No. Rectt-3/156/2014

BHARAT SANCHAR NIGAM LIMITED

(A Government of India Enterprise)

Recruitment of Junior Telecom Officers (Telecom) under Special Recruitment Drive (SRD) -2013 for

Persons with Disabilities (PWD)

CLOSING DATE OF RECEIPT OF APPLICATION: 05-09-2014 EXAMINATION DATE: 23-11-2014

Bharat Sanchar Nigam Ltd. [BSNL], Assam Telecom Circle, Guwahati will fill up 05 (Five) [subject to variation depending on the availability of vacancies] backlog vacancies of Junior Telecom Officers reserved for Persons with Disabilities(PWD) through an open competitive examination to be held on **23-11-2014** as per the details given below:-

Number of vacancies	PWD(LI)	PWD(HI)	Total
JTO(Telecom)	Nil	05	05

Candidates with following physical disability will be permitted:

- i. Hearing Impairment (HI) Partially Deaf
- ii. Locomotive Impairment (LI) one arm or one leg or both legs affected

(Only such persons would be eligible for reservations/concessions/benefits who suffer from not less than 40% of relevant disability. The vacancies are interchangeable i.e. if vacancy of one category of disability remains unfilled, it may be filled by person of other category of disability)

Scale of Pay: The Junior Telecom Officer shall be appointed in the IDA pay scale of Rs 16400-40500 with annual increment @ 3% of basic pay plus HRA, Perks, Medical Benefits, LTC etc. as admissible as per company rules.

The emolument at the minimum of the pay scale will be around Rs 20,500/- excluding HRA, perks, medical benefits, LTC etc.

2. Selection for a Particular Circle & Service liability

The BSNL comprises of a number of territorial Circles and functional Circles. A list of the existing territorial Circles, their respective headquarters etc., appears in *Annexure 'A'*.

The Junior Telecom Officer is a Circle-based Cadre and the candidates would be selected against the vacancies of **Assam Telecom Circle** and required to serve **minimum of 5 years in Assam Telecom Circle** only or until they are promoted to All India Cadre, whichever is earlier. However, BSNL has the right to post any selected J.T.O. to any of the Circles either temporarily or on permanent basis. The decision of BSNL in this regard shall be final and binding. The service conditions, seniority etc. of selected candidates will be determined as per prevailing rules of the Corporation from time to time.

- 3. Eligibility
- **3.1**. **Nationality**: Only Indian Nationals would be eligible to apply.

3.2. Educational Qualifications:

Applicant must possess as on **31-12-2014** Bachelor of Engineering/Bachelor of Technology or equivalent Engineering degree in any of the following disciplines from a recognized engineering college/university:

- i. Telecommunication,
- ii. Electronics,
- iii. Radio.
- iv. Computer,
- v. Electrical.
- vi. IT (Information Technology)
- vii. Instrumentation

Candidates appearing in the final year degree examination may also apply provided they possess the required educational qualification by 31.12.2014.

- **3.3(a)** Age: The external applicant for JTOs(Telecom) should not be more than 30 years of age on the closing date for receipt of applications. However, the upper age-limit is relaxable as per standing instructions of Government of India on this subject for:
 - i) For PWD candidates up to 10 years for OC candidate; 15 years for SC/ST and 13 years for OBC
 - ii) Ex-Service Men will get the benefit of age relaxation as per central government rules:
 - iii) For Residents of J&K Relaxation shall be in accordance with DoP&T's Notification No.15012/7/1991-Estt.(D) dated. 7.12.2007 pertaining to "Residents of State of Jammu and Kashmir (Relaxation of Upper Age Limit for Recruitment to Central Civil Services & Posts) Rules 1997".
- **3.3(b)**i) For BSNL employees the upper age-limit is relaxable by up to 5 years in accordance with the instructions or orders issued by the BSNL;
 - ii) Govt. servants up to 5 years in accordance with the instructions or orders issued by the Central Govt.;
- Note I: Candidates belonging to SC/ST/OBC who are also covered under any other clause of 3(a) above, viz those coming under the category of Ex-Servicemen, Persons domiciled in the state of J&K will be eligible for grant of cumulative age relaxation under both the categories. The candidates covered under clause 3(b) will get the maximum benefit that he or she will be getting under clause 3(a) or 3(b).
- Note II: The date of birth entered in matriculation or Secondary School Leaving Certificate or in a certificate recognized by an Indian University as equivalent to Matriculation or in an extract from a Register of Matriculates maintained by a University which extract must be certified by the proper authority of the University or in the Higher Secondary or an equivalent examination certificate. The certificates are required to be submitted only at the time of appointment. No other document relating to age like horoscopes, affidavit, birth extracts from Municipal Corporation, Service records and the like will be accepted.
 - 3.4. Further in respect of apprentices who have undergone apprentice training in BSNL successfully, there will be following provision:-

