(A Government of India Enterprise)

### O/o C.G.M.T. UP (East) Circle Hazratganj Lucknow-226001

Our website: www.upe.bsnl.co.in

No. Rectt/M-94/TTA/OS/2012/12

Date:

30.04.2013

#### **Examination Notification**

Applications are invited from eligible Indian citizens for filling up 108 posts of Telecom Technical Assistants (TTA) for various SSAs of UP (East) Telecom Circle in IDA pay scale of Rs. 13600-25420. Detailed vacancy position of SSAs is indicated in **Annexure-B** of this notification.

Note: Telecom Technical Assistants (TTA) is a SSA cadre. The candidates if selected, will be considered against vacancies of that SSA only against which they have applied/appeared. However, he/she may be transferred/deputed anywhere in India in emergent circumstances in the interest of service.

The posts of various SSAs of UP (East) Telecom Circle will be filled up through a competitive examination scheduled to be held on 30<sup>th</sup> June, 2013 from 10.00 AM to 01.00 PM. Successful candidates will have to undergo thorough medical test held by a Medical Board, followed by completion of pre-appointment formalities. Detailed scheme and syllabus of the examination is also detailed in **Annexure-C** of this notification. Other details of examination are given below.

Minimum qualifying marks: -

Category/Community of applicant	Minimum qualifying marks in the paper	Minimum qualifying marks in each of three parts
General (OC) Candidate	40%	30% (i.e. 6, 27, 27 respectively)
SC/ST/OBC	33%	20% (i.e. 4, 18, 18 respectively)

Note: There will be negative marking for each wrong answer, 25% marks of that question will be deducted.

**Age Limit:** - Between 18 to 27 years as on the closing date of receipt of applications form which is 13-05-2013.

Relaxation in age limit: -

S. No.	Category or Community	Relaxation
1	Scheduled Caste and Scheduled Tribe (SC and ST)	Five years.
2	Other Backward Caste (OBC)	Three years.
3	General Physically Handicapped (OC-PH)	Ten years.
4	SC/ST Physically Handicapped (SC-PH or ST-PH)	Fifteen years
5	Other Backward Caste Physically Handicapped (OBC-PH)	Thirteen years
6	Departmental candidates (OC or General)	Age upto 40 years
7	SC/ST Departmental candidates	Age upto 45 years
8	Other Backward Caste (OBC) Departmental candidates	Age upto 43 years
9	Ex-Servicemen, residents of Jammu and Kashmir and any other special categories indicated by Government of India	In accordance with instructions or orders issued by Government of India.

**Note:** The crucial date for determining the age limit shall be the closing date of receipt of application form of candidates from across India (not the closing date prescribed for those in Assam, Nagaland, Meghalaya, Arunachal Pradesh, Mizoram, Manipur, Tripura, Sikkim, Laddah Division of Jammu and Kashmir state, Lahaul and Spiti District and Pangi sub Division of Chamba District of Himachal Pradesh, Andaman and Nicobar Islands or Lakhdweep.

**Minimum Educational Qualification:** - Three years Engineering Diploma in Telecommunication/Electronics/Electrical/Radio/Computer Science/Information Technology (IT)/Instrumentation Technology or M.Sc. in Electronics.

Disqualification: - No person who,

- (i) has entered into or contracted marriage with a person having a spouse living, or
- (ii) having a spouse living has entered into or contracted marriage with any person, shall be eligible for appointment to the post of Telecom Technical Assistants (TTA).
- Bond & Training: (i)

  Candidates selected against vacancies for direct recruitment shall execute a Bond in the specified format prescribed the Company to serve in BSNL for a period of two years from the date of appointment as Telecom Technical Assistants (TTA).
  - (ii) Candidates selected for the post of Telecom Technical Assistants (TTA) shall have to successfully undergo training as per the training plan before their appointment as Telecom Technical Assistants (TTA).
  - (iii) During the period of training, recruited Telecom Technical Assistants (TTA) will be entitled for stipend (training allowance) as decided by BSNL from time to time.

# Facilities offered to SC/ST candidates: -

- (i) Travelling allowance As per provisions laid in BSNL Corporate Office no. 14-1/2008-Rectt.(Pt) dated 04.01.2010. The candidates are required to submit their claim in prescribed format as per **Annexure-D** at the end of the examination.
- (ii) Free of cost pre-examination training to be held at Lucknow only will have to be offered in respect of willing SC/ST applicants without any travelling and lodging allowance. Applicants will have to submit their willingness with the application form. Schedule of training and venue etc will be intimated separately at website.

