bhat234@gmail.com	8.593(85.93)
3	Vasudev D	1SG12EC112	8861264227	vasudevdlvasu@gmail.com	8.569(85.69)

(Seal & Sign of Principal)

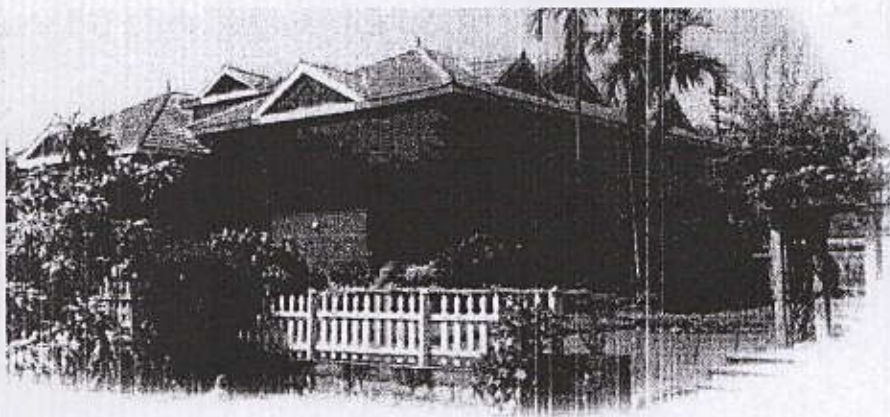
Dr. Puttamadappa. C

Principal

Sapthagiri College of Engineering
No. 14/5, Chikkasandra,
Hesaraghatta Main Road,
BANGALORE-560 057

Principal

Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bangalore - 560 057



Proforma - 4

Waitlist of eligible students for AICTE -BSNL EETP 2014-15 as per the criteria given by AICTE

Name of the college : SAPTHAGIRI COLLEGE OF ENGINEERING.

Sl.No	Name of students	USN	Mobile No	Email Id	CGPA
1	Roopashree M	1SG12EC089	9900114592	rcopashree.m94@gmail.com	83.8
2	Divya Lakshmi B N	1SG12EC036	7795478320	divyalakshmibn@gmail.com	82.92
3	Vijay A	1SG12EC113	8553942996	vijayanjinappa@yahoo.com	82.69
4	Asha S	1SG12EC023	7204233944	asha181995@gmail.com	82.09
5	T V Swaroop	1SG12EC109	8105024241	swaroopj44@gmail.com	81.53
6	Pruthvik G.S	1SG12EC075	8971820866	pruthviksripathi@gmail.com	81.53
7	Vinod Panduranga Patil	1SG12EC115	9900896702	vinodppatil32@gmail.com	81.14
8	Vilas Raj V Urs	1SG12EC114	9741438974	vilasrajurs33@gmail.com	81.12
9	Neha U Tatti	1SG12EC059	8095992979	nehatatti@gmail.com	80.5
10	Niranjan P M	1SG12EC062	8147537690	niranjanpm121994@gmail.com	80.39
11	T R Vijay	1SG12EC108	9066619639	vijayrajan.rajan@gmail.com	80.27
12	Theertha C	1SG12EC110	8792559972	theertha.raghavan@gmail.com	79.2

(Seal & Sign of Principal)

Dr. Puttamadappa, C

Principal

Sapthagiri College of Engineering
No. 14/5, Chikkasandra,
Hesaraghatta Main Road,
BANGALORE-560 057

(Signature)
Principal

Sapthagiri College of Engineering
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Bharat Sanchar Nigam Limited
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REGISTRATION FORM
BSNL SILVER CERTIFIED COURSE
ACADEMIC YEAR 2014-15



Course Details

Course Name : **BSNL SILVER CERTIFIED COURSE**

Learning Centre : **DISTRICT TELECOM TRAINING CENTRE
BENGALURU**

Candidate's profile

Registration Number : **S14BGL362**

Name of the Student : **Mr. VASUDEV D**

Login ID (Email Id) of the Student : **vasudevvasu@gmail.com**

Father's Name : **DEVARAJ.L.N**

Date of Birth : **14/12/93**

Name of the College : **SAPTHAGIRI COLLEGE OF ENGINEERING,
BANGALORE**

Branch :

Contact Mobile Number : **918861264227**

Student's Postal Address : **no.6, 12th 'a' main road,
annapoorneshwari
nilaya, shivanagar, rajajinagar, bengaluru**

College ID Card No. : **1sg12ec112**
(Please attach Photocopy of College ID Card)

The information furnished above is correct to the best of my knowledge and belief.

