

BHARAT SANCHAR NIGAM LIMITED
(A Government of India Enterprise)
Office of the Chief General Manager Telecommunications
Tamilnadu Circle, Chennai 600 002

No.RET/301-10/2012 dated @ Chennai the 18- 04-2013

DIRECT RECRUITMENT FOR TELECOM TECHNICAL ASSISTANTS (TTA)

Applications are invited from the eligible Indian citizens for the post of Telecom Technical Assistant (TTA) in the non-executive category in BSNL,T.N.Circle. Selection of candidates will be through a Competitive Examination to be held on **30.06.2013**. The number of vacancies to be filled up in the SSAs (Secondary Switching Areas) of Tamilnadu Telecom Circle are as under.

1. VACANCIES (Secondary Switching Area Wise) :

Name of SSA (Secondary Switching Area)	Vacancies					Address for sending applications
	OC	SC	ST	OBC	TOTAL	
COONOOR	2	0	0	0	2	General Manager, Telecom, BSNL, Doorsanchar Bhavan Grays Hill, Coonoor – 643 101.
COIMBATORE	1	0	0	1	2	Principal General Manager, Telecom BSNL, No.2 Bharathi Park Second Street, Coimbatore 641 043
CUDDALORE	1	1	0	0	2	General Manager, Telecom, BSNL, Hospital Road, Cuddalore 607 001
DHARMAPURI	1	0	0	0	1	General Manager, Telecom, BSNL, Salem Main Road, Bharathipuram, Dharmapuri 636 705
ERODE	0	1	0	0	1	General Manager, Telecom. BSNL Gandhiji Road, Erode – 638 001.
KARAIKUDI	1	0	0	0	1	General Manager, Telecom, BSNL, No. 22, Nethaji Street, Opp to New Bus Stand, Karaikudi 630 001
KUMBAKONAM	1	0	0	0	1	General Manager, Telecom, BSNL, Cauvery River Delta Area , Thangavilas Building, Mayiladuthurai Road, Kumbakonam 612 001

MADURAI	1	0	0	0	1	General Manager, Telecom, BSNL, 2 V P Rathinasamy Nadar Road, Bibi Kulam, Madurai 625 002
NAGERCOIL	1	0	0	0	1	General Manager, Telecom, BSNL, BSNL Bhavan, Court Road, Nagercoil 629 001
PONDICHERRY	1	1	0	0	2	General Manager, Telecom, BSNL, New CTO Building Rengapillai Street, Pondicherry 605 001
SALEM	2	0	0	0	2	General Manager, Telecom, BSNL, No. 1, Seerangapalayam West Street, Salem 636 007
THANJAVUR	1	0	0	1	2	General Manager, Telecom, BSNL, BSNL Complex, Ram Nagar, Balaji Nagar Thanjavur 613 007.
TIRUNELVELI	1	0	0	0	1	General Manager, Telecom, BSNL, Bye Pass Road, Vannarpet, Tirunelveli 627 003
TRICHY	2	0	0	0	2	Principal General Manager, Telecom, BSNL, Promenade Road 41 Bharathidasan Salai, Trichy 620 001
TUTICORIN	1	0	0	1	2	General Manager, Telecom, BSNL, 176, Palayamkottai Road, Tuticorin 628 003
VELLORE	1	0	0	1	2	General Manager, Telecom, BSNL, Market Committee Building, Toll Gate, Vellore 632 001
VIRUDHUNAGAR	2	0	0	0	2	General Manager Telecom. BSNL 131/1, Kutcheri Road Virudhunagar – 626 001

(Vacancies are provisional and are subject to change)

Normal rules on reservation for SC/ST/OBC/PWD/ Ex-Serviceman shall be applicable as per instructions of Government of India issued from time to time.

2. SCALE OF PAY : The post of TTA is in the IDA pay scale of Rupees 13600-25420/- plus usual allowances as per the rules.

3. ELIGIBILITY:

a) NATIONALITY: Only Indian National would be eligible to apply.

