



**NORTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED.
VIDHYUTH BHAVAN :: CORPORATE OFFICE :: WARANGAL.**

NOTIFICATION

**DIRECT RECRUITMENT FOR THE POSTS OF
ASSISTANT ENGINEER (ELECT., CIVIL AND CS/IT)**

Northern Power Distribution Company of Telangana Ltd (TSNPDCL) incorporated under the Companies Act, 1956 as a Public Limited Company on 30-03-2000 with head quarters at Warangal to carry out electricity distribution business as part of the unbundling of erstwhile A.P.S.E.B which caters the electricity requirements of Warangal, Karminagar, Khammam, Nizamabad and Adilabad Districts invites applications from the eligible and qualified candidates for the post of "Assistant Engineer(Electl.,Civil and CS/IT).

PARA-I :

1. Applications are invited On-line from qualified candidates through the proforma Application made available on TSNPDCL WEBSITE www.tsnpdcl.in and <http://tsnpdcl.cgg.gov.in> to the post of Assistant Engineer (Electl., Civil and CS/IT).

i) Starting date for submission of On-line Applications from **29-09-2015**.

ii) Last date of submission of On-line Applications **15-10-2015**.

iii) Hall-tickets can be downloaded 07 days before commencement of Examination.

2. The examination will be held on **08-11-2015**.

3. The candidates who possess requisite qualification may apply On-line by satisfying themselves about the terms and conditions of this recruitment. The details of vacancies are given below

Position	No .of Vacancies
<u>Direct Recruitment of</u>	
Assistant Engineers (Electl.)	159
Assistant Engineers (Civil)	3
Assistant Engineers (CS/IT)	2
Total No. of Vacancies	164

The details of vacancies community-wise and Gender-wise (General/Women) may be seen at Annexure-I.

IMPORTANT NOTE: The vacancies are subject to variation based on the necessity and shall be filled-up as per the Rules & Regulations in vogue, duly following the Rule of Reservation.

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4. EDUCATIONAL QUALIFICATIONS: Applicants must possess the qualifications from a recognized University as detailed below or equivalent thereto as specified in the relevant Service Rules of TSNPDCL as on the date of Notification.

a) Assistant Engineer (Electrical):	Must possess a Bachelor Degree in Electrical Engineering /Electrical & Electronics Engineering of a University in India established or incorporated by or under a Central Act or Provincial Act, or a State Act or an institution recognized by the University Grants Commission or a pass in Sections 'A' &'B' of AMIE (India) examination in Electrical Engineering.
b) Assistant Engineer (Civil)	Must possess a Bachelor Degree in Civil Engineering of a University in India established or incorporated by or under a Central Act or Provincial Act, or a State Act or an institution recognized by the University Grants Commission or a pass in Sections 'A' &'B' of AMIE (India) examination in Civil Engineering.
c) Assistant Engineer (CS/IT)	Must possess a Bachelor Degree in Computer Science Engineering/ Information Technology of a University in India established or incorporated by or under a Central Act or Provincial Act, or a State Act or an institution recognized by the University Grants Commission or a pass in Sections 'A' &'B' of AMIE (India) examination in Computer Science Engineering/ Information Technology

5) AGE: Minimum 18 years & Maximum 44 years. The age is reckoned as on **01/07/2015**.

*As per G.O. Ms. No. 329 GA(Ser.A) Dept., Dt. 27/07/2015 and as adopted by TSNPDCL Vide N.O.O (CGM-HRD)Ms.No.179, Dt.18-09-2015, the upper age limit raised up to 10 years i.e., from 34 years to 44 years.

N.B.: No person shall be eligible if he/she is less than 18 years of age and above the prescribed Age limit.

Age Relaxations: The upper age limit prescribed above is however relaxable in the following cases:

Sl.No	Category of candidates	Relaxation of age permissible
1	2	3
1.	SC/ST and BCs	5 Years
2.	Physically Handicapped persons	10 Years

6.(a) FEE: (Remittance of fee) Each applicant must pay Rs.100/- (Rupees One Hundred only) towards Online Application Processing Fee. This apart, the applicants have to pay Rs.120/- (Rupees One hundred and twenty only) towards Examination Fee. However, the Applicants belonging to SC/ST/BC Communities and PH are exempted from payment of examination fee.

(b) **Mode of Payment of fee:** The fee mentioned at para- I (6)(a) is to be paid online through TS Online duly following online instructions.

(c) After payment of Fee, the Candidate has to logon to the website <http://www.tsnpdcl.in> and click on **APPLY ONLINE** link or directly visit <http://tsnpdcl.cgg.gov.in> to view the detailed notification, User Guide and Application Form. The applicants have to invariably fill all the relevant fields in the Application. Immediately on submission of application the Applicant will get an acknowledgement in the form of a downloadable pdf document.

The fee once remitted shall not be refunded or adjusted under any circumstances. Failure to pay the examination fee, application fee wherever applicable will entail the total rejection of application.

Starting date for Payment of Fee is **28-09-2015**.

Starting date for submission of Online Application is **29-09-2015**.