Date: 8/09/14

Vasudev D
Signature of the Student

To be filled by the Nodal Officer of the College

- The credentials of VASUDEV D have been verified and found in order.
- The student fulfills the criteria given by AICTE in letter no AICTE/ED(A), Finishing School/2012 dated 10th April 2013.

Date: 09-09-14

Sandhya Devi M.H
Signature (with Name) of the Nodal Officer

To be filled by the Class Incharge

- The documents submitted by the candidate have been checked and found OK.
- The candidate has been permitted for the course, and he/she has joined the course on

Date:

Signature of the BSNL Staff (Class Incharge)

Principal

[Signature]
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesarghatta Main Road
Bengaluru - 560 057



Bharat Sanchar Nigam Limited
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REGISTRATION FORM
BSNL SILVER CERTIFIED COURSE
ACADEMIC YEAR 2014-15



Course Details

Course Name : **BSNL SILVER CERTIFIED COURSE**

Learning Centre : **DISTRICT TELECOM TRAINING CENTRE
BENGALURU**

Candidate's profile

Registration Number : **S14BGL360**

Name of the Student : **Mr. ARUN R**

Login ID (Email Id) of the Student : **arungowda249@gmail.com**

Father's Name : **RAMAKRISHNAIAH**

Date of Birth : **02/12/94**

Name of the College : **SAPTHAGIRI COLLEGE OF ENGINEERING,
BANGALORE**

Branch :

Contact Mobile Number : **919731319066**

Student's Postal Address : **No 98, Manjunatha Layout,
Basavanahalli, Nelamangala,
Bangalore rural -552 123**

College ID Card No. : **1SG12EC020**
(Please attach Photocopy of College ID Card)

The information furnished above is correct to the best of my knowledge and belief.

Date: **04/09/2014**

Signature of the Student

To be filled by the Nodal Officer of the College

- The credentials of **ARUN R** have been verified and found in order.
- The student fulfills the criteria given by AICTE in letter no AICTE/DD(A)/ Finishing School/2012 dated 10th April 2013.

Date: **5/9/14**

Signature (with Name) of the Nodal Officer

To be filled by the Class Incharge

- The documents submitted by the candidate have been checked and found OK.
- The candidate has been permitted for the course, and he/she has joined the course on

Date:

Signature of the BSNL Staff(Class Incharge)

Principal

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11/5, Chikkasandra, Hosaraghatta Main Road
Bangalore - 560 057

EETB 272 5/9/14



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REGISTRATION FORM
BSNL SILVER CERTIFIED COURSE
ACADEMIC YEAR 2014-15



Course Details

Course Name : **BSNL SILVER CERTIFIED COURSE**

Learning Centre : **DISTRICT TELECOM TRAINING CENTRE
BENGALURU**

Candidate's profile

Registration Number : **S14BGL361**

Name of the Student : **Mr. ARPITH D BHAT**

Login ID (Email Id) of the Student : **arpith.bhat234@gmail.com**

Father's Name : **DINESH BHAT M**

Date of Birth : **11/10/94**

Name of the College : **SAPTHAGIRI COLLEGE OF ENGINEERING,
BANGALORE**

Branch :

Contact Mobile Number : **917760314742**

Student's Postal Address : **NO 19, Apoorva, 2nd Floor,
Panduranga Layout, Bhuvaneshwari Nagar,
Bangalore-560 057**

College ID Card No. : **1sg12ec017**
(Please attach Photocopy of College ID Card)

The information furnished above is correct to the best of my knowledge and belief.

Date: 04/09/2014

Signature of the Student

To be filled by the Nodal Officer of the College

- The credentials of ARPITH D BHAT have been verified and found in order.
- The student fulfills the criteria given by AICTE in letter no AICTE/DD(A)/ Finishing Schoc/2012 dated 10th April 2013.