- b) **AGE** : 18 to 27 years **as on 13.05.2013 i.e. the last date of receipt of application.** The upper age is relaxable by 5 years for SC/ST and 3 years for OBC candidates. Ex-Servicemen and PWD are eligible for the relaxation in age limit as prescribed by the Central Government. The age is relaxable for BSNL Employees, upto 40 years for OC, 43 years for OBC and 45 years for SC/ST.
- c) **EDUCATIONAL QUALIFICATION** : Applicant must Possess as on 13.05.2013 (ie) last date of receipt of application, The educational qualifications in any one of the following disciplines from a recognized Institute /University.
- (A) 3 years Engineering Diploma in following disciplines.
- i) Telecommunications Engineering
 - ii) Electronics Engineering
 - iii) Electrical Engineering
 - iv) Radio Engineering
 - v) Computer Engineering
 - vi) Information Technology
 - vi) Instruments Technology
- Candidates possessing higher qualification in the eligible stream(A) above are eligible to appear for the examination.

B. M.Sc (Electronics) from a recognized institution /university.

4. EXAMINATION FEE :a) Rs.500/- (Rupees Five Hundred only) in the form of Bank Demand Draft drawn in favour of Accounts Officer(cash), O/o GM ,BSNL of respective SSA. (or) Original Cash receipt of Rs.500/- paid at the departmental cash counter, of respective SSA Head quarters.

b) No Fee for PWD (Persons with disabled) /SC/ST candidates.

c) FEES ONCE PAID WILL NOT BE REFUNDED UNDER ANY CIRCUMSTANCES NOR CAN IT BE HELD IN RESERVE FOR ANY OTHER EXAMINATION OR SELECTION.

5. METHOD OF SELECTION : Through a Competitive Examination to be conducted on 30.06.2013, followed by a medical test. Appointment and posting will be subject to successful completion of pre-appointment training.

6. SCHEDULE OF EXAMINATION :

Day & Date	Subject	Marks	Time (IST)
30.06.2013 (Sunday)	PART-I:General Ability Test	20	1000 Hrs to 1300 Hrs
	PART-II : Basic Engineering	90	
	PART-III : Specialisation	90	

The questions will be of objective type. Each question carries one mark and there will be negative marking. For each wrong answer 25% mark of that question will be deducted.

7. MINIMUM QUALIFYING STANDARDS: BSNL shall fix minimum qualifying marks for OC/OBC/SC/ST etc., Candidates obtaining less than minimum qualifying marks shall not be considered for inclusion in the merit-list. The merit-list will be drawn up depending on the vacancies. The appearance of the name in the merit-list does not confer any right to the candidate for employment. A final call letter/appointment letter will be issued to the candidate after completion of all other formalities.

8. LAST DATE : Applications should be sent to the concerned SSA's PGMTs/ GMTs so as to reach them **on or before 13.05.2013**. Applications received after the due date will be rejected and no further correspondence will be entertained.

9. REJECTION : Applications received without the required Examination fee in the form of Demand Draft / BSNL Cash Receipts without attested copies of certificates, the applications received after the due date and incomplete applications will summarily be rejected. No further correspondence will be entertained in this regard.

10. REGISTRATION IN EMPLOYMENT EXCHANGE: Registration in Employment Exchange is not mandatory.

11. BOND & TRAINING: All candidates recruited against the vacancies for direct recruitment shall execute a Bond in the Proforma as prescribed by the Company to serve in BSNL for a period of 2 years from the date of their appointment as Telecom Technical Assistant. The candidates selected have to undergo a training for a

period of 10 weeks as per the training plan laid down by the Company before their appointment as Telecom Technical Assistant . During the period of training, stipend will be paid by BSNL, as per the rules in force.

12. DISQUALIFICATION: No person, -
(a) who has entered into or contracted a marriage with a person; having a spouse living or
(b) who having a spouse living, has entered into or contracted a marriage with any person,
shall be eligible for appointment to the said post provided that the Company may if satisfied that such marriage is permissible under the personal law applicable to such person and the other party to the marriage and that there are other grounds for so doing exempt any person from the operation of this rule.

13. PROBATION: The candidates appointed shall remain on probation for a period of two years.

14. ALREADY EMPLOYED IN GOVT. SERVICE: Candidates working in Government Service Central / State / Public Sector undertakings should send their application through the Head of their Office/ Department so as to reach the concerned SSA within the due date. Application received after the due date will summarily be rejected.

15. Candidates are advised to send application to **ONE SSA** only and they will be considered for vacancies of that SSA only and they will have to write the examination in the respective Examination centre of the SSA where they have applied. No change of examination centre will be entertained.

16. BSNL Reserves the Right to amend any clause in this notification in future according to the rules and regulations prevailing at that time.