Last date for payment of Fee at Online is **15-10-2015 @13.00 Hrs.**

Last date for submission of Application is **15-10-2015 @23.59 Hrs**

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PARA-II :

CENTRES FOR THE WRITTEN EXAMINATION. The written examination for recruitment of Assistant Engineer (Elect), (Civil) and (CS/IT) will be held at different centers located only in Hyderabad and Secunderabad.

PARA-III :HOW TO APPLY

A. HOW TO UPLOAD THE APPLICATION FORM:

The Applicants have to read the **User Guide** for Online Submission of Applications and then proceed further.

I Step:- Payment of Fee: The Applicant should pay the prescribed Fee as per the notification in any one of the TS Online centers and obtain Fee paid receipt with Journal Number (12 digit) in the first instance. Applicants can also pay the fee through TS Online portal.

II Step:- Submission of Application: After payment of Fee, the Candidate has to logon to the website <http://www.tsnpdcl.in> and click on **APPLY ONLINE** link or directly visit <http://tsnpdcl.cgg.gov.in> to view the detailed notification, User Guide and Application Form. The applicants have to provide payment details (journal number and date) and upload the scanned copy of passport size photograph with signature (see instructions for scanning and uploading photograph with signature) and then invariably fill all the relevant fields in the Application. Immediately on submission of application, applicant will get an acknowledgement in the form of a downloadable pdf document.

NOTE:

1. The applicants are required to go through the detailed notification and decide themselves as to their eligibility for this recruitment carefully before applying and enter the particulars completely online.
2. Candidates are required to retain a photocopy of application form with Reference ID for future reference.
3. Candidates have to submit application only through online mode well in advance of the last date to avoid last day rush.
4. **Hand written/ Typed/ Photostat copies/ Outside printed Application Form will not be accepted and liable for rejection.**
5. Only applicants willing to serve anywhere in TSNPDCL area should apply.

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6. For any problems related to Online submission and downloading of Hall-Tickets please contact **Help Desk No.040-23120303** (Call Time:10:30 A.M to 1:00 P.M & 2:00 P.M to 5:00 P.M) or log on to <http://tsnprdcl.cgg.gov.in> click on to complaint box.

PARA –IV : GENERAL PROVISIONS :

1. Applicants must compulsorily fill up all relevant columns of application and submit the application through website only. The particulars made available in the website shall be processed through Computer and the eligibility decided in terms of notification.
2. The Applications received online in the prescribed proforma available in the website and within the time shall only be considered and TSNPDCL will not be held responsible for any kind of discrepancy.
3. Applicants must upload his / her own scanned photo and signature through jpg format in the following steps :

Instructions for Scanning of Photograph with Signature

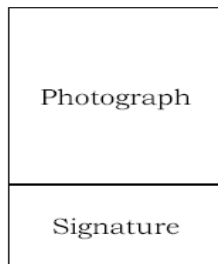


Photo width= 3.5cm
Photo Height= 4.5cm
Signature Space = 1.5 cm

- i) Paste the Photo on any white paper as per the above required dimensions. Sign in the Signature Space provided. Ensure that the signature is within the box.
- ii) Scan the above required size containing photograph and signature. Please do not scan the complete page.
- iii) The entire image (of size 3.5 cm by 6.0 cm) consisting of the photo along with the signature is required to be scanned and stored in ***.jpg** format on local machine.
- iv) Ensure that the size of the scanned image is not more than 50KB.
- v) If the size of the file is more than 50 KB, then adjust the settings of the scanner such as the dpi resolution, no. of colors etc., during the process of scanning.

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- vi) The candidate has to sign in full in the box provided. Since the signature is proof of identity, it must be genuine and in full; initials are not sufficient. Signature in CAPITAL LETTERS is not permitted.
- vii) The signature must be signed only by the candidate and not by any other person.
- viii) The signature will be used to put on the Hall Ticket and wherever necessary. If the candidate's signature on the answer script, at the time of the examination, does not match the signature on the Hall Ticket, the candidate will be disqualified.

Sample Photo and Signature



e.g. The Technical Specifications of the sample scanned image shown above are:

- * Size of the file < 50 KB
- * Dpi setting = 200 dpi
- * True Colour

The candidate has to upload his/her **Photo with Signature** in the prescribed format by clicking on the **browse** button at the time of submission of application form.

4. The applicants should not furnish any particulars that are false, tampered, fabricated or suppress any material information while making an application through website.

5. All the essential certificates issued by the competent authority of Telangana State shall compulsorily be kept with the applicants to produce as and when required to do so. Failure to produce the required certificates on the day of verification will lead to disqualification.

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6. **Important** : The claim of the candidates with regard to the date of birth, educational / technical qualifications and community are accepted only provisionally on the information furnished by them in their application form and is subject to the verification and satisfaction of TSNPDCL. Mere admission to any test or inclusion of the name of a candidate in a merit list will not confer on the candidate any right for appointment. The candidature is therefore provisional at all the stages and TSNPDCL reserves the right to reject candidature at any stage of the selection even after the advice has been made.

7. TSNPDCL is not responsible, for any discrepancy in submitting through Online. The applicants are therefore, advised to strictly follow the instructions and User guide in their own interest.