Date: 05/09/14

Signature (with Name) of the Nodal Officer

To be filled by the Class Incharge

- The documents submitted by the candidate have been checked and found OK.
- The candidate has been permitted for the course, and he/she has joined the course on

Date:

Signature of the BSNL Staff (Class Incharge)

EETP 24 2
5/9/14

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1st, Chikkasandra, Hasaraghatta Main Road
Bangalore - 560 057

Certificate regarding attendance for AICTE-BSNL EETP program

Name of TP:- District Telecom Training Centre, Bangalore

Name of EETP Certification:- "BSNL SILVER CERTIFIED ENGINEER"

Course Duration:- w.e.f 30/03/2014

This is to certify that following students have attended the "BSNL SILVER CERTIFIED ENGINEER" Course as per the guidelines of EETP under BSNL-AICTE MOU and other directives issued from time to time on EETP by BSNL C.O. / BRBRAITT & AICTE.

Name of the College: SAPTHAGIRI COLLEGE OF ENGINEERING

Sl No.	Reg. No	Name of students nominated for BSNL Silver Certified Engineer (DSS, DTS & TSI) course under EETP
1	S14BGL361	ARPITH D BHAT
2	S14BGL360	ARUN R
3	S14BGL362	VASUDEV D

Signature
(EETP Coordinator)
DTTC, Bangalore
Date:
Place:
Seal of the Institution

Signature
(EETP Coordinator of the College)
Bangalore
Date: 06-02-2015
Place: SCE
Seal of the Institution
Department Electronics &
Communication Engineering
Sapthagiri College of Engineering
Bangalore-57

EETP 24
3
06/02/15

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BSNL SILVER CERTIFIED ENGINEER DIGITAL SWITCHING SYSTEM(DSS)

SYLLABUS

- Front Cover for DSS JobAid

WEEK-1 : DIGITAL SWITCHING SYSTEM (DSS)

- EETP-DSS - THEORY - WEEK 1 : Telecom Switching Network
 - Telecommunication Network
 - Evolution Of Electronic Exchange
 - Components Of PSTN Network
 - PCM Principles
- EETP-DSS - JOB AID - WEEK 1: Job Aid 1&2
 - Identification of different telecom components
 - Identification of different customer premise equipments & Outdoor Equipments

WEEK-2 : DIGITAL SWITCHING SYSTEM (DSS)

- EETP-DSS - THEORY - WEEK 2 : Principles of Electronic Exchange
 - Stored Programme Controlled exchange
 - Block schematic of SPC exchange
 - Digital time switch principle
 - Subscriber signaling
- EETP-DSS - THEORY - WEEK 2: Subscriber Administration (Version 1 June 2013)
 - Subscriber Line Management
 - Subscriber Class Of Services
- EETP-DSS - JOB AID - WEEK 2 : Job Aid 3&4
 - Creation of subscriber and tracing the physical connectivity from the customer premises equipment to exchange equipment
 - Deletion and modification of customer data in data base and checking their effect like BNP Announcement and BNP disconnection, reconnection, etc

WEEK-3 : DIGITAL SWITCHING SYSTEM (DSS)

- EETP-DSS - THEORY - WEEK 3: Facilities Offered by Electronic Exchanges (Version 1 June 2013)
 - Facilities offered by electronic exchanges
 - Hunt group
 - Centrex
 - Intelligent network
- EETP-DSS - JOB AID - WEEK 3 : Jobaid 5&6
 - Demonstration various facilities from the subscriber line by dialing appropriate access codes
 - Activation and deactivation of the facilities
 - Creation of hunt group and demonstration of line hunting on incoming calls and different types of Centrex calls

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WEEK-4 : DIGITAL SWITCHING SYSTEM (DSS)

- **EETP-DSS - THEORY - WEEK 4: Testing, Traffice and Bill ng Administration (Version 1 June 2013)**
 - Testing
 - Traffic measurements
 - Backup management
 - Charging
- **EETP-DSS - JOB AID - WEEK 4 : Job Aid7&8**
 - Testing the subscriber line from the exchange maintenance terminal and analyzing the test report to localize the fault
 - Self testing the lines from the subscriber premises and interpreting the meaning of the tones received as response from the exchange
 - Explanation of the details available in call detail records of subscriber.
 - Putting the subscriber under various observations

WEEK-5 : DIGITAL SWITCHING SYSTEM (DSS)

- **EETP-DSS - THEORY - WEEK 5: Trunk Administration and Hierarchy (Version 1 June 2013)**
 - Trunk group management
 - Routing management
 - National network
 - Concept of SDCA and LDCA
- **EETP-DSS - JOB AID - WEEK 4 : JobAid 9&10**
 - Interrogation of Routing and Digital Trunk related parameters and testing of trunks
 - Explanation of the hierarchy of nodes in the telecom network and the nodes involved and their roles while establishing calls of different access levels

Hours for Practical:20 Hrs. # Hours for Field Visit: 2 Hrs. # Hours for Exam & Feedback : 2 Hrs.