17. APPLICATION FORM: The specimen of the application form is enclosed. The same may be neatly typed . The envelop containing the application form duly filled should be superscribed as "APPLICATION FOR THE POST OF TELECOM TECHNICAL ASSISTANT UNDER DIRECT RECRUITMENT -2012" **in bold letters on top of the envelope.**

The applications complete in all respect along with the draft drawn towards examination fee should be sent by Regd Post/Speed Post/by Hand to the SSA concerned.

Hall Permits will be issued to the eligible candidates by the concerned SSA.

18. Any dispute in regard to the recruitment will be subject to the Courts/ Tribunals having jurisdiction over the place of concerned Unit/Office of BSNL where the candidate submits his/her application.

All information regarding the examination will be published in this website and all applicants are requested to visit the site frequently.

LIST OF ENCLOSURES ALONG WITH THE APPLICATION

1. Two identical spare photographs with the name of the candidate on the reverse.
2. Bank Demand Draft for Rs.500/-(Rupees Five Hundred only) drawn in favour of Accounts Officer(cash), O/o GM, BSNL of respective SSA. (Not required for SC/ST Candidates) or BSNL Cash receipt
3. Attested copy of Matriculation/SSLC certificate for proof of age.
4. Attested copy of Diploma / BE/B.Tech Certificate.
5. Attested copy of Community Certificate in respect of SC/ST/OBC candidates. OBC candidates should produce valid Community Certificates as per the PROFORMA for appointment of OBCs in Central Government Services as per Department of Personnel & Training OM No.36012/22/93-Estt.(SCT) dated 08.09.1993.
- 6.No Objection Certificate from the present employer.
7. Two self addressed and Rs 10 stamped envelopes of 27 x 12 cms of size.
8. If Ex-Serviceman, attested copy of Discharge Certificate and other relevant service certificates.

Note : Please ensure that all enclosures are annexed to the application properly. No Column in the application should be left unfilled. (Say YES/NO/NOT APPLICABLE)

The details of syllabus for the examination is given below.

B.S.N.L Syllabus for TTA Examination – 30.06.2013.

PART-I: GENERAL ABILITY TEST – 20 MARKS

Detailed syllabus

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, Acoustic, 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, Kirchhoff's voltage, current laws and their applications in simple DC circuits, Basic Magnetism; Electric Magnetism; Electromagnetic Induction; Concept of alternating voltage & current; Cells and Batteries, Voltage and Current Sources, Thevenin's theorem, Norton's theorem and their applications.
- 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 & electronics circuits elements. Active and passive components; semi conductor Physics; Semiconductor Diode; Bipolar transistor & their circuits; Transistor Biasing stabilisation of operating point; Single stage transistor amplifier; field effect transistor, Mosfet circuits application.

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

Block diagram of IC. Timer (such as 555) and its working; Motivation Circuits; Time Base Circuits; Thyristor and UT Regulated Power Supply.

5. Digital Techniques: Applications and advantages of digital system; number system (binary and hexadecimal); Logic Gates; Logic Simplification; 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 phase's 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 chargers, batteries, servo and stepper motor, contactor control circuits, switchgear, relays, protection devices & schemes, substation, protective relaying, circuit breaker, generator protection. Transformer protection, feeder & lightning protection feeder & bus bar protection, lightning arrestor, earthing, voltage stabilizer & regulators, power control devices & circuits phase controlled rectifiers, inverters, choppers dual converters cycloconverters; power electronics application in control of drives, refrigeration and air conditioning.

2. Communication:

Modulation and de- modulation – and principles and operation of various type of AM, FM and PM modulator/demodulator pulse modulation – TDM, PAM, PPM, PWM, Multiplexing. Principle and applications of PCM. Introduction of basic block diagram of digital and data communication system. Coding error detection and correction techniques; digital modulation techniques – ASK, ICW, FSK, PSK; Characteristic/ working of data transmission circuits; UART, USART; Modems ; protocols and their function; brief idea of ISDN interfaces; local area Network, carrier Telephony – futures of carrier telephone system. Microwave Engineering; Microwave Devices; Waves –guides; microwaves component; microwave Antennas; Microwaves communication systems- block diagram and working principle of microwave communication link.

3 Network, Filters and Transmission Lines:

Two port network; Attenuators; Filters; Transmission Lines and their applications characteristic impedance of line; concept of reflection 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 System:

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

6. Time response of systems.

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

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

7. Microprocessors:

Typical organization of a microprocessor 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.