- (a) An apprentice will be required to compete in the common competitive examination conducted by BSNL along with other direct candidates and preference to the apprentices over non-apprentices direct candidates will be given only if apprentices secure equal place in merit in select zone and all other eligibility conditions being equal.
- (b) The apprentices would not be required to get her/his name sponsored by any employment exchange.
- (c) The apprentices would be entitled to age relaxation to the extent of the period for which the apprentice had undergone training as apprentice in the BSNL.

4. Mode of selection and nature of Question Paper

The mode of selection is through Open Competitive Examination. The examination will be of three hours duration with one Question Paper containing the following three sections:-

For JTOs(Telecom)

Section-I: Engineering stream : 50 questions

Section-II: Engineering stream : 50 questions

Section-III: General Ability Test : 20 questions

The Question Paper will be fully objective type with multiple options as answers to each question. The standard of paper in engineering subjects will be that of Engineering Examination of an Indian University.

However, there would be no separate time fixed for attempting the separate sections. Detailed syllabus for JTOs appears at **Annexure 'B'**.

5. Minimum qualifying standards

BSNL may fix at its discretion minimum qualifying marks for each section as well as in the aggregate. Candidates obtaining less than minimum-qualifying marks in any of the sections or in aggregate shall not be considered for inclusion in the merit-list.

BSNL reserves the right to change the number of vacancies.

The appearance of the name in the merit-list does not confer any right on the candidate for employment. A final call letter/ appointment letter will be issued to the candidate after completion of all other formalities.

No request for revaluation of answer books shall be entertained in any case or under any circumstances.

6. Choice of Examination Centre

The examination centre will be the Circle Headquarters city i.e. at **GUWAHATI**. Examination centre may be shifted if required at the sole discretion of BSNL.

7. Application Form

The specimen of the application form is included in this advertisement. Neatly typed [only on one side of paper] copy in A4 size [30 cms. X 20 cms.] may be downloaded for making application. The completed application form should be sent by Registered post to the **DGM** (**Admn/HR**), **O/o CGMT**, **BSNL**, **Assam Telecom Circle**, 3rd **Floor**, **BSNL Bhawan**, **Panbazar**, **Guwahati-781 001**. The envelope containing application form should be marked "Application for J.T.O.(Telecom) SRD Examination-2013 for PWD" in bold letters on top of the envelope.

8. No Fee is payable.

9. Closing date for receipt of Application Forms

Application forms complete in every respect must reach on or before 05-09-2014.

Applications received after the closing date or incomplete in any respect shall be summarily rejected and no communication in respect of the rejected application forms shall be entertained. **BSNL shall not be responsible for any postal delay.**

The applicants would be admitted to the examination on the basis of the information furnished by them in their application form. They are, therefore, advised to ensure that they fulfil all eligibility conditions before applying. In case it is found at a later stage that the information furnished by an applicant is false or an applicant does not fulfil any of the eligibility conditions, the candidature of such applicants would be cancelled and no correspondence in this regard would be entertained. Issuance of an admit card for the examination will NOT confer any right for appointment. Appointment will be solely subject to fulfilment of all eligibility conditions.

10. Training and Bond

All candidates provisionally recruited shall execute Bonds in the format specified by the BSNL indicating their willingness to serve the Assam Circle for a period of at least 5 years from the date of their appointment as JTOs (Telecom). All candidates shall, before their appointment as JTOs (Telecom) have to successfully undergo prescribed training as per the training plan laid down and amended by the Company from time to time.

