



SOUTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED
(A Govt. of Telangana Undertaking)
(Formerly Central Power Distribution Company of Andhra Pradesh Ltd.)
6-1-50, Corporate Office, Mint Compound :: Hyderabad – 500 063
CIN U40109TG2000SGC034116 Website : www.tssouthernpower.com

DETAILED NOTIFICATION No.01/2018, Dt. 11.01.2018

DIRECT RECRUITMENT FOR THE POST OF ASSISTANT ENGINEER (Electrical) & ASSISTANT ENGINEER(Civil)

The Southern Power Distribution Company of Telangana Limited (TSSPDCL) with Head quarters at Hyderabad is carrying out electricity distribution business as part of the unbundling of erstwhile A.P.S.E.B & Re-organization of the state of Andhra Pradesh and formation of the state of Telangana is catering to the electricity requirements of composite districts in Telangana State Viz:- Hyderabad, Rangareddy, Mahabobnagar, Medak and Nalgonda Districts.

PARA-I:

1. Applications are invited On-line from qualified candidates through the proforma Application to be made available on <http://tssouthernpower.cgg.gov.in> to the post of Assistant Engineer (Electrical) & Assistant Engineer (Civil).

Starting date for Payment of Fee	----- 01.02.2018
Starting date of application submission	----- 02.02.2018
Last date for payment of Fee Online	----- 19.02.2018 (upto 05.00 pm)
Last date for submission of Online Application	----- 19.02.2018 (upto 11.59 pm)
Downloading of Hall tickets from	----- 15.03.2018
Date of examination	----- 25.03.2018

2. 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 :

Sl.No.	Name of the Post	No. of Vacancies			Age	Pay Scale of the Post (in Rs.)
		LR	GR	Total		
1	AE (Electrical)	9	124	133	18 yrs – 44 yrs	41155-1700-44555-1985-54480-2280-63600
2	AE (Civil)	0	20	20		
TOTAL		9	144	153		

LR: Limited Recruitment; **GR:** General Recruitment.

(The details of vacancies for AE(Electrical), AE(Civil), Community-wise and Gender-wise (General/Women) may be seen at Annexure-I(A) and Annexure-I(B) respectively.

IMPORTANT NOTE : The number of vacancies are subject to variation.

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Click Here for Telangana Govt Jobs

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3. EDUCATIONAL QUALIFICATIONS:

Applicants must possess the qualifications from a recognized University as detailed below or equivalent thereto **as on the date of Notification.**

Sl.No.	Name of the Post	Educational Qualifications
1	Assistant Engineer / Electrical	Must possess a Bachelors Degree in Electrical Engineering / Electrical and Electronics Engineering of a Recognized University in India established or incorporated by or under a Central Act, Provincial Act, or a State Act (or) an Institution recognized by the University Grants Commission/AICTE (or) any other qualification recognized as equivalent thereto (or) a Pass in Section-'A' & 'B' of A.M.I.E. examination conducted by Institute of Engineers in Electrical/ Electrical and Electronics Engineering.
2	Assistant Engineer / Civil	Must possess a Bachelors Degree in Civil Engineering of a Recognized University in India established or incorporated by or under a Central Act, Provincial Act, or a State Act (or) an Institution recognized by the University Grants Commission/AICTE (or) any other qualification recognized as equivalent thereto (or) a Pass in Section-'A' & 'B' of A.M.I.E. examination conducted by Institute of Engineers in Civil Engineering.

4. AGE: Minimum 18 years and maximum 44 years. **The age is reckoned as on 01.01.2018 .**

The Upper age limit is raised up to 10 years i.e., from 34 to 44 years as per the G.O.Ms.No.190, GA (Ser.A) Dept.Dt:08.08.2017 as adopted vide SP.O.O.Ms.No.767, Dt.01.12.2017 by TSSPDCL.

The Upper age limit of 44 years is relaxable up to 5 years in respect of SC/ST/BC candidates and up to 10 years in respect of Physically Handicapped candidates.