8. Computer:

Computer and its working, types of computers, familiarisation with DOS and Windows, concept of file, directory, folder, number system. 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 Organisation. I/O system organisation. Microprocessors - Microprocessors 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, OSI model, functions of data link layer and network layer, networking components; Communication protocol- X.25, TCP/IP.

9. Database Management System:

Basic concepts, entity relationship model, relational model, DBMS based on relational model.

(To be typed in A 4 size paper on one side only)

APPLICATION FOR THE POST OF TELECOM TECHNICAL ASSISTANT (TTA)

(Note : To be filled by the candidate in English)

Affix your recently taken passport size signed photograph, attested by a Gazetted Officer.

1. Name of the candidate :
(In BLOCK Letters)
2. Father /Husband Name :
3. Postal address in full with Pincode :
 - a. Present Address :
 - b. Permanent Address :
4. Nationality :
5. Date of Birth as in the School Certificate :
(Attested copy should be attached)
6. a) Age as on 13.05.2013 :
b) Whether claiming age relaxation?: Yes/No
If Yes, under what category,
(Write the relevant category given below)
 - i) BSNL Employee
 - ii) SC/ST/OBC/Ex-Serviceman/PWD
7. Name of SSA (Secondary Switching Area) :
for which application submitted:
8. a) Community (in respect of SC/ST/OBC :
Attested copy of Community certificate
to be enclosed)
 - b) Ex-serviceman (Attested copy of discharge:
certificate to be attached)

9. Gender:[Male / Female] :
10. Educational Qualifications :
(Attested copy to be enclosed)
University/ Institute & Month & yr of Passing
11. Whether employed in Central Govt./State Govt./ :
Public Sector Undertaking (PSU); Give
details (the application must be forwarded
by the Present employer)
12. Particulars of Bank Demand Draft / Cash receipt
DD No and date enclosed :

I, _____ certify that the above particulars are true to the best of my knowledge and belief. I understand that in the event of any particulars / information given above are found to be false or incorrect, my candidature for the post of Telecom Technical Assistant is liable to be rejected or cancelled and in the event of any misstatement or discrepancy in the particulars being detected after my appointment, my services are liable to be terminated forthwith without any notice to me.

Place :

Date :

SIGNATURE OF THE CANDIDATE

Annexure-B

BHARAT SANCHAR NIGAM LIMITED
_____ SSA

OPEN COMPETITIVE EXAMINATION FOR DIRECT
RECRUITMENT OF TTAs in BSNL TAMILNADU CIRCLE
ACKNOWLEDGEMENT SLIP

Received application for the open Competitive Examination for Direct
Recruitment of TTAs in BSNL Tamilnadu Circle from
Mr/Mrs/Ms_____ Your Application is registered under
Reg No :_____.

Signature with date _____

O/o General Manager, BSNL, _____ SSA

(A Government of India Enterprise)
Office of Chief General Manager
Tamilnadu Telecom. Circle

Form for reimbursement of Travelling Allowance in respect of SC/ST candidates attending Written Test Exam. for the post of TTA DR 2012 at _____ Centre.

1. Name of Applicant :
2. Roll Number :
3. Whether SC or ST
(Attested photocopy of the certificate enclosed):
4. Residential Address :
- (As given in Application Form)
5. Address from where journey has been performed :
6. Whether employed or not :
7. If employed, whether in Central/State Govt. or Central/State Govt. Corporation, Public Sector Undertaking. Private Sector etc :
8. Details of Journey and Rail/Bus fare etc :

Date of Journey	From	To	Mode of Journey	Class of Travel Bus/ Rail	Distance travelled (one side)	Ticket number	Fare (in Rs.)

CERTIFIED THAT

- a) I am unemployed and a certificate of Unemployment issued by MP/MLA or a Gazetted Officer of the place where I normally reside is enclosed.
- b) I have not claimed/will not claim T.A. for this journey from any other source.
- c) I have actually travelled by the shortest route and by the class/mode for which I have preferred the claim.
- d) I do hereby declare that all the statements made in the application are true, complete and correct to the best of my knowledge and belief. I understand that in the event of any particular information given above found false or incorrect, necessary action as deemed fit may be taken by BSNL.

Dated:

Signature of Applicant

Note: 1. Candidate will have to submit original ticket for inward journey.
The payment will be made by BSNL through cheque.

For use of BSNL Verified by

(Signature of Designated Officer of BSNL)

Admissible Amount Rs. _____

Signature of DDO