8. Applicant must compulsorily fill-up all relevant fields of application and submit application through website only.

9. Incomplete/incorrect application form will be summarily rejected. TSNPDCL under any circumstances will not entertain the information if any furnished by the candidate subsequently. Applicants should be careful in filling-up of the application form at the time of submission. If any lapse is detected during the scrutiny, the candidature will be rejected even though he/she comes through the final stage of recruitment process or even at a later stage.

10. Before payment of fee, submission of application form, the candidates should carefully ensure his/her eligibility for this notification. No relevant column of the application form should be left blank; otherwise application form will not be accepted.

11. The applications received online in the prescribed proforma available in the website and within the time shall only be considered and the TSNPDCL will not be held responsible for any kind of discrepancy.

12. Applicants must compulsorily upload his/her own scanned photo with signature in jpg format only.

The following certificates must be kept ready by the candidates for the purpose of verification.

- i) Date of Birth Certificate
- ii) School Study Certificate

The following Certificates should be obtained from Govt. of Telangana State in prescribed proforma for the purpose of verification.

- iii) Community Certificate
- iv) Creamy layer certificate
- v) Certificate of Residence / Nativity
- vi) No objection certificate from the Employer (If employed anywhere)

The following Certificates (whichever applicable) should be obtained from Competent Medical authority as follows for the purpose of verification.

- vii)
 - a) Medical Certificate for the blind from Sarojini Devi Eye Hospital, Hyderabad.
 - b) Certificate of hearing disability and hearing assessment from ENT Hospital, Koti, Hyderabad.
 - c) Medical Certificate in respect of orthopedically handicapped from Osmania General Hospital, Hyderabad.

13. Candidates will be required to appear for written test as and when conducted at their own cost.

14. Written Test will be conducted in ENGLISH language only.

15. Admission for written test or calling the qualified candidates to the written test to furnish documentary proof does not confer any right for appointment.

16. The degrees awarded by the Universities/institutions that are recognized by the U.G.C, D.E.C (Under IGNOU) and AICTE as the case may be considered.

17. The decision of the Selection Committee/TSNPDCL is final in selection and allotment of candidates.

PARA-V : Important Provisions Governing the Recruitment Process :

1. **Vacancies:** The Recruitment will be made to the vacancies notified before the examination only. There shall be no waiting list as per G.O.Ms.No.81, General Administration (Ser.A) Department, dt.22.02.1997.

2. **Recruitment:** The Recruitment will be processed as per this notification and also as per the rules and regulations of TSNPDCL existing as on date.

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3. Rules : All are informed that various conditions and criterion described herein are governed by the Rules and Regulations existing in TSNPDCL.

4. Transparency in Recruitment and Selection: The whole recruitment and selection process is carried out with utmost regard to maintain secrecy and confidentiality so as to ensure that the principle of merit is followed. A candidate shall be disqualified for appointment, if he himself / she herself or through relations or friends or any others has canvassed or endeavored to enlist for his/her candidature, extraneous support, whether from official or non-official sources for appointment to this service.

5. Local Reservation: The Local reservations shall be made following the Reservation prescribed to the "Local Candidates" of TSNPDCL jurisdiction.

Jurisdiction	Districts covered
TSNPDCL	Warangal, Karimnagar, Khammam, Nizamabad & Adilabad.

The Local Reservations shall be followed as per the Para -8 of A.P. Public Employment (Organization of Local Cadres and Regulation of Direct Recruitment) Order, 1975 (G.O.P. No. 674, G.A. (SPF-A) Dept., Dated: 20/10/1975) read with G.O. Ms. No. 124, General Administration (SPF-A) Department, dated: 07/03/2002 and other orders issued by the Government and within the meaning of Sections 3 and 97 of A.P. State Reorganization Act 06/2014 .

The select list will be drawn into two parts. The first part will comprise 30% of the posts consisting of combined merit list of local as well as non-locals and the remaining second part will comprise the balance 70% of the posts consisting of locals only and the posts will be filled only following the rule of reservation.

6. Caste & Community : The Community Certificate issued by the competent authority (obtained from the Government of Telangana) should be submitted at appropriate time in respect of SC & ST candidates. In respect of candidates belonging to Backward classes are required to produce Community Certificate (BC-A, BC-B, BC-C, BC-D & BC-E) from competent authority i.e., from Tahsildar in the State of Telangana or not below the rank of Deputy Tahsildar. **No person who professes a religion different from Hinduism shall be deemed a member of Scheduled Caste.**

7. Percentage of reservation: The following percentages of reservations are applicable subject to the orders of the Government from time to time.

BC-25% + 4%

Reservation to BC-E group will be subject to the adjudication of the litigation before the Hon'ble Courts including final orders in Civil Appeal No. (a) 2628-2637 of 2010 in SLP.No.7388-97 of 2010 dated 25.03.2010 and orders from the Government.

SC-15%, ST- 6%, PH- 3%

Women - 33 1/3 % reservation is applicable as per rules.