5. (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 :

Candidate has to visit the website <http://tssouthernpower.cgg.gov.in> to view the detailed notification and User Guide. The fee mentioned at Para- I (5)(a) is to be paid online by visiting the link **MAKE PAYMENT** in the website duly following online instructions.

After payment of Fee, the Candidate has to click on the link **SUBMIT APPLICATION** to complete the process of application submission. 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.

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PARA-II : CENTRES FOR THE WRITTEN EXAMINATION :

The written examination for recruitment of Assistant Engineers (Elect.) & Assistant Engineers (Civil) will be held at different centers located in the GHMC area.

PARA-III : HOW TO APPLY :

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 as detailed above and obtain Fee paid receipt with Journal Number in the first instance.

(II) Step:- Submission of Application: After payment of Fee, the Candidate has to visit the website <http://tssouthernpower.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. TSSPDCL is not responsible for any discrepancy in Bio-data particulars while submitting the application form through On-line. The applicants are therefore advised to strictly follow the instructions and User guide on their own interest before submitting the application.
2. The particulars furnished by the applicant in the Application Form will be taken as final and data-entry is processed based on these particulars only by Computer. Candidates should therefore, be very careful in Uploading / Submitting the Application Form On-line.
3. Incomplete / Incorrect Application Form will be summarily rejected. The information if any furnished by the candidate subsequently in any form will not be entertained by TSSPDCL under any circumstances. Applicants should be careful in filling-up the application form and submission. If any lapse is detected during the scrutiny, the candidature will be rejected even though he/she comes to the final stage of recruitment process or even at a later stage.
4. Before Uploading / Submission of Application Form, the candidates are required to go through the detailed notification and should carefully ensure his/her eligibility for this examination. No relevant column of the Application Form should be left blank, otherwise application form will be rejected.
5. **Hand written/ Typed/ Photostat copies/ Outside printed Application Forms will not be accepted and liable for rejection.**
6. Candidates are required to retain a copy of the filled-in application form with Reference ID for future reference.
7. Candidates have to submit application only through online mode well in advance of the last date to avoid last day rush.
8. Only applicants willing to serve anywhere in the TSSPDCL jurisdiction should apply.
9. For any problems related to Online submission and downloading of Hall-Tickets please contact **Help Desk No. 040-23120303** (Call Timings:10:30 A.M to 1:00 P.M & 2:00 P.M to 5:00 P.M) or log on to <http://tssouthernpower.cgg.gov.in> and click on to complaint box.

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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 TSSPDCL 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

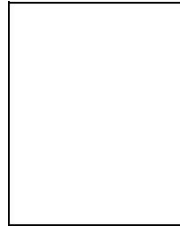


Photo Height= 4.5cm

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 colours etc., during the process of scanning.
- 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 the sample scanned image shown above are:

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

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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.

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 TSSPDCL. 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 TSSPDCL reserves the right to reject candidature at any stage of the selection even after the advice has been made.

7. Candidates called for verification of certificates will be required to furnish documentary proof in evidence of the following as and when called-for :

- 1) Age: Proof of age as recorded in SSC certificate or equivalent.
- 2) Qualification of BE/B.Tech/AMIE or equivalent from any recognized University in India.
- 3) Permanent Community certificate in original obtained from Govt. of Telangana State in respect of SC/ST & BC candidates clearly indicating the Sub-Caste and group. Further, candidates claiming to be belonging to B.C. have to produce a certificate regarding their exclusion from the Creamy Layer from the Competent Authority (Tahsildar).
- 4) PH Certificate (PH-VH, PH-HH & PH-OH) issued by the Government of Telangana
--- if PH status is claimed
- 5) Study Certificate obtained from the School or Institution / Residential Certificate obtained from Govt. of Telangana

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

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

10. The decision of the Selection Committee of TSSPDCL is final in selection of candidates.

PARA-V : IMPORTANT PROVISIONS GOVERNING THE RECRUITMENT PROCESS :