### **Examination Fee: -**

- (i) Demand draft of Rs. 500/- (Five hundred) in favour of Accounts Officer (Cash) office of CGMT, BSNL UP (East) Telecom Circle Lucknow payble at Lucknow, in case of General (OC) and Other Backward Caste (OBC).
- (ii) The applicants of SC/ST/Physically Handicapped communities will not be required to pay examination fee.

IMPORTANT: Candidature of any applicant is liable to be cancelled any time during Recruitment process (i.e. before or after conduction of examination) in case he/she does not fulfil any of the eligibility conditions laid in this notification or relevantt Rules of TTA.

# Closing Date for receipt of application form:-

Application form duly filled in and complete in every respect should be sent to AGM (Recruitment, O/o Chief General Manger Telecom BSNL, UP (East) Circle Hazratganj, Lucknow-226001, so as to reach on before 13-05-2013.

"APPLICATION FOR TTA-2012 Exam (......SSA)"

should be written in bold letters on the top of envelope containing duly filled in Application Form.

Application received after closing date and incomplete in any respect shall summarily be rejected and no communication in this regard shall be entertained.

BSNL will not be responsible for any postal delay.

Enclosures: - Please submit the following in the order as given below:-

- (1) Bank Draft of Rs. 500/- from non exempt categories (OC/OBC). (Please mention personal details such as name, father's name etc. at the back side of demand draft)
- (2) Admit Card (Duly filled) in two copies (applicants copy and office copy).
- (3) Two self addressed envelops (23cm x 11 cm)
- (4) Application form complete in all respect.
- (5) Copies of certificates i.e. proof of age, educational qualification & Caste certificate etc, self attested by the applicant.
  - (Necessary certificate from a Govt. Hospital/Medical Board in respect of Physically Handicapped application).
- (6) Five recent identical passport size photographs (without attestation), out of which (i) two photographs should be pasted on the application form, (ii) each of two photographs (unattested) should be pasted on each copy of admit cards and, (iii) one spare photograph with name & father's name mentioned at the back side to be attached with the Application Form.

Applicants are also directed to fill their particulars asked in proforma of admit card too.

Asstt. General



(A Government of India Enterprise)

<u>APPLICATION FORM FOR RECRUITMENT OF TELECOM TECHNICAL ASSISTANT IN BSNL</u>

IMPORTANT NOTES – (I) Before filling this form, read the detailed advertisement carefully. (II) All entries should be made in CAPITAL LETTERS.

1. Name of recruitment unit: \_

2.	Name in name)		•			•				/	n fii	rst, m	iddle a	and last
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3.	Father's/ first, mid					apital	lette	s (Ple	ease	keep o	ne b	oox b	lank b	etween
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4.	Date of B	irth (d	d/mm/	<sup>/</sup> уууу)	5. A	Age a	s on	13.05	.201	3		Whethe axatior		ning age
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	7. Gender Male of Female	or		(Marr	al Statu ied/ arried)	1s 9.		Nationa			10		gory be T/OBC	longs to /PH
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11. Ca	itegory (W			licab							•			
	Whether BSNL employee (Yes/No) if yes, mention HRMS No.	Wheth register under Employ Exchains the second SSA If yes	oymen inge respec (Yes/I , men	of tive No). tion	If ph (Attack as in A		dical	Certific		Wheth Govt. employ (Yes/N	/ee	Ex- Service	her bel cemen/J e specif	
		registi	ration	NO.	Wheth			Percent	age					
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	Telephon		(with	STI	) Code	e)								

Signature of Candidate

13. Educational Qual	ification (Diploma in E	ngineering. & above)	)
Engineering Diploma/Degree	University/ Institute	Month & Year of Passing	Advertisement whether eligible
with Discipline			(Yes/No.)
14. Permanent Addre	ess (in capital letters)		
Name :-			Please affix one recent
Father's/Husband's 1	Name:-		passport size
Address			photograph without
	Pin Code:		attestation
of Shrideclare that I belong by the Government contained in Depart 36012/22/93-Estt.(Soft persons/sections (Creferred Office Mem Estt. (Res.) Dated 14	I	resident State State State which is recognitudes of reservation in and Training Office is also declared the in column 3 of the 3 and amended vide	nt of village/town/chere zed as a backward cla services as per orde e Memorandum N nat I do not belong Schedule to the abo
complete and correct event of any particular candidature for the cancelled and in the detected after my appany notice to me.  I also understappointed earlier by had already qualified	declare that all the st t to the best of my know alar information given post of Telecom Tech event of any mis-stater pointment, my services and that if appointed, I the erstwhile DOT/DTS d in the TTA examinate dates of TTA examinate	owledge and belief. In above being found anical Assistant is liment or discrepancy are liable to be terminated would rank junior to S/DTO or BSNL or a sion but not appointe	I understand that in the false or incorrect, reliable to be rejected in the particulars beinated forthwith without any TTA who had be my other candidate with a TTA by BSNL
Place:	. <del></del>		

Date:

(Signature of the Applicant)



(A Government of India Enterprise)

# O/o C.G.M.T. UP (East) Circle Hazratganj Lucknow-226001

Our website: www.upe.bsnl.co.in

### Telecom Technical Assistant Examination-2012 Admit Card (Office copy)

Identical photograph of the applicant as on the application form (Passport size )

(Passport size)	
	Roll No
	(To be filled by the office)
Son/Daughter/of Mr* affixed on the admit car Technical Assistant-201	*/Mrs*/Ms*
*(to be filled by applicant	
Date Place	Signature  Designation  For Bharat Sanchar Nigam Limited
	Bharat Sanchar Nigam Ltd.  (A Government of India Enterprise)  I.T. UP (East) Circle Hazratganj Lucknow-226001  Our website: www.upe.bsnl.co.in
	Telecom Technical Assistant Examination-2012
Identical photograph of the applicant as on the application form (Passport size )	Admit Card (Applicant's copy)
	Roll No
	(To be filled by the office)
Son/Daughter/of Mr* affixed on the admit car Technical Assistant-201 examination centre)  * (to be filled by applican	Signature
Date Place	Designation  For Bharat Sanchar Nigam Limited

# Annexure-A

#### NAME & ADDRESS OF THE INSTITUTE/HOSPITAL

Certificate No	Date
DISABI	ILITY CERTIFICATE
	Recent Photograph of the candidate showing the disability duly attested by the Chairperson of the Medical Board.
son/wife/daughter of	Shriis suffering
A. Locomotors or cerebral palsy :	
(i) BL – Both legs affected but not ar	ms.
(ii) OL – One leg affected (right or left)	(a) Impaired reach
	(b) Weakness of grip
	(c) Ataxic
(iii) BH - Stiff back and hips (Cannot sit	or stoop)
(iv) MW – Muscular weakness and limit	ted physical endurance.
B. Blindness or Low Vision:	
(i) B : Blind	
(ii) PB: Partially Blind	
C. Hearing Impairment:	
(i) D - Deaf	
(ii) PD - Partially Deaf	

(Delete the category whichever is not applicable)

# REVISED (ANNEXURE - 3

# File No. Staff/M-34/Corr./5

Dated.: 15.04.2013

# Allotment of Seats in TTA Cadre - Outsider Quota (Category wise) For Recruitment Year-2012

SI NO.	Name of SSA	Category	ory wise allotment of Seats out of 108				Vacancies for Horizontal Reservation		
		OC	SC	ST	ОВС	Total	PH	Ex-Ser.	
1	Lucknow	1	5	0	. 9	15	0	1	
2	Allahabad	3	1	0	0	4	0	0	
3	Azamgarh	4	0	0	0	4	0	. ′ 0	
4	Basti ·	0	2	0	4	6	0	0	
5	Deoria								
6	Farrukhabad	1	0	0	1	2.	0	0	
7 .	Faizabad	5	0	0	0	5	0 .	. 0	
8	Gorakhpur	2	.0	1	0	3	0	Q	
9	Jhanśi	2	1	0	2	5	0	0	
10	Kanpur	15	7	0	7	29	0	2	
11	Lakhimpur	0	0 -	0	1	1	0	0	
12'	Mirzapur	3	0	0	1	4	0	0	
13	Sultanpur	1	0	0	0	1 .	0 _	0	
14	Varanasi	7.	3	0	2	12	0	, 1	
15	Bahraich								
16	Banda '	3	0	0	0	3	0 .	,o	
17	Barabanki	1	0	0	0	1	0	0	
18	Ballia								
19	Fatehpur	0	1	0	0	1	0	0	
20	Ghazipur								
21	Gonda								
22	Hardoi	2	0	0	0	2	0	0	
23	Hamirpur								
24	Jaunpur								
25	Mau	0	1	0	1	2	0	0	
26 .	Orai							<b>'</b>	
27	Pratapgarh	1	0	0	0	1	0	0	
28	Raebareli	1	0	0	0	1	0	0 .	
29	Sitapur								
30	Shahjahanpur	2	1	0	0	3	0	0	
31	Unnao	2	0	0	1	3	0	0	
	TOTAL	56	22	1	29	108	<del></del>	<del> </del>	

(Shashi Bhishah) Asstt. General Manager

# SCHEME & SYLLABUS FOR TTA DIRECT RECRUITMENT EXAMINATION

The standard of Paper in General ability test will be such as may be expected of an Engineering Diploma holder. The standard of papers in other subjects will approximately be that of Diploma level of an Indian Polytechnic. There shall be a single multiple choice objective type Paper of 3 hrs. duration as per details given below:

<u>P</u> aper	•	5 20,0W.
	Marks	Time allowed
PART - I GENERAL ABILITY TEST PART - II BASIC ENGINEERING PART - III SPECIALIZATION	20 90	3 hrs
1	90	o ms.

Note: 1. The candidate is required to obtain minimum qualifying marks in each of these parts as may be prescribed by the BSNL.

# Detailed syllabus

# PART-I: GENERAL ABILITY TEST - 20 MARKS

The candidate's comprehension and understanding of General English shall be tested through simple exercise such as provision of antonyms and synonyms, fill in the blanks and multiple-choice exercise etc. This shall also include questions on current events, general knowledge and such matters of everyday observation and experiences as may be expected of Diploma holder.

# PART-II: BASIC ENGINEERING - 90 MARKS

# Detailed Syllabus is as under:

- Applied mathematics: Co-ordinate Geometry: Vector Algebra; Matrix and Determinant: Differential Calculus; Integral Calculus: Differential equation of second order: Fourier series; Laplace Transform; Complex Number; Partial Differentiation.
- 2. <u>Applied Physics</u>: Measurement-Units and Dimension; Waves, Acoustics, Ultrasonic; Light; Laser and its Application, Atomic Structure and Energy Levels.
- 3. Basic Electricity: Electrostatics, Coulomb's law, Electric field, Gauss's theorem, concept of potential difference; concept of capacitance and capacitors; Ohm's law, power and energy, Kirchoff's voltage, current laws and their applications in simple Corcuits, Basic Magnetism; Electro Magnetism; Electromagnetic Induction; Concept of alternating voltage & current; Cells and Batteries; Voltage and Current Sources; Thevenin's theorem, Norton's theorem and their applications.

Production

4. Electronics Devices and Circuits: Classification of materials into conductor semi-conductor, insulator etc, electrical properties, magnetic materials, various types of relays, switches and connectors, Conventional representation of electric and electronic circuits elements. Active and passive components; semi-conductor Physics; Semiconductor Diode; Bipolar transistor & their circuits; Transistor Biasing Stabilization of operating point; Single stage transistor amplifier; field effect transistor, Mosfet circuits applications.

Multistage Transistor Amplifier; Transistor Audio Power Amplifiers; Feedback in Amplifier; Sinusoidal Oscillators; Tuned Voltage Amplifiers; Opto Electronics Devices and their applications; Operational Amplifier; Wave shaping and switching circuits.

Block diagram of LC Timer (such as 5.55) and its working, Motivation Circuits, Time Base Circuits, Thyristory and UJT; Regulated Power Supply.

5. <u>Digital Techniques</u>: Applications and advantages of digital systems; number system (binary and hexadecimal); Logic Gates; Logic Simplication; Codes and Parity; Arithmetic Circuits; Decoders, Display Devices and Associated Circuits; Multiplexers and De-multiplexers; Latches and Flip Flops; Counters; Shift Registers; Memories; A/D and D/A converters.

# PART-III: SPECIALIZATION - 90 MARKS

Detailed Syllabus is as under:-

#### i. <u>Electrical:</u>

3 phases vs. single-phase supply, Star Delta connections, relation between phase & line voltage power factor and their measurements; construction and principles of working of various types of electrical measuring instruments. All types of motor and generator-AC & DC transformers, starters, rectifiers, inverters, battery charges, batteries, servo and stepper motors, contactor control circuits, switchgear, relays, protection devices & schemes, substation, protective relaying, circuits breaker, generator protection, transformer protection, feeder & lightening protection, feeder & bus bar protection, lightening arrestor, earthing, voltage stabilizer & regulators, power control devices & circuits, phase controlled rectifiers, inverters, choppers dual converters, cycloconverters; power electronics application in centrol of drivers, refrigeration & air-conditioning.