8. Creamy Layer : In terms of G.O.Ms.No.8, Backward Classes Welfare (OP) Department, dt.13.11.2014, as adopted by TSNPDCL vide N.O.O (CGM-HRD) Ms.No. 181, Dt. 24-09-2015, In terms of G.O. Ms. No. 8 Backward Classes Welfare(OP) Department, Dated 13.11.2014, Govt., of Telangana, the candidates claiming to be belonging to Backward Classes have to produce a Certificate regarding their exclusion from the Creamy Layer from the competent authority (Tahsildar). The Certificate excluding from Creamy Layer has to be produced at an appropriate time. B.C. Candidates whose Parent's income is less than 6.00 Lakhs per annum come under Non-Creamy Layer. In case of failure to produce the same on the day of verification of certificates, the Candidature will be rejected without further correspondence.

9. Education through Open University : The Candidates who have acquired Degrees through Open Universities are required to have recognition by the University Grants Commission / A.I.C.T.E. / Distance Education Council as the case may be. Unless such degrees had been recognized by the relevant Statutory Authority, they cannot be accepted for the purpose of Educational Qualifications. The onus of Proof of recognition by the relevant Statutory Authority that their Degrees / Universities have been recognized rests with the candidate.

10. Employed : The persons already in Government Service/Power Utilities/ Autonomous bodies/Govt. Aided Institutions etc., whether in Permanent or Temporary capacity or as work charged employees are required to inform in writing to the Head of Office/Department as the case may be and required to submit "No Objection" from the concerned Head of Office/Department to apply for this recruitment

PARA-VI: RESERVATION TO LOCAL CANDIDATES: Reservation to the Local candidates is applicable as provided in the Rules and as amended from time to time as in force on the date of notification. The candidates claiming reservation as Local candidates should obtain the required Study certificates (from IV Class to X Class or SSC) (OR) Residence Certificate in the Proforma only for those candidates who have not studied in any Educational Institutions as the case may be. The relevant certificates may be got ready with authorized signature and kept with the candidates to produce as and when required.

DEFINITION OF LOCAL CANDIDATE:- "LOCAL CANDIDATE" means a candidate for direct recruitment to any post in relation to that Local areas where he/she has studied in Educational Institution(s) for not less than four consecutive academic years prior to and including the year in which he/she appeared for S.S.C or its equivalent examination. If however, he/she has not studied in any educational institution and obtained SSC or its equivalent qualification or Open School, Private Study basis, he/she has to produce residential certificate issued by the Tahsildar.

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- i) In case any Candidate who does not fall within the scope of above then, if he/she has studied for a period of not less than seven years prior to and inclusive of the year in which he/she has studied SSC or its equivalent qualification, he/she will be regarded as local candidate on the basis of the maximum period out of the said period of seven years and where the period of his/her study in two or more local areas or equal such local area where he/she has studied last in such equal periods will be taken for determining the local candidature. Similarly, if he/she has not studied during the above said period in any Educational Institution(s) and obtained private study the place of residence during the above period will be taken into consideration and local candidature determined with reference to the maximum period of residence or in the case of equal period where he/she has resided last in such equal periods.
- ii) If the claim for local candidature is based on study, the candidate is required to produce a certificate from the Educational Institution(s) where he/she has studied during the said 4/7-year period. If, however, it is based on residence, a certificate should be obtained from an officer of the Revenue Department not below the rank of Tahsildar or Deputy Tahsildar in independent charge of Mandal.
- iii) If, however, a candidate has resided in more than one Mandal during the relevant four/seven years period but within the same District or Zone as the case may be separate certificates from the Tahsildar exercising jurisdiction have to be obtained in respect of different areas.
- iv) In cases where visually handicapped and hearing handicapped persons studied in special schools meant for them, the native place of the parents of such visually handicapped and hearing handicapped persons will be the local area

NOTE:

- (A) Residence Certificate will not be accepted, if a candidate has studied in any educational institution up to S.S.C. or equivalent examination, such candidates have to produce study certificates invariably.
- (B) The candidates, who acquired Degree from Open Universities without studying SSC / Matriculation or equivalent in Educational Institutions, have to submit Residence Certificate only. Educational institutions means a recognized institution by the Government / University / Competent Authority.

PARA-VII : Scheme of Examination :

The written test comprising of 100 marks consisting of 100 multiple choice questions and each question carries 1 mark. The Part-A consisting of 80 questions on core technical subject of respective discipline and the Part-B consisting of 20 questions on General Awareness and Numerical Ability etc.,

- i) **Syllabus:** The Syllabus for the examination has been shown in Annexure-II

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ii) **Hall Tickets:** The hall tickets will be placed on the website seven days prior to the date of examination. The candidate has to download the Hall ticket from the website only. Hall tickets will not be sent to the candidates by post.

iii) **Date of examination:** The written examination will be held on **08.11.2015** at **10 AM to 12 Noon**.

iv) **Examination Centers:** The written examination for recruitment of Assistant Engineer (Elect).(Civil) and (CS/IT) will be held at different centers located only in Hyderabad and Secunderabad.

v) **Instructions to Candidates at the time of Written Examination:**

1. The test is of two hours duration. The date and time will be indicated on the Hall ticket. Candidates should reach the test center in time. Candidates will be allowed in to the examination hall half an hour before the scheduled starting time. Candidates will not be allowed into the examination hall after the test has started and will not be permitted to leave examination hall before the closure of test time under any circumstances.
2. The test will be of objective type with multiple-choice questions with only one answer being correct among the four alternatives suggested.
3. A separate O M R (Optical Mark Reader) answer sheet with the carbon impression paper will be provided to the candidates. The candidate has to indicate his response to each question by darkening the appropriate bubble with a **Black Ball Point pen**. No corrections with **white fluid** will be permitted.
4. The candidate has to bring a good quality **Black Ball point pen** to the examination hall.
5. The candidate has to handover the original OMR Sheet to the invigilators in the examination centre and is however permitted to take away the **duplicate OMR Sheet** (the carbon impression paper) along with question paper after the examination. If any candidate in violation of the above instructions takes away the original OMR Sheet, his/her candidature to the recruitment will be rejected besides invocation of penal provisions including debarment of the candidature for all future recruitments to be conducted by TSNPDCL
6. The candidate has to follow meticulously all the instructions given on the question paper booklet and OMR Answer Sheet, else his answer sheet may not be valued.

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- 7 Usage of Calculators/mathematical tables is not permitted. Candidates should not bring cell phones or any other electronic gadgets to the examination hall.
8. The provisional key will be publicized one day after the examination i.e., on 09-11-2015.
9. If any objections on the provisional key can be raised and send to email : cgmhrd@tsnpsc.in within 3 days i.e., up to 11-11-2015 .

PARA-VIII : Procedure for Selection:

- i) The selection of candidates for appointment will be made 100% on written examination. The written test comprising of 100 marks consisting of 100 Multiple choice questions and each question is carrying "One" Mark. The Section-A consisting of 80 questions on core subject of respective discipline; and the Section-B consisting of 20 questions on General awareness and Numerical ability, etc. The duration of Written Examination will be 120 Minutes (2 hours). The Syllabus for the examination is shown in Annexure-II.
- ii) Only those candidates who qualify in the written examination by being ranked high, community wise will be called for verification of Original Certificates in 1:1 ratio.
- (iii) The minimum qualifying marks in the written test for the above selection process shall be as follows:

OC - 40%
BC - 35%
SC/ST - 30%
PH - 30%

Note: Mere securing minimum qualifying marks doesn't vest, any right to a candidate for being called for verification of original certificates.

PARA-IX. TERMS AND CONDITIONS OF SERVICE:

1. **Scale of Pay: Rs. 41155-1700-44555-1985-54480-2280-63600.**

2. **Training cum Probation:** The candidates appointed to the post shall be placed on Probation for a period of 2 years which includes 1 year Training. At the time of joining training, they shall have to deposit their Original certificates such as Date of Birth (SSC), Degree (B.Tech/BE), Caste and Study/Residence Certificates etc. During the training period, they will be paid initial scale of pay of Assistant Engineer with usual allowances as admissible at the place of posting.

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3. **Place of posting:** The candidates appointed shall be required to work any where at field (Office, MRT & Construction etc.,)/Operation side in TSNPDCL jurisdiction.

4. The candidate will be governed by the rules and regulations applicable or as framed by the TSNPDCL and as amended from time to time. The Tripartite Agreement entered into between the APSEB, Govt. of United A.P and the Employees Associations is not applicable to these candidates and they shall at no stage be entitled to claim any right what so ever arising out of the said Tripartite Agreement.

5. **Execution of Service Bond:** At the time of joining training, the candidate shall have to execute a Bond to serve TS NPDCL for a minimum period of 5 years. The candidate who leaves the Company during the training period shall refund the emoluments received by him/her plus Rs. 50,000/- (Rupees Fifty Thousand only) by way of liquidated damages. The candidate who leaves the Company without serving a minimum period of 5 years after completion of training, shall pay to the Company a sum of Rs. 1,00, 000/- (Rupees One lakh only) by way of liquidated damages.

PARA-X: DEBARMENT:

- a) Candidates should make sure of their eligibility to the post applied for and that the declaration made by them in the format of application regarding their eligibility is correct in all respects. Any candidate furnishing in-correct information or making false declaration regarding his/her eligibility at any stage or suppressing any information is liable to be debarred for five years from appearing for any of the examinations conducted by the TSNPDCL, and summarily rejection of their candidature for this recruitment.
- b) The Penal Provisions of Act 25/97 published in the State Gazette No. 35, Part-IV.B Extraordinary dated: 21/08/1997 shall be invoked if malpractice and unfair means are noticed at any stage of the Recruitment.
- c) The Company is vested with the powers under regulations for recruitment and selection as per regulations duly maintaining utmost secrecy and confidentiality in this process and any attempt by anyone causing or likely to cause breach of this constitutional duty in such manner or by such action as to violate or likely to violate the fair practices followed and ensured by the Company will be sufficient cause for rendering such questionable means as ground for debarment and penal consequences as per law and rules and as may be decided by the Company.

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d) Any candidate is or has been found impersonating or procuring impersonation by any person or resorting to any other irregular or improper means in connection with his / her candidature for selection or obtaining support of candidature by any means, such a candidate may in addition to rendering himself/ herself liable to criminal prosecution, will be debarred permanently from any exam or selection held by the TSNPDCL.

PARA-XI : INSTRUCTIONS TO IN-SERVICE EMPLOYEES : The employees working in TS NPDCL in Assistant Engineer and above cadres are not eligible to apply. If found applied, they are liable for disciplinary action apart from prosecution.