- 1) **Vacancies** : The Recruitment will be made to the vacancies notified subject to variation. There shall be no waiting list as per G.O.Ms.No.81, Gen. Admn.(Ser.A)Department, dt.22.02.1997 as adopted in B.P.(P&G-Per)Ms.No.100, dt.28.07.1997.
- 2) **Recruitment** : The Recruitment will be processed as per this notification and also as per the rules and Regulations/Orders of TSSPDCL existing as on date.
- 3) **Rules** : All are informed that various conditions and criterion prescribed herein are governed by the Rules and Regulations/Orders existing in TSSPDCL.

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- 4) **Transparency in Recruitment** : The whole Recruitment and selection process is carried out with utmost secrecy and confidentially so as to ensure that the principle of merit is scrupulously followed. A candidate shall be disqualified for appointment, if he/she himself/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 for Local vacancies shall be followed as per the rules and Regulations/Orders of TSSPDCL existing as on date.
- 6) **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.
- 7) **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 not below the rank of Deputy Tahsildar. **No person who professes a religion different from Hinduism shall be deemed a member of Scheduled Caste.**
- 8) **Reservations**: 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% - Reservation will be applicable for candidates with requisite percentages specified by the Government/existing Rules of TSSPDCL
 - Women- 33 1/3 % reservation is applicable as per rules.

9. Creamy Layer : In terms of G.O.Ms.No.8, Backward Classes Welfare (OP) Department,dt.13.11.2014, Govt. of Telangana, as adopted by TSTRANSCO vide T.O.O.(CGM-HRD-Per) Ms.No.188,dt.22.09.2015 and subsequently adopted by TSSPDCL, 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 the Creamy Layer has to be produced at an appropriate time. B.C. candidates whose parents income is less than limit prescribed by the Government of Telangana 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.

10. The candidates who have obtained Bachelors Degree in Engineering through Open Universities are required to have recognition by the University Grants Commission/ AICTE/DEC as the case may be. Unless such Degrees have been recognized by the relevant statutory authority, they will not be accepted for purpose of educational qualification. The decision of the management will be final.

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 in force on the date of notification. The candidates claiming reservation as Local

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candidates should obtain the required Study certificates (from class IV to X) 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 as and when required.

DEFINITION OF LOCAL CANDIDATE: In terms of Para-(7) of AP Public Employment (Organization of Local Cadres and Regulations of Direct Recruitment) order, 1975 (G.O.P.No.674, G.A (SPF-A) Dept., Dtd. 20.10.1975), "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 S.S.C. or its equivalent qualification or Open School, Private Study basis, he / she has to produce residential certificate issued by the Tahsildar.

- (i) In case any candidate who does not fall within the scope of the 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 S.S.C. 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 are 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 of 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 a Tahsildar / Deputy Tahsildar in independent charge of a Mandal.
- (iii) If, however, a candidate has resided in more than one Mandal during the relevant 4/7 years period but within the same District, 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
- (v) Candidates local to the territorial jurisdiction of TSSPDCL will be eligible for LOCAL vacancies. Jurisdiction details are given below:-

Territorial Jurisdiction	Composite Districts
TSSPDCL	HYDERABAD, RANGAREDDY, MEDAK, NALGONDA & MAHABUBNAGAR

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 shall comprise 100 marks consisting of 100 multiple choice questions and each question carrying 1 mark. The section A consisting of 80 questions on core technical subject of respective discipline; and the section B consisting of 20 questions on General Awareness and Numerical Ability.

The duration of the written examination will be 2 hrs. (120 minutes).

Details of Written Examination:

i) **Syllabus:** The syllabus for the written examination for AE(Electrical) & AE(Civil) is placed at Annexure-II (A) & II(B) respectively

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. The Hall Ticket has to be preserved till the final selection.

iii) **Date of examination:** The written examination for Assistant Engineers will be held as follows :

- | | | |
|-----------------------------------|---|------------|
| (a) Assistant Engineer/Electrical | - | 25.03.2018 |
| (b) Assistant Engineer/Civil | - | 25.03.2018 |

iv) **Examination Centers:** The written examination for recruitment of Assistant Engineer (Electrical) and Assistant Engineer (Civil) will be held at different centers located in GHMC area.

i) Instructions to Candidates at the time of Written Examination:

1. The examination is of two hours duration. The date, time and venue will be indicated on the Hall ticket. Candidates should reach the test center in time. The candidates have to report 30 Minutes before the examination time at the examination venue. Candidates will not be allowed into the examination hall after the exam has started and will not be permitted to leave examination hall before the closure of examination time under any circumstances. The candidates shall appear for written examination at their own cost.

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 will be provided to the candidates. The candidate has to indicate his/her response to each question by darkening the appropriate bubble with a **Black Ball Point pen**. No corrections with **white fluid or any** 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 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 the TSSPDCL.

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6. The candidate has to follow meticulously all the instructions given on the question paper booklet and OMR Answer Sheet, else, the answer sheet may not be evaluated.
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 placed on website within 3 days of written examination.
9. If there are any objections on the provisional key, the same can be raised within 3 days from the date of placing of provisional key to **email : cgm-hrd@tssouthernpower.com**.

PARA-VIII : PROCEDURE FOR SELECTION:

- i) The selection of candidates for appointment will be made **100%** on Written examination only.
- ii) Only those candidates who qualify in the written examination by being ranked high, community wise and as per Spirit of Presidential order will be called for verification of Original Certificates in **1:1 ratio**.
- (iii) The minimum qualifying marks in the written examination 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 or for appointment.

- (iv) The selection list will be drawn into two parts. The first part will comprise 30% of the posts for **OPEN** 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 **LOCAL** only and the posts will be filled, following the existing rules and other rules of reservation issued from time to time. The candidates will be selected and allotted to various places in TSSPDCL jurisdiction.

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, they shall have to deposit their original certificates such as Date of Birth (SSC), Degree, Caste and Study / Residence Certificates etc. During the training cum probation period, they will be paid initial scale of pay of Assistant Engineer with usual allowances admissible at the place of posting.
3. **Place of posting:** The candidates appointed shall be required to work wherever posted in the jurisdiction of TSSPDCL for a minimum period of 3 years.
4. The candidate will be governed by the rules and regulations applicable or as framed by the TSSPDCL and as amended from time to time.

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5. **Execution of Service Bond**: At the time of joining, the candidate shall have to execute a Bond to serve TSSPDCL for a minimum period of 5 years in addition to two year training cum probation period. The candidate who leaves the Company during the training cum probation period of two years shall refund the emoluments received by him/her during training period 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 five 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 – IX : DEBARMENT:

1. 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 incorrect information or making false declaration regarding his/her eligibility at any stage or suppressing any information, is liable to be debarred from appearing any examinations conducted by the Telangana Power Utilities and summarily rejection of their candidature for this recruitment and future recruitments.

2. 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 also be liable to be debarred permanently from any exam or selection held by TSSPDCL and other TS Power Utilities.

PARA- X: INSTRUCTIONS TO IN-SERVICE EMPLOYEES: The employees working in TSSPDCL in the cadre of Assistant Engineer and above are not eligible to apply. If found applied, they are liable for disciplinary action apart from prosecution.

PARA-XI : TSSPDCL's DECISION TO BE FINAL:

The decision of TSSPDCL in all aspects and all respects pertaining to the application and its acceptance or rejection as the case may be, conduct of examination and at all consequent stages culminating in the selection or otherwise of any candidate shall be final in all respects. TSSPDCL reserves its right to alter and modify terms 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 TSSPDCL at any stage.

Place: Hyderabad

Date : 11.01.2018

sd/-

CHAIRMAN & MANAGING DIRECTOR

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ANNEXURE-I(A)

ASSISTANT ENGINEER(ELECTRICAL)

Roster Community	OC		BCA		BCB		BCC		BCD		BCE		SC		ST		PH*	Total
	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W		
OPEN	12	6	2	1	3	1	0	1	0	1	0	1	4	2	2	1	3	40
LOCAL	26	14	5	2	6	4	1	0	6	2	3	1	10	5	2	2	4	93
TOTAL	38	20	7	3	9	5	1	1	6	3	3	2	14	7	4	3	7	133

(*) PH Vacancies :-

PH OPEN vacancies –VH(W), VH, HH

PH LOCAL vacancies – HH(W), HH, OH(W), VH(W)

ANNEXURE-I(B)

ASSISTANT ENGINEER(CIVIL)

Roster Community	OC		BCA		BCB		BCC		BCD		BCE		SC		ST		PH*	Total
	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W		
OPEN	2	1	-	1	-	-	-	-	-	-	-	-	-	1	-	-	1	6
LOCAL	4	2	1	-	-	1	1	-	-	1	-	1	2	-	-	1	-	14
Total	6	3	1	1	-	1	1	-	-	1	-	1	2	1	-	1	1	20

(*) PH Vacancies :-

PH OPEN vacancies – VH(W)

ANNEXURE-II(A)

Syllabus – Assistant Engineers (Elect.,)

Section-A: 80 Marks.

I Engineering Mathematics

Linear Algebra: Matrix Algebra, Systems of linear equations, Eigenvalues, Eigenvectors.

Calculus: Mean value theorems, Theorems of integral calculus, Evaluation of definite and improper integrals, Partial Derivatives, Maxima and minima, Multiple integrals, Fourier series, Vector identities, Directional derivatives, Line integral, Surface integral, Volume integral, Stokes's theorem, Gauss's theorem, Green's theorem.

Differential equations: First order equations (linear and nonlinear), Higher order linear differential equations with constant coefficients, Method of variation of parameters, Cauchy's equation, Euler's equation, Initial and boundary value problems, Partial Differential Equations, Method of separation of variables.

Complex variables: Analytic functions, Cauchy's integral theorem, Cauchy's integral formula, Taylor series, Laurent series, Residue theorem, Solution integrals.

Probability and Statistics: Sampling theorems, Conditional probability, Mean, Median, Mode, Standard Deviation, Random variables, Discrete and Continuous distributions, Poisson distribution, Normal distribution, Binomial distribution, Correlation analysis, Regression analysis.

Numerical Methods: Solutions of nonlinear algebraic equations, Single and Multi-step methods for differential equations.

Transform Theory: Fourier Transform, Laplace Transform, z-Transform.

II. Electrical Engineering

Electric Circuits

Network graph, KCL, KVL, Node and Mesh analysis, Transient response of dc and ac networks, Sinusoidal steady-state analysis, Resonance, Passive filters, Ideal current and voltage sources, Thevenin's theorem, Norton's theorem, Superposition theorem, Maximum power transfer theorem, Two-port networks, Three phase circuits, Power and power factor in ac circuits.

Electromagnetic Fields

Coulomb's Law, Electric Field Intensity, Electric Flux Density, Gauss's Law, Divergence, Electric field and potential due to point, line, plane and spherical charge distributions, Effect of dielectric medium, Capacitance of simple configurations, Biot-Savart's law, Ampere's law, Curl, Faraday's law, Lorentz force, Inductance, Magnetomotive force, Reluctance, Magnetic circuits, Self and Mutual inductance of simple configurations.

Signals and Systems

Representation of continuous and discrete-time signals, Shifting and scaling operations, Linear Time Invariant and Causal systems, Fourier series representation of continuous periodic signals, Sampling theorem, Applications of Fourier Transform, Laplace Transform and z-Transform.

Electrical Machines

Single phase transformer: equivalent circuit, phasor diagram, open circuit and short circuit tests, regulation and efficiency; Three phase transformers: connections, parallel operation; Auto-transformer, Electromechanical energy conversion principles, DC machines: separately excited, series and shunt, motoring and generating mode of operation and their characteristics, starting and speed control of dc motors; Three

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phase induction motors: principle of operation, types, performance, torque-speed characteristics, no-load and blocked rotor tests, equivalent circuit, starting and speed control; Operating principle of single phase induction motors; Synchronous machines: cylindrical and salient pole machines, performance, regulation and parallel operation of generators, starting of synchronous motor, characteristics; Types of losses and efficiency calculations of electric machines.

Power Systems

Power generation concepts, ac and dc transmission concepts, Models and performance of transmission lines and cables, Series and shunt compensation, Electric field distribution and insulators, Distribution systems, Per-unit quantities, Bus admittance matrix, Gauss-Seidel and Newton-Raphson load flow methods, Voltage and Frequency control, Power factor correction, Symmetrical components, Symmetrical and unsymmetrical fault analysis, Principles of over-current, differential and distance protection; Circuit breakers, System stability concepts, Equal area criterion.

Control Systems

Mathematical modeling and representation of systems, Feedback principle, transfer function, Block diagrams and Signal flow graphs, Transient and Steady-state analysis of linear time invariant systems, Routh-Hurwitz and Nyquist criteria, Bode plots, Root loci, Stability analysis, Lag, Lead and Lead-Lag compensators; P, PI and PID controllers; State space model, State transition matrix.

Electrical and Electronic Measurements

Bridges and Potentiometers, Measurement of voltage, current, power, energy and power factor; Instrument transformers, Digital voltmeters and multimeters, Phase, Time and Frequency measurement; Oscilloscopes, Error analysis.

Analog and Digital Electronics

Characteristics of diodes, BJT, MOSFET; Simple diode circuits: clipping, clamping, rectifiers; Amplifiers: Biasing, Equivalent circuit and Frequency response; Oscillators and Feedback amplifiers; Operational amplifiers: Characteristics and applications; Simple active filters, VCOs and Timers, Combinational and Sequential logic circuits, Multiplexer, Demultiplexer, Schmitt trigger, Sample and hold circuits, A/D and D/A converters, 8085 Microprocessor: Architecture, Programming and Interfacing.

Power Electronics

Characteristics of semiconductor power devices: Diode, Thyristor, Triac, GTO, MOSFET, IGBT; DC to DC conversion: Buck, Boost and Buck-Boost converters; Single and three phase configuration of uncontrolled rectifiers, Line commutated thyristor based converters, Bidirectional ac to dc voltage source converters, Issues of line current harmonics, Power factor, Distortion factor of ac to dc converters, Single phase and three phase inverters, Sinusoidal pulse width modulation.

Section-B: 20 Marks.

General Awareness and Numerical Ability :

- i) Analytical & Numerical Ability
- ii) General Awareness
- iii) English
- iv) Related to Telangana Culture & Movement
- v) Computer Knowledge

ANNEXURE-II(B)
Syllabus – Assistant Engineers (Civil)

Section-A: 80 Marks.

I Engineering Mathematics

Linear Algebra: Matrix algebra; Systems of linear equations; Eigen values and Eigen vectors.

Calculus: Functions of single variable; Limit, continuity and differentiability; Mean value theorems, local maxima and minima, Taylor and Maclaurin series; Evaluation of definite and indefinite integrals, application of definite integral to obtain area and volume; Partial derivatives; Total derivative; Gradient, Divergence and Curl, Vector identities, Directional derivatives, Line, Surface and Volume integrals, Stokes, Gauss and Green's theorems.

Ordinary Differential Equation (ODE): First order (linear and non-linear) equations; higher order linear equations with constant coefficients; Euler-Cauchy equations; Laplace transform and its application in solving linear ODEs; initial and boundary value problems.

Partial Differential Equation (PDE): Fourier series; separation of variables; solutions of one-dimensional diffusion equation; first and second order one-dimensional wave equation and two-dimensional Laplace equation.

Probability and Statistics: Definitions of probability and sampling theorems; Conditional probability; Discrete Random variables: Poisson and Binomial distributions; Continuous random variables: normal and exponential distributions; Descriptive statistics - Mean, median, mode and standard deviation; Hypothesis testing.

Numerical Methods: Accuracy and precision; error analysis. Numerical solutions of linear and non-linear algebraic equations; Least square approximation, Newton's and Lagrange polynomials, numerical differentiation, Integration by trapezoidal and Simpson's rule, single and multi-step methods for first order differential equations.

II. CIVIL Engineering

Structural Engineering

Engineering Mechanics: System of forces, free-body diagrams, equilibrium equations; Internal forces in structures; Friction and its applications; Kinematics of point mass and rigid body; Centre of mass; Euler's equations of motion; Impulse-momentum; Energy methods; Principles of virtual work.

Solid Mechanics: Bending moment and shear force in statically determinate beams; Simple stress and strain relationships; Theories of failures; Simple bending theory, flexural and shear stresses, shear centre; Uniform torsion, buckling of column, combined and direct bending stresses.

Structural Analysis: Statically determinate and indeterminate structures by force/ energy methods; Method of superposition; Analysis of trusses, arches, beams, cables and frames; Displacement methods: Slope deflection and moment distribution methods; Influence lines; Stiffness and flexibility methods of structural analysis.

Construction Materials and Management: Construction Materials: Structural steel - composition, material properties and behaviour; Concrete - constituents, mix design, short-term and long-term properties; Bricks and mortar; Timber; Bitumen. Construction Management: Types of construction projects; Tendering and construction contracts; Rate analysis and standard specifications; Cost estimation; Project planning and network analysis - PERT and CPM.

Concrete Structures: Working stress, Limit state and Ultimate load design concepts; Design of beams, slabs, columns; Bond and development length; Prestressed concrete; Analysis of beam sections at transfer and service loads.

Steel Structures: Working stress and Limit state design concepts; Design of tension and compression members, beams and beam- columns, column bases; Connections - simple and eccentric, beam-column connections, plate girders and trusses; Plastic analysis of beams and frames.

Geotechnical Engineering

Soil Mechanics: Origin of soils, soil structure and fabric; Three-phase system and phase relationships, index properties; Unified and Indian standard soil classification system; Permeability - one dimensional flow, Darcy's law; Seepage through soils - two-dimensional flow, flow nets, uplift pressure, piping; Principle of effective stress, capillarity, seepage force and quicksand condition; Compaction in laboratory and field conditions; One- dimensional consolidation, time rate of consolidation; Mohr's circle, stress paths, effective and total shear strength parameters, characteristics of clays and sand.

Foundation Engineering: Sub-surface investigations - scope, drilling bore holes, sampling, plate load test, standard penetration and cone penetration tests; Earth pressure theories - Rankine and Coulomb; Stability of slopes - finite and infinite slopes, method of slices and Bishop's method; Stress distribution in soils - Boussinesq's and Westergaard's theories, pressure bulbs; Shallow foundations - Terzaghi's and Meyerhoff's bearing capacity theories, effect of water table; Combined footing and raft foundation; Contact pressure; Settlement analysis in sands and clays; Deep foundations - types of piles, dynamic and static formulae, load capacity of piles in sands and clays, pile load test, negative skin friction.

Water Resources Engineering

Fluid Mechanics: Properties of fluids, fluid statics; Continuity, momentum, energy and corresponding equations; Potential flow, applications of momentum and energy equations; Laminar and turbulent flow; Flow in pipes, pipe networks; Concept of boundary layer and its growth.

Hydraulics: Forces on immersed bodies; Flow measurement in channels and pipes; Dimensional analysis and hydraulic similitude; Kinematics of flow, velocity triangles; Basics of hydraulic machines, specific speed of pumps and turbines; Channel Hydraulics - Energy-depth relationships, specific energy, critical flow, slope profile, hydraulic jump, uniform flow and gradually varied flow

Hydrology: Hydrologic cycle, precipitