भारत संचार निगम लिमिटेड
(भारत सरकार का उपक्रम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

No. 250-23/2015-Estt-III
Dated: 09.05.2016

Top Priority/Examination

To

The Chief General Manager,
Bharat Sanchar Nigam Limited*.
(*Recruiting Circles only)

Sub: Direct Recruitment of TTAs from Open market for the Recruitment Year-2015---Approval thereof.

The issue regarding direct recruitment of TTAs from open market has been engaging attention of the Management in view of demands raised by the Circle Heads owing to shortages in the cadre. Approval of the Management Committee of BSNL Board is hereby conveyed for filling up of **2700*** vacancies of TTA **(* in all the 27 Recruiting Circles as shown in Annexure-I indicating total vacancies to be filled in each Recruiting Circle)** through Direct Recruitment from open market as per provisions laid in the Recruitment Rules of TTA-2014 issued under this office letter Nos. 250-7/2013-Pers-III dated 25.08.2014. TTA being a Circle cadre w.e.f 25.08.2014, a fresh Reservation Roster at Circle level shall be maintained by the respective Circles. The demands of non-recruiting units like Project, Maintenance Regions, ITPC, NCNGN, BBNW etc. may also be met proportionately by Recruiting circles. The Recruitment Year shall be treated as 2015.

2. Normal rules on reservation for SC/ST/OBC/PH/Ex-Servicemen shall be applicable. The 3% reservation for Physically Handicapped Persons shall be made as per provisions laid in DoP&T OM No. 36035/3/2004-Estt (Res) dated 29.12.2005 and distribution of 3% reservation for PWDs shall be done as per provisions laid in DoT letter Nos. 1-8/2001-AD (SNG) dated 18.10.2001 and 21.4.2003. Point No.1, 34 and 67 of the Reservation Roster is earmarked for PWD category, which is horizontal reservation. The Backlog vacancies in PWD category, if any, which could not be filled up in previous Direct Recruitment conducted so far shall be filled up in the present DR process in addition to the current vacancies computed in this category. Accordingly, the PWD vacancies thus computed should be included in the official notification of the ensuing DR in your Circle.

Contd...2

3. The Direct Recruitment shall be conducted as per the revised Syllabus and scheme of examination prescribed vide letter No. 250-18/2008-Pers-III dated 4.9.2008. Further, instructions issued with regard to reservation for Ex-Servicemen, minimum qualifying standards vide letter Nos. 250-23/2008-Pers-III dated 29.10.2008 and 1.12.2008, and No. 250-18/2006-Pers-III (Part-2) dated 21.10.2008 for maintaining waiting list shall also hold good for the Direct Recruitment examination for the Recruitment Year 2015.

4. **All Heads of the Circles are requested to furnish category wise distribution of total vacancies (viz. SC, ST, OBC & PWD) to GM (Rectt.), BSNL Corporate Office, New Delhi immediately.** Further, communication with regard to holding of Direct Recruitment shall be notified by the Rectt. Branch. In the event of any query relating to calculation of vacancies, provisions of Recruitment Rules, eligibility of candidates, the same may be referred to the undersigned for clarifications.

Encl: Annexure-I.

(Zanal Zachariah)
Asstt. General Manager (Estt-III)
Tel: 23310401 Fax: 23725255

Copy to:

1. GM (Rectt.), BSNL CO, New Delhi for information & with the following directions:-

(i) The process Direct Recruitment shall be conducted in a centralized manner in all the designated 27 Telecom Circles on the same day and at the same time.

(ii) The candidates will be permitted to apply/appear only for one Circle in which he/she desires to serve consequent upon his/her selection.

2. **BSNL-INTRANET**

(S. Ravi Shankar)
Deputy Manager (Estt-III)
Tel: 23310401 Fax: 23725255

Bharat Sanchar Nigam Limited

Annexure-I

Circle wise distribution of TTA vacancies

S.No.	Name of the Recruiting Circle	Vacancies of TTA earmarked for each Recruiting Circle of BSNL for the RY-2015 to be filled through Direct Recruitment
1.	Punjab	400
2.	J & K	79
3.	NE-I	132
4.	Assam	116
5.	A & N	12
6.	NTR-Delhi	15
7.	Orissa	30
8.	Kerala	13
9.	Tamil Nadu	198
10.	Gujarat	206
11.	NE-II	34
12.	A.P.	176
13.	H.P.	73
14.	Chennai TD	80
15.	Haryana	160
16.	Calcutta TD	80
17.	Jharkhand*	19
18.	Rajasthan	100
19.	U.P.(East)	80
20.	U.P.(West)	80
21.	Uttarakhand	29
22.	West Bengal	115
23.	Bihar	34
24.	Maharashtra	224
25.	M.P.	78
26.	Karnataka	120
27.	Chhattisgarh	17
	Total	2700

(Zanal Zachariah)
Asstt. General Manager (Estt-III)

PERS-III SECTION
5TH FLOOR,
BHARAT SANCHAR BHAWAN,
DELHI-110001

भारत संचार निगम लिमिटेड
(भारत सरकार का उद्यम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

IndiaBroadband 2007
Linking India

No. 250-18/2006-Pers-III (Part-2)
Dated: 21.10.2008

To

All Heads of the Telecom Circles,
Bharat Sanchar Nigam Limited.

Sub: **Direct Recruitment of TTA for the recruitment year 2008---- Guidelines regarding maintaining waiting list of successful candidates.**

The issue regarding maintaining waiting list of candidates who have qualified in the Direct Recruitment examination of TTA has been considered in view of drop out of successful candidates.

It has now been decided with the approval of the Competent Authority to maintain a waiting list of the qualified candidates of DR-TTA examination 2008 to be held in 2009, on the following terms and conditions:-

(i) The respective Recruiting Circle shall maintain two lists i.e, merit list and waiting list for each SSA.

(ii) Waiting list will consist of all those candidates who have qualified the examination but do not find a place in the merit list of successful candidates.

(iii) Waiting list shall remain valid for a period of one year from the date of declaration of result or the date of notifying the DR Examination for the next recruitment year, whichever is earlier.

(iv) The list of successful candidates and the waiting list shall be shown in the websites of the respective Recruiting Circles and also information in this regard be prominently published through other media so as to enable proper dissemination of information and avoid any confusion.

(v) Circles shall clearly indicate that the appearance of a candidate's name in the waiting list does not confer any right on the candidate for claiming appointment in the company.

(vi) Circles shall issue offer letter to the successful candidates under registered post/speed post only. Such selected candidates should be clearly advised to send their willingness to take up the assignment as TTA in BSNL within 30 days of the issue of offer letter. The notice for cancellation of candidature of successful candidate, in the event of their not turning up for training /joining as TTA, may be issued under receipt, through registered post/speed post giving 15 more days time before operating the waiting list.

(vii) In the event of drop out/non-availability of successful candidates who have been sent offer letter for appointment as TTA, the waiting list may be operated to fill up only the unfilled notified vacancies arising out of dropouts of successful candidates strictly in the order of merit in the waiting list, while canceling candidature of earlier successful candidate.

(viii) These guidelines will apply for the next Recruitment year i.e. Direct Recruitment Examination of TTA 2008 that is slated to be held in the year 2009.

All the Circle Heads are requested to make all out efforts to ensure that the maintenance of the Waiting list is transparent and foolproof from all angles.

(R.K.GUPTA)
ASSTT. GENERAL MANAGER (PERS-III)
TEL: 23310401 FAX: 23725255

Copy to: -

1. PGM (IR), BSNL CO, New Delhi.
2. AGM (DE-II), BSNL CO, New Delhi.
3. Guard file.

33/c

96/c

BHARAT SANCHAR NIGAM LIMITED
(A Government of India Enterprise)

(Pers-III Section)
Corporate Office
5th Floor, Bharat Sanchar Bhawan,
Janpath, New Delhi

No. 250 23/2008-Pers-III
Dated: 1.12.2008

To

All Heads of the Telecom Circles,
Bharat Sanchar Nigam Limited,

Sub: **Direct Recruitment in the cadre of TTAs in BSNL for the Recruitment year 2008---- Clarification regarding.**

I am directed to say that references have been received from different Circles seeking clarification with regard to reservation for Ex-servicemen in the Direct Recruitment examination for TTAs. In this regard it is hereby clarified that reservation would be applicable for Ex-servicemen in accordance with the orders issued by the Central Government from time to time as prescribed under 'Saving' Clause No. 9 of the Recruitment Rules of TTA-2001. In this context the approved reference books like Swamy's Manual on Establishment & Administration/ Swamy's Compilation on Reservation & concessions may be referred to. It is also clarified that no equivalence of educational qualification is prescribed in the Recruitment Rules of TTA-2001.

With regard to imparting Pre-recruitment training for SC/ST candidates, duration of course, training center and traveling allowance etc, the matter may be taken up with SCT/Recruitment branch of the Corporate Office.

(R.K.GUPTA)
ASSTT. GENERAL MANAGER (PERS-III)
TEL: 23310401 FAX: 23725255

Copy to:-

1. Chief General Manager, BSNL, Assam Telecom Circle, Guwahati w.r.t. letter No. Rectt-3/111/2008/63 dated 24.10.2008.
2. CLO, (SCT Section), BSNL CO—a copy of CGM Assam Circle is enclosed for necessary action at your end.
3. AGM, (Rectt. Section), BSNL CO---a copy of CGM, Assam Circle is enclosed for necessary action at your end.
4. Intranet
5. Guard file/Spare copy.

RS-III SECTION
FLOOR,
BHARAT SANCHAR BHAWAN,
NEW DELHI-110001

भारत संचार निगम लिमिटेड
(भारत सरकार का उद्यम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

IndiaBroadband 2007
Linking India

No. 250-23/2008-Pers-III
Dated: 29.10.2008

To

All Heads of the Telecom Circles,
Bharat Sanchar Nigam Limited.

Sub: Direct Recruitment of TTAs for the year 2008---Clarifications thereof.

I am directed to refer to references received from different Circles seeking clarifications with regard to relaxation in respect of minimum qualifying standards in respect of various categories of candidates and relaxation of age for Ex-servicemen. The issue has been examined. It is hereby clarified that the following criterion shall be applicable in the DR of TTA for the year 2008.

(i) As per the scheme and syllabus for TTA DR Examination, there will be three parts of General Ability Test, Basic Engineering & specialization consisting of maximum marks of 20, 90 and 90 respectively. The minimum qualifying marks in each of the above three parts of the question paper will be 30% for candidates belonging to OC category and 20% for candidates belonging to OBC/SC/ST category, i.e. the minimum passing marks in each of the 3 parts in respect of OC will be 6, 27 and 27 respectively whereas in respect of OBC/SC/ST, it will be 4,18 and 18 respectively.

(ii) Ex-serviceman shall be allowed age relaxation to the extent that every Ex-Servicemen who has put in not less than six months continuous service in the Armed Forces of the Union shall be allowed to deduct the period of such service from his/her actual age and if the resultant age does not exceed the maximum age limit prescribed for the post or service for which he seeks appointment by more than three years, he/she shall be deemed to satisfy the condition regarding age limit.

This issues with the approval of the Competent Authority.

(R.K.GUPTA)
ASSTT. GENERAL MANAGER (PERS-III)
TEL: 23310401 FAX: 23725255

Copy to:-
PGM (IR), BSNL CO, New Delhi for information.

भारत संचार निगम लिमिटेड
(भारत सरकार का उद्यम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)
IndiaBroadband 2007
Linking India

81/C

No. 250-18/2008-Pers-III
Dated: 4.9.2008

To

All Heads of the Telecom Circles,
Bharat Sanchar Nigam Limited.

Sub: Forwarding of revised Syllabus and Scheme of Examination for TTA Direct Recruitment Examination in BSNL.

I am directed to enclose herewith a copy of revised Syllabus and Scheme of Examination for Direct Recruitment Examination for TTAs in BSNL for favour of further necessary action at your end please. The revised Scheme and syllabus will be effective for the Direct Recruitment examinations to be conducted in January 2009 corresponding to recruitment year 2008 onwards.

Encl: As above.

(R.K.GUPTA)
ASSTT. DIRECTOR GENERAL (PERS-III)
TEL: 23310401 FAX; 23725255

Copy to:-

1. Sr.DDG(IR), BSNL CO, New Delhi.
2. ADG (DE-II), BSNL CO, New Delhi.
3. CGM, ALTTC, Ghaziabad.
4. General Secretary, BSNLEU, New Delhi.

87/C

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:

Paper	Marks	Time allowed
PART - I GENERAL ABILITY TEST	20	
PART - II BASIC ENGINEERING	90	3 hrs.
PART - III SPECIALIZATION	90	

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:

1. 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. Applied Physics: 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 DC circuits, 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.

83/C

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 electri and electronic circuits elements. Active and passive components; semi conduc r 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 I.C. Timer (such as 555) and its working; Motivation Circuits; Time Base Circuits, Thyristory and UJT; Regulated Power Supply.

5. Digital Techniques: 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:-

1. Electrical:

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 con rolled rectifiers, inverters, choppers dual converters, cycloconverters; power electronics application in control 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.

(27)

84/.

3. 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; Bandwidth consideration of a transmission line.

4. Instruments and Measurements:

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. Control Systems:

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. Microprocessors:

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.

7. 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,

85/C

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.

****

ADS (P-III)