PARA-XII : TSNPDCL's DECISION IS FINAL:

The decision of TSNPDCL in all aspects and all respects pertains to the application and its acceptance or rejection as the case may be, conducting of examination and at all consequent stages culminating in the selection or otherwise of any candidate shall be final in all respects. TSNPDCL reserves its right to alter and modify time and conditions laid down in the notification for conducting the various stages up to selection, duly intimating details thereof to all concerned, as warranted by any unforeseen circumstances arising during the course of this process, or as deemed necessary by TSNPDCL at any stage.

Place: Warangal
Date: 24-09-2015

K. VENKATA NARAYANA
CHAIRMAN & MANAGING DIRECTOR

Annexure – II

Syllabus – Assistant Engineers (Elect.)

Part-A (80 Questions)

1. Electrical Circuits and Networks: Kirchhoffs laws, mesh and node analysis, network theorems, sinusoidal steady state analysis of single phase and three phase circuits, resonance, transient response of RL, RC, RLC Circuits for different input, two-port networks, Two element network synthesis. Measurement of power by two-wattmeter method; Fourier, Laplace and Z transforms

2. Control Systems: Modeling of physical system, Block diagrams and signal flow graphs, Time and frequency domain analysis, Steady state errors, Routh's criterion, Nyquist and Bode plots, compensation, root loci, elementary ideas of state variable analysis, control system components.

3. Measurements and Instrumentation: Measurement of current, voltage, power, power-factor and energy, Measurement of resistance, inductance, capacitance and frequency-bridge methods, transducers and their applications to the measurement of non-electrical quantities like temperature, pressure, strain, displacement etc., CRO.

4. Electrical Machines: Single phase transformer; equivalent circuit, tests, regulation and efficiency, three phase transformers connections, parallel operation, auto transformer, principle of energy, Conversion, windings of rotating machines, DC generator and motors, characteristics, starting and speed control, three phase induction motors performance characteristics, starting and speed control, single phase and three-phase induction motors, synchronous generators, performance, regulation, parallel operation, synchronous motors, starting characteristics and applications synchronous condensers, fractional horse power motors, permanent magnet and stepper motors

5. Power Systems: Electrical power generation thermal, hydro, nuclear, Types of Tariffs; transmission line parameters, steady state performance of overhead transmission lines and cables, surge propagation, distribution systems, insulators, bundle conductors, corona and radio interference effects, Sag and Tension, per-unit quantities, bus admittance and impedance matrices, load flow: voltage control and power factor correction, economic operation, Load Frequency Control, symmetrical components, analysis of symmetrical and unsymmetrical faults, principles of over-current, differential and distance protection, circuit breakers, concept of system stability, swing curves and equal area criterion, HVDC transmission

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6. Analog and Digital Electronics: Characteristics of diodes, BJT, FET, SCR, Amplifier biasing, equivalent circuit, frequency response, feed-back amplifiers, power amplifiers, oscillators, operational amplifiers and applications, wave shaping circuits, multiplexer, flip-flops, universal gates, combinational circuits, A/D and D/A converters, 8-bit microprocessor basics (8085), architecture, programming and interfacing.

7. Power Electronics & Drives: Semiconductor power diodes, transistors, thyristors, triacs, GTOs, MOSFETs and IGBTs - static characteristics and principles of operation; triggering circuits; phase control rectifiers; bridge converters - fully controlled and half controlled; dual converters, principles of choppers, inverters, cyclo-converters and ac voltage controllers. Four quadrant operation, Types of loads, Steady-state stability, Types of braking in dc & ac motors, Energy loss during starting and braking of dc and ac motors, Basic concepts of converter and chopper fed dc drives; V/f control of ac motors, chopper controlled rotor resistance and slip power recovery scheme.

8. Utilization: High frequency eddy current heating, dielectric heating, Arc furnace, electric arc welding & electric resistance welding, Illumination: Laws of illumination, MSCP, SV & MV lamps, Factory, street & flood lighting, Electric traction and track electrification, Speed-time curves, Tractive effort, Specific energy consumption, Mechanism of train movement, adhesive weight and coefficient of adhesion.

9. Switchgear protection: Principles of over current, differential and distance protections, circuit breaker, concept of system stability, swing curves and equal area criterion. Power System Operation & Control, Relays, Protection for Generator, Transformers, feeder and Busbars, Grounding, Protection against Over Voltages, Batteries and Battery Chargers.

10. Electricity Act' 2003 and Indian Electricity Rules.

11. Non-Conventional Energy: Solar, Wind and Bio-mass.

Part-B (20 Questions)

Sl.No.	Particulars of the section	Weightage
1.	Numerical Ability (Indices, Ratios, Proportions, Profit & Loss, Menstruation, Algebra, Geometry and Statistics)	20 Questions
2.	Language proficiency (Vocabulary, Sentence corrections, Reading comprehension).	
3.	Computer Awareness	
4.	General Knowledge	
5.	Socio-economic, Political and Cultural History of Telangana with special emphasis on Telangana Statehood Movement and formation of Telangana state.	