BSNL SILVER CERTIFIED ENGINEER DIGITAL TRANSMISSION SYSTEM(DTS)

SYLLABUS

WEEK-1 : DIGITAL TRANSMISSION SYSTEM (DTS)

- **EETP-DTS-THEORY- WEEK 1: Overview of Digital Transmission Technology**
 - Evolution of transmission systems
 - Transmission fundamentals, Types of multiplexing, Pulse Ccde Modulation
 - Evolution of digital multiplexing
 - Transport network and the road analogy
- **EETP-DTS - JOB AID - WEEK 1 : JobAid-01(Identification of different types of Transmission Media)**
 - 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

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- **EETP-DTS - JOB AID - WEEK 1 : JobAid-02 (Identification of different types of Transmission System)**
 - Identify the different types of Transmission media like PDH,SDH, Radio Systems, VSATe
 - Understand the Network Architecture and application of different Transmission System

WEEK-2 : DIGITAL TRANSMISSION SYSTEM (DTS)

- **EETP-DTS-THEORY- WEEK 2 : SDH TECHNOLOGY**
 - S.D.H. evolution
 - SDH rates,STM-1 frame format,Path overhead
 - Network elements of SDH, SDH multiplexing structure and principle
 - Why synchronizing networks?
- **EETP-DTS - JOB AID - WEEK 2 : Job Aid 3 (Identification of different types of Optical connectors & components used in OFC)**
 - Identification of different types of Optical connectors & components used in Optical Fiber Systems and their applications.
 - Identify the different types of Optical Fiber connectors used in FDF/FDMS and in System
 - Understand application of different optical components
 - Locate the different Optical Component and their Connectivity in PDH/SDH System
- **EETP-DTS - JOB AID - WEEK 2 : Job Aid 4(Understanding the concept of SDH Technology using Multimedia)**
 - Understanding the concept of SDH Technology using Multimedia
 - Multimedia of SDH
 - Understand the concept of SDH Technology
 - List down menus of Multimedia/CBT of SDH

WEEK-3 : DIGITAL TRANSMISSION SYSTEM (DTS)

- **EETP-DTS-THEORY- WEEK 3: SDH NETWORKING, PROTECTION & NGSDH**
 - Physical topology of an SDH transmission network
 - SDH network protection
 - Two-fiber bidirectional MS shared protection ring-(MS-Spring)
 - Sub-network connection protection
- **EETP-DTS - JOB AID - WEEK 3 : Job aid 5 (Understand the Network and Hardware Architecture of SDH System)**
 - Understand the Network and Hardware Architecture of SDH System
 - Identify the different interfaces and Cards in each network Elements.
- **EETP-DTS - JOB AID - WEEK 3 : Job aid 6 (Software Configuration of SDH)**
 - Login to the SDH SYS
 - Create the cross connection at VC-12 level between different network elements
 - Identify the different modules/boards/units through LCT/ NMS

WEEK-4 : DIGITAL TRANSMISSION SYSTEM (DTS)

- **EETP-DTS-THEORY- WEEK 4: DIGITAL RADIO TRANSMISSION TECHNOLOGY**
 - Electromagnetic spectrum
 - Microwave radio relay
 - How microwave radio relay links are formed
 - Transmission capacities available on the radio Systems
- **EETP-DTS - JOB AID - WEEK 4 : Job aid 7 (SDH : Alarm Management, Performance management, Synchronization)**


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- SDH : Alarm Management, Performance management, Synchronization
- identify the different Alarms available on the rack
- Check the different alarm using LCT/EMS/NMS
- Monitor different performance parameter using LCT/EMS/NMS
- **EETP-DTS - JOB AID - WEEK 4 : Job aid 8 (Visit and demo to Microwave Mini link /Microwave System/ Ku Band VSAT System)**
 - Visit and demo to Microwave Mini link /Microwave System/ Ku Band VSAT System
 - Identify the different M/W Systems and Mini-Links
 - Understand the Concept of Operation of M/W System and Mini-Links
 - Identify the different types Radio Systems (DRS)/Ku band VSAT

WEEK-5 : DIGITAL TRANSMISSION SYSTEM (DTS)