11. List of enclosures

- a. Two identical passport size photographs out of which one should be pasted (not stapled or pinned) on the application form, duly attested by the candidate and the other, attached to the application (not to be pasted or attested). One identical photograph to be retained by the applicant for Admit Card purpose.
- b. Two self addressed unstamped envelopes of 27 x 12 cms size
- c. Medical certificate in respect of Physically Disabled candidates in the prescribed format as at **Annexure C**.
- d. Certificate of Apprentice training if undertaken in BSNL successfully

12 **Disqualifications**: No person

- 12.1 who has entered into or contracted a marriage with a person having a spouse living, or
- 12.2 who, having a spouse living, has entered into or contracted marriage with any person;

shall be eligible for appointment to the post of JTO: Provided that BSNL may, if satisfied that such marriage is permissible under the personal law applicable to such person and the other party to the marriage and there are other grounds for so doing, exempt any person from the operation of this rule.

13. Admit Card:

Admit cards will be issued to eligible candidates only, which will be uploaded on the website www.assam.bsnl.co.in around one month before the scheduled date of examination. The same may be downloaded from this site. No manual Admit Card will be issued under any circumstances.

14. No request for withdrawal of candidature received from a candidate after he has submitted his application will be entertained under any circumstances. Any dispute in regard to the recruitment will be subject to the Courts/Tribunals having jurisdiction over the place of Assam Telecom Circle office of BSNL where the candidate appearing in the examination.

NOTE:

- 1. Candidates in their interest are advised to refer to the BSNL website <u>www.assam.bsnl.co.in</u> from time to time for any further instruction/information.
- 2. For any query/information the applicant may contact on telephone number **0361-2736353** during office hours or send e- mail to **asrecttcell@bsnl.co.in**
- 3. The application form of unsuccessful candidates and also that of ineligible candidates shall be retained for a period of three months from the date of declaration of the result.
- 4. Candidates are advised to mention invariably his/her mobile no. / E-mail address in the space specified in the application form.



BHARAT SANCHAR NIGAM LIMITED

[A Government of India Enterprise]

<u>APPLICATION FOR RECRUITMENT OF JUNIOR TELECOM OFFICER (JTO) TELECOM IN BSNL (SRD-2013 for PWD)</u>

IMPORTANT NOTES: (I) BEFORE FILLING THIS FORM, READ DETAILED ADVERTISEMENT CAREFULLY. (II) ALL ENTRIES SHOULD BE MADE IN CAPITAL LETTERS.

1.	1. Post applied for:																									
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			attest	tation
Mobile No.	Tele. No (with STD Code):			
Mail ID:				
			Signature o	f Candidate 🔨
3 Educational Qualification	on (B.E./B. Tech & Above).			
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Father's/Husband's N	ame: :			
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	ted 8.9.1993. It is also declared the in column 3 of the Schedule to the			
	d vide OM No. 36033/3/2004-Estt.			

12. Address for correspondence (in capital letters)

DECLARATION TO BE SIGNED BY THE APPLICANT

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 being found false or incorrect, my candidature for the post of Junior Telecom Officer is liable to be rejected or cancelled and in the event of any mis-statement or discrepancy in the particulars being detected after my appointment, my services are liable to be terminated forthwith without any notice to me. I am willing to serve anywhere in India. I agree BSNL has the right to post/transfer me to any part of the country at their discretion. I understand that if appointed I would have to serve the Assam Telecom Circle for the period of five years.

I also understand that if appointed, I would rank junior to any JTO who had been appointed earlier by the erstwhile DoT/DTS/DTO or BSNL or any other candidate who had already qualified in the JTO examination but not appointed as JTO by BSNL so far.