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Syllabus – Assistant Engineers (Civil)

Part-A (80 Questions)

1. Building Materials And Construction:

Bricks– Types of Bricks, Indian standard classification, properties; Stones – Types of stones, classification, properties, dressing and polishing of stones; Methods of Quarrying; Cement – Different grades and types of cement, properties and IS specifications; Aggregates – coarse and fine aggregate, properties and IS specifications; Cement Mortar – Proportions of cement mortar for various applications; Concrete – Constituents of Concrete, Different grades of Concrete, mix proportioning using IS Code, Properties of fresh and hardened Concrete; Admixtures – Types of Admixtures

2. Strength of Materials And Theory of Structures:

Strength of Materials: Simple stresses and strains, elastic constants and relationship between them; Compound bars; Temperature stresses; Shear forces and bending moment diagrams for beams; Principal stresses and Mohr's circle of stress, Theory of bending and bending stresses ; Shear stress distribution; Theory of torsion; Springs; Deflections of beams; Thin and thick cylinders;; Analysis of trusses, Betti-Maxwell theorem; Shear centre and unsymmetrical bending.

Theory of Structures: Direct and bending stresses; Columns and struts; Strain energy method; Moving loads and influence lines; Arches and suspension bridges; Static and kinematic indeterminacy; Moment distribution, Slope deflection, and Kani's methods applied to continuous beams and portal frames; Column analogy and matrix methods of analysis.

3. RCC and Steel Structures:

Concrete Structures: Materials, permissible stresses and IS Specifications; Working stress methods; Limit State Method - Stress Blocks parameters, design of Beams, Slabs, Columns and Footing; Design for Shear and Torsion; Design of Retaining Walls, Water tanks, and T-Beam Slab bridges; Yield line theory.

Steel Structures: Properties of steel sections, permissible stresses, IS Specifications; Riveted and welded joints and connections; Design of simple and compound Beams and Columns, Column bases, Roof trusses, Plate and Gantry Girders; Plate Girder Lattice Girder Railway bridges, and Bearings. Plastic analysis.

Pre-Stressed Concrete: Basic concepts, material for pre-stressing, losses in Pre-stress, classification of pre-stressing system; Analysis of PSC Sections.

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4. Fluid Mechanics and Hydraulics:

Fluid Properties; Measurement of Pressure - Manometers; Fluid Kinematics – Classification of Fluids, Stream function and Velocity potential, significance and use of Flownets, Fluid dynamics - Continuity equation, Bernoulli's equations and Impulse momentum equation; Laminar and Turbulent flow through pipes – significance of Reynolds number, Hagen – Poiseuille's equation, Darcy – Weisbach equation, Friction factor, Water hammer phenomenon; Compressible flow – Bernoulli's equation for Isothermal and Adiabatic conditions, Mach Number, Mach cone, stagnation properties; Steady uniform flow through open channels; Gradually varied flows – significance of Froude number, classification and computation of Flow profiles, Hydraulic jump, Surges; Boundary layer – Laminar and Turbulent Boundary layer, Boundary layer thickness, rough and smooth Boundaries, Boundary layer separation; Dimensional analysis and similarity laws; Hydraulic Turbines – classification, Velocity triangles, principles and design of reaction and impulse turbines; Centrifugal pumps – specific speed, work done and efficiency, characteristic curves.

5. Hydrology and Water Resources Engineering:

Hydrological cycle; Rainfall – types and measurement, network design; Infiltration - Φ -index; Runoff – process, factors and determination of runoff, dependable yield; Floods – flood hydrograph, computation of flood peak using rational formula, unit hydrograph method and Gumbel's extreme value methods; Groundwater – types of aquifer and properties, Darcy's law, specific yield, steady radial flow to wells in confined and unconfined aquifers; Irrigation – types and advantages, soil water plant relationship, consumptive use, duty, delta, base period, crops and their water requirements; Single and multipurpose projects; Dams – classification, forces and design of Gravity dam and Earth dam; Spillways – types, energy dissipation, stilling basin, Appurtenances; Canals – alignment, Kennedy's and Lacey's theories, lining of Canals; Weirs – components, design of vertical drop and sloping glacis weir; Seepage forces – Bligh's Theory, Khosla's theory; Canal falls – types and design principles; Cross drainage works – classification and design principles of aqueducts; Hydropower – classification and principle components of Hydroelectric power plants.

6. Environmental Engineering:

Water supply – objectives, rate of demand, population forecasts; Analysis of water – classification, design of coagulation, sedimentation, filtration, disinfection and softening processes; Methods of layout of distribution pipes – Hardy cross method; Waste water engineering – systems of sewerage, hydraulic formulae and design of sewers, BOD, COD, self purification of

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natural streams, methods of sewage disposal; Treatment of sewage – principles and design of grit chamber, sedimentation tanks, trickling filters, activated sludge process, sludge digestion tanks, septic tanks; Municipal solid waste – characteristics, collection and transportation of solid wastes; Air Pollution – types and sources of pollutants, air quality standards; Noise pollution – Impacts and permissible limits, measurement and control of noise pollution.