- **EETP-DTS-THEORY- WEEK 5: FTTH & DWDM TECHNOLOGY**
 - Why FTTH
 - Technology options for FTTH architecture
 - Services on FTTH network
 - DWDM,DWDM system function,varieties of WDM
- **EETP-DTS - JOB AID - WEEK 5: Job Aid 9 (Visit and demo of DWDM System)**
 - Identify the different optical network element and boards
 - Understand the network architecture of DWDM.
- **EETP-DTS - JOB AID - WEEK 5: Job Aid 10 (Optical connectors, Splitters, ONTs components of GEAPON/GPON)**
 - Different types of Optical connectors
 - Different types of Splitters & applications
 - Different types of ONTs
 - GPON/GEAPON OLTE

Hours for Practical:20 Hrs. # Hours for Field Visit: 2 Hrs. # Hours for Exam & Feedback : 2 Hrs.

BSNL SILVER CERTIFIED ENGINEER TELECOM SUPPORT INFRASTRUCTURE(TSI)

SYLLABUS

- **Front Cover for TSI JobAid**

WEEK-1 : TELECOM SUPPORT INFRASTRUCTURE (TSI)

- **EETP -TSI - THEORY - WEEK 1 :Overview of Telecom Infrastructure & PowerPlant(Version 1 June 2013)**
 - Components of telecom support infrastructure
 - Sources of power
 - Commercial ac power supplies
 - Major subsystems of power plants
- **EETP - TSI -JOB AID - WEEK 1 : Job Aid 1&2**
 - Identify different Components of telecom support infrastructure and their role
 - Identify different parts of SMPS power plant


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- To trouble shoot with the help of trouble shooting chart

WEEK-2 : TELECOM SUPPORT INFRASTRUCTURE (TSI)

- **EETP -TSI - THEORY - WEEK 2 : Battery UPS and Earthing (version 1 June 2013)**
 - Different Methods of Working of a Battery
 - Secondary cells (conventional)
 - Maintenance free battery (VRLA)
 - Working and maintenance of UPS
- **EETP - TSI -JOB AID - WEEK 2 : Job Aid 3&4**
 - Study of Valve Regulated Lead Acid battery (VRLA) and Take different measurements
 - Identify positive and negative terminal of the battery
 - Practical study of Uninterrupted power supply, Inverter and Earthing
 - Install the inverter/UPS by connecting input cables and battery supply.

WEEK-3 : TELECOM SUPPORT INFRASTRUCTURE (TSI)

- **EETP -TSI - THEORY - WEEK 3 : Airconditioning System and Fire Safety (version 1 June 2013)**
 - Types of air conditioning system
 - Innovative strategies for air-conditioning system
 - Fire safety.
 - Fire protection
- **EETP - TSI -JOB AID - WEEK 3 : Job Aid 5&6**
 - Air Conditioning (AC Package Unit, Split AC, Window Type AC)
 - Measure Energy Efficiency of AC System in the Telephone Exchange Building
 - Protective Systems (Fire Extinguishers, Lightning Arrestors, HRC Fuses)
 - Demonstration of fire detection and fire fighting system in the Telecom Building

WEEK-4 : TELECOM SUPPORT INFRASTRUCTURE (TSI)

- **EETP -TSI - THEORY - WEEK 4 : Engine Alternator and Energy Conservation (version 1 June 2013)**
 - Principle of operation of engine
 - Principle of operation of alternator
 - Diesel engine & common troubles
 - Concept and various forms of renewable energy
- **EETP - TSI - JOB AID - WEEK 4: Job Aid 7&8**
 - Engine Alternator (Demonstration & Maintenance Tips)
 - Identify various parts of Engine Alternator and demo of Engine Alternator set
 - Sub-Station Works in Telecom and Energy Conservation Features
 - Compare Energy efficiency of different Electrical Devices with their rated value

WEEK-5 : TELECOM SUPPORT INFRASTRUCTURE (TSI)

- **EETP -TSI - THEORY - WEEK 5 : Pre fabricated Shelters & Towers (version 1 June 2013)**
 - Various components of ground based BTS
 - Site selection for BTS
 - Telecom shelters
 - Technical specifications and dimensions of pre fabricated shelters
- **EETP - TSI - JOB AID - WEEK 5 : Job Aid 9&10**


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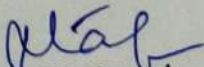
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