Place:	
Date:	(Signature of the Applicant)

<u>List of the Territorial Telecom Circles with their respective headquarters:</u>

Sl.No	Name of the Territorial Circle	Address to whom the application is to be sent/Examination Centre City
	Territorial entite	Schil Examination Centre City
(1)	(2)	(3)
1.	Andhra Pradesh	Hyderabad
2.	Andaman & Nicobar	Port Blair
3.	Assam	Guwahati
4.	Bihar	Patna
5.	Calcutta Telephones District	Kolkata
6.	Chattisgarh	Raipur
7.	Chennai Telephone District	Chennai
8.	Gujarat	Ahmedabad
9.	Haryana	Ambala Cantt
10.	Himachal Pradesh	Shimla
11.	Jammu & Kashmir	Jammu
12.	Jharkhand	Ranchi
13.	Karnataka	Bangalore
14.	Kerala	Thiruvananthapuram
15.	Madhya Pradesh	Bhopal
16.	Maharashtra	Mumbai
17.	Northern Telecom	New Delhi
	Region [New Delhi]	
18.	North East-I	Shillong, Meghalaya
	[Meghalaya, Mizoram	
	& Tripura]	
19.	North East-II	Dimapur, Nagaland.
	[Arunachal Pradesh,	
	Nagaland & Manipur]	
20.	Orissa	Bhubaneswar
21.	Punjab	Chandigarh
22.	Rajasthan	Jaipur
23.	Tamilnadu	Chennai
24.	Uttar Pradesh [East]	Lucknow
25.	Uttar Pradesh [West]	Meerut
26.	Uttaranchal	Dehradun
27.	West Bengal	Kolkata

Scheme and Syllabus for the Recruitment of Junior Telecom Officers(Telecom)

For Direct Recruitment of Junior Telecom Officers, an objective type Examination of 3 hours duration consisting of following sectional papers will be conducted:

SCHEME

- A. Engineering Stream Section I
- B. Engineering Stream Section II
- C. General Ability Test Section III
- 1. The standard of paper in engineering subjects will be that of Engineering Degree Examination of an Indian University.
- 2. In the general ability test, special attention will be paid to assess the candidate's capacity for general awareness. The standard of paper in general ability test will be such as may be expected of an Engineering Graduate.
- 3. The syllabus for engineering stream papers will be as given below.

SYLLABUS

SECTION - I

1. Materials and components

Structure and properties of Electronic Engineering materials, Conductors, Semiconductors and Insulators, Magnetic, Ferroelectric, Piezoelectric, Ceramic, Optical and Superconducting materials. Passive components and characteristics, Resistors, Capacitors and Inductors; Ferrites, Quartz crystal, Ceramic resonators, Electromagnetic and Electromechanical components.

2. Physical Electronics, Electronic Devices and ICs

Electrons and holes in semiconductors, Carrier Statistics, Mechanics of current flow in a semi-conductor, Hall effect; Junction theory; Different types of diodes and their characteristics; Bipolar Junction transistor; Field effect transistors; Power switching devices

like SCRs, CTOs, power MOSFETs; Basics of ICs-bipolar, MOS and CMOS types; Basics of Opto Electronics.

3. Network theory

Network analysis techniques: Network theorem, transcient and steady state sinusoidal response, Transmission criteria: delay and rise time Elmore's and other definition, effect of cascading. Elements of network synthesis.

4. Electromagnetic Theory

Transmission lines: basic theory, standing waves, matching applications, micro strip lines; Basics of waveguides and resonators; Elements of antenna theory.

5. Electronic Measurements and instrumentation

Basic concepts, standards and error analysis; Measurements of basic electrical quantities and parameters; Electronic measuring instruments and their principles of working: analog and digital, comparison, characteristics, applications. Transducers; Electronic measurements of non-electrical quantities like temperature, pressure, humidity etc. Basics of telemetry for industrial use.

6. Power Electronics

Power Semiconductor devices, Thyristor, Power transistor, MOSFETs, Characteristics and operation. AC to DC convertors; 1-Phase and 3-phase DC to DC Convertors.

AC regulators. Thyristor controlled reactors, switched capacitor networks.

Inverters: Single-phase and 3-phase. Pulse width modulation. Sinusoidal modulation with uniform sampling. Switched mode power supplies.

SECTION-II

1. Analog Electronic Circuits

Transistor biasing and stabilization, Small Signal analysis. Power amplifiers. Frequency response, Wide band techniques, Feedback amplifiers. Tuned amplifiers. Oscillators.

Rectifiers and power supplies. Operational Amplifier, other linear integrated circuits and applications. Pulse shaping circuits and waveform generators.