7. Transportation Engineering:

Highway Classification as per IRC; Highway alignment; Engineering Surveys; Geometric Design; Cross sectional elements of road; Gradient; Grade compensation; Traffic Surveys – speed, Volumes, origin and destination; Highway capacity and level of service as per HCM 2000; Intersection – at grade and grade separated; Channelization; Rotary intersection; signal design – Webster method, traffic signs, pavement marking; Parking studies, accidental studies, pavement types, Factors considered for pavement design, flexible and rigid pavements design concepts.

Railway Engineering: Permanent way, rails, sleepers, ballast; Creep, coning of wheel, rail fixtures and fastenings, super elevation, cant deficiency, curves, turnout; Points and crossings.

Airport Engineering: Selection of site of Airport, runway orientation and design, wind rose diagram, basic run way length, correction to basic runway length.

8. Soil Mechanics and Foundation Engineering:

Soil Mechanics: Physical properties of soils, Classification and identification, Permeability, Capillarity, Seepage, Compaction, Consolidation, Shear Strength, Earth pressure, Slope stability;

Foundation Engineering: Site investigations, stress distribution in soils, Bearing capacity, Settlement analysis, Types of Foundation, Pile foundations, Foundations on expansive soils; swelling and its preventions; Cofferdams, Caissons, Dewatering, Bracing for excavations, Newmark charts, machine foundations.

Engineering Geology: Mineralogy, Structural Geology, Groundwater Exploration methods; Engineering Geology applications for Tunnels, Dams and Reservoirs; Geological hazards and preventive measures.

9. Estimation, Costing and Construction Management:

Abstract estimate: Detailed estimate – centerline, long & short wall method, various items of Civil Engineering works as per Indian Standard, General Specifications - Earth Work, Brick / Stone Masonry in Cement Mortar, RCC, Plastering in Cement Mortar, Floor finishes, white wash, colour wash; Standard schedule of rates, lead and lift, preparation of lead statement; Computation of earth work – Mid-ordinate, Mean Sectional area, Trapezoidal method, Prismoidal Rule; Approximate estimate – Plinth area and cubic rate estimate.

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10. Surveying:

Principle and classification of surveying, chain surveying; Compass surveying; Levelling and contouring; Theodolite surveying; curves; Introduction and Fundamental concepts of electronic measuring instruments – EDM, Total station, GIS & GPS.

Part-B (20 Questions)

Sl.No.	Particulars of the section	Weightage
1.	Numerical Ability (Indices, Ratios, Proportions, Profit & Loss, Menstruation, Algebra, Geometry and Statistics)	20 Questions
2.	Language proficiency (Vocabulary, Sentence corrections, Reading comprehension).	
3.	Computer Awareness	
4.	General Knowledge	
5.	Socio-economic, Political and Cultural History of Telangana with special emphasis on Telangana Statehood Movement and formation of Telangana state.	

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Syllabus – Assistant Engineers (CS/IT)

Part-A (80 Questions)

Digital Logic: Logic functions, Minimization, Design and synthesis of combinational and sequential circuits; Number representation and computer arithmetic (fixed and floating point).

Computer Organization and Architecture: Machine instructions and addressing modes, ALU and data-path, CPU control design, Memory interface, I/O interface (Interrupt and DMA mode), Instruction pipelining, Cache and main memory, Secondary storage.

Programming and Data Structures: Programming in C; Functions, Recursion, Parameter passing, Scope, Binding; Abstract data types, Arrays, Stacks, Queues, Linked Lists, Trees, Binary search trees, Binary heaps.

Algorithms: Analysis, Asymptotic notation, Notions of space and time complexity, Worst and average case analysis; Design: Greedy approach, Dynamic programming, Divide-and-conquer; Tree and graph traversals, Connected components, Spanning trees, Shortest paths; Hashing, Sorting, Searching. Asymptotic analysis (best, worst, average cases) of time and space, upper and lower bounds, Basic concepts of complexity classes – P, NP, NP-hard, NP-complete.

Theory of Computation: Regular languages and finite automata, Context free languages and Push-down automata, Recursively enumerable sets and Turing machines, Undecidability.

Compiler Design: Lexical analysis, Parsing, Syntax directed translation, Runtime environments, Intermediate and target code generation, Basics of code optimization.

Operating System: Processes, Threads, Inter-process communication, Concurrency, Synchronization, Deadlock, CPU scheduling, Memory management and virtual memory, File systems, I/O systems, Protection and security.

Databases: ER-model, Relational model (relational algebra, tuple calculus), Database design (integrity constraints, normal forms), Query languages (SQL), File structures (sequential files, indexing, B and B+ trees), Transactions and concurrency control.

Information Systems and Software Engineering: information gathering, requirement and feasibility analysis, data flow diagrams, process specifications, input/output design, process life cycle, planning and managing the project, design, coding, testing, implementation, maintenance.

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Computer Networks: ISO/OSI stack, LAN technologies (Ethernet, Token ring), Flow and error control techniques, Routing algorithms, Congestion control, TCP/UDP and sockets, IP(v4), Application layer protocols (icmp, dns, smtp, pop, ftp, http); Basic concepts of hubs, switches, gateways, and routers. Network security – basic concepts of public key and private key cryptography, digital signature, firewalls.

Web technologies: HTML, XML, basic concepts of client-server computing.

Part-B (20 Questions)

Sl.No.	Particulars of the section	Weightage
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