### .2. Communication:

Modulation and demodulation – principles and operation of various types of AM, FM and PM modulators/demodulators; pulse modulation – TDM, PAM, PPM, PWM, Multiplexing, Principles and applications of PCM.

Introduction of Basic block diagram of digital and data communication systems, Coding error detection and correction techniques; Digital Modulation Techniques – ASK, ICW, FSK, PSK; Characteristics/working of data transmission circuits; UART, USART; Modems; Protocols and their functions, brief idea of ISDN interfaces, local areas Network; Carrier Telephony – Features of carrier telephone system.

Microwave Engineering; Microwave Devices; Wave-guides; Microwave Components; Microwave Antennas; Microwave Communication Systems- Block diagram & working principal's of microwave communication link.

Rostould

# Network, Filters and Transmission Lines:

Two port network; Attenuators; Filters; Transmission Lines and their applications characteristic impedance of line; concept of refection and standing waves on a transmission line; Transmission line equation; Principles of impedance matching.

# 4. <u>Instruments and Measurements:</u>

Specification of instruments – accuracy, precision, sensitivity, resolution range, Errors in measurements and loading effect; principles of voltage, current and resistance measurements; Transducers, measurement of displacement & strain, forces & torque measuring devices, pressure measuring devices, flow measuring devices, power control devices & circuits. Types of AC milli voltmeters- Amplifier rectifier and rectifier amplifier; Block diagram explanation of a basic CRO and a triggered sweep oscilloscope, front panel controls; impedance Bridges and Q-Meters.

Principles of working and specifications of logic probes, signature analyzer and logic analyzer, signal generator, distortion factor meter, spectrum analyzer.

#### 5. <u>Control Systems:</u>

Basic elements of control system, open and closed loop system, concept of feedback Block diagram of control system. Time lag, hysterisis, linearity concepts. Self-regulating and non-self regulating control systems. Transfer function of simple control components, single feedback configuration.

Time response of systems.

Stability Analysis Characteristics equation, Routh's table, Nyquist criterion, Relative stability, phase margin and gain margin.

Routh Hurwitz criterion, root locus techniques, Bode plot, Power plot, Gain margin and phase margin.

### 6. <u>Microprocessors</u>:

Typical organization of a microcomputer system & functions of its various blocks: Architecture of a Microprocessors; Memories and I/O Interfacing; Brief idea of M/C assembly languages, Machines & Mnemonic codes, Instruction format and Addressing mode; concept of Instruction set; programming exercises in assembly language; concept of interrupt; Data transfer techniques:— sync data transfer, interrupt driven data transfer, DMA, serial output data, serial input data.

#### Computer:

Computer and its working, types of computers, familiarization with DOS and Windows-concept of file, directory, folder, Number Systems, Data representation; Programming – Elements of a high level programming language, PASCAL, C:Use of basic data structures; Fundamentals of computer architecture, Processor design, Control unit design; memory organization. I/o system organization. Microprocessors-microprocessor architecture, instruction set and simple assembly level programming. Microprocessors based system design: typical examples. Personal computers and their typical uses, data communication principles, types and working principles of modems, Network principles,

Estary ( map.

OSI model, functions of data link layer and network layer, networking components; communications protocolsa-X.25, TCP/IP.

Database Management System – Basic concepts, entity relationship model, relational model, DBMS based on relational model.

\*\*\*\*\*\*\*

Acetember

### भर्ती अनुभाग/Recruitment Cell

कार्यालय मुख्य महाप्रबन्धक /O/o Chief General Manager, उत्तर प्रदेश (पूर्वी) परिमंडल/ UP(East) Telecom Circle हजरतगंज लखनऊ-226001/ Hazaratganj, Lucknow-226001 दूरभाष/ Telephone No.0522-2614555,2612831,2628950

फैक्स / Fax: +91-522-2616555

Admissible Amount Rs.\_

ई-मेल / E-mail: rectt\_upe@bsnl.co.in



Signature of DDO

FOR				the post of TTA-		./SI candida	ates for attending Centre.
1.	Ņame of	Applicant			:		
2.	Roll Num	nber			:		
3.	Whether	SC or ST			:		
	(Attested	d photo cop	y of the certi	ficate enclosed)	:		
		ial Address			:		
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CERTIFIE	ED THAT						
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	above to	und faise or	incorrect, ne	ecessary action as	deemed fit may b	e taken by B	SNL.
Dated:							Signature of Applica
Note:	(	`andidate w	ill have to su	bmit original ticke	et for inward journ	ev The navm	
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