2. <u>Digital Electronic Circuits</u>

Transistor as a switching element; Boolean algebra, simplification of Boolean functions, Karnaugh Map and applications; IC Logic gates and their characteristics; IC logic families: DTL, TTL, ECL, NMOS, PMOS and CMOS gates and their comparison; Combinational logic circuits; Half adder, full adder; Digital Compartor; Multiplexer Demultiplexer; ROM and their applications. Flip-flops, R-S, J-K, D and T flip-flops; Different types of counters and registers; waveform generators. A/D and D/A convertors. Semiconductor memories.

3. <u>Control Systems</u>

Transient and steady state response of control systems; Effect of feedback on stability and sensitivity, Root locus techniques; Frequency response analysis. Concepts of gain and phase margins; Constant-M and Constant-N Nichol's Chart; Approximation of transient response from Constant-N Nichol's Chart; Approximation of transient response from closed loop frequency response; Design of Control Systems, Compensators; Industrial controllers.

4. <u>Communication systems</u>

Basic information theory: Modulation and detection in analogue and digital systems; Sampling and data reconstruction. Quantization & Coding; Time division and frequency division multiplexing; Equalisation; Optical Communication: in free space & fibre optic; Propagation of signals at HF, VHF, UHF and microwave frequency; Satellite communication.

5. <u>Microwave Engineering</u>

Microwave Tubes and solid state devices, Microwave generation and amplifiers, Waveguides and other Microwave Components and Circuits, Microstrip circuits, Microwave antennas, Microwave Measurements, MASERS LASERS; Microwave Propogation. Microwave Communication Systems-terrestrial and satellite based.

5. Computer Engineering

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. Personal computers and their typical uses.

7. <u>Microprocessors</u>

Microprocessor architecture - Instruction set and simple assembly language programming. Interfacing for memory and I/O. Applications of Microprocessors in Telecommunications and power system.

SECTION-III

General ability test

The candidate's comprehension and understanding of General English shall be tested through simple exercises. Questions on knowledge of current events and of such matter of everyday observation and experience in their scientific aspects as may be expected of an educated person. Questions will also be included on events and developments in Telecommunications, History of India and Geography. These will be of a nature, which can be answered without special study by an educated person.

NAME & ADDRESS OF THE INSTITUTE/HOSPITAL

	Certificate No.		Date
	DISA	ABILITY CERTIFICAT	<u>re</u>
			Recent Photograph of the candidate showing the disability duly attested by the Chairperson of the Medical Board.
Shri/Sn Shri	This is nt/Kums) is suffering	. agesex.	son/wife/daughter of identification
A.	Locomotors or cerebral	palsy:	
	BL – Both legs affected but not a OL – One leg affected (right or lef		
		(b) Weakness of grip	
		(c) Ataxic	
(iii)	BH - Stiff back and hips (Cannot s	sit or stoop)	
(iv)	MW – Muscular weakness and lin	mited physical endurance	<i>.</i> .
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)	

	ment of this	ogressive/non-progressive/likely to i case is not recommended/ is r's months*.							
3.	Percentage of d	isability in his/her case is per	cent.						
4.	Sh./Smt./Kum.	meets th	e following physical requirem	ents					
for dis	scharge of his/her	duties:-							
(i)	F-can perform v	work by manipulating with fingers.	Yes/No						
(ii)	PP-can perform	work by pulling and pushing.	Yes/No						
(iii)	L-can perform	work by lifting.	Yes/No						
(iv)	KC-can perform	n work by kneeling and crouching.	Yes/No						
(v)	B-can perform	work by bending.	Yes/No						
(vi)	S-can perform v	work by sitting.	Yes/No						
(vii)	ST-can perform	work by standing.	Yes/No						
(viii)	W-can perform	work by walking.	Yes/No						
(ix)		work by seeing.	Yes/No						
(x)	H-can perform	work by hearing/speaking.	Yes/No						
(xi)	RW-can perform	n work by reading and writing.	Yes/No						
(Dr) (Dr) (Dr)					
	Member	Member	Chairperson						
M	edical Board	Medical Board	Medical Board						
			Countersigned	l by the					

Countersigned by the Medical superintendent/CMO/Head of Hospital (with seal)

^{*}Strike out which is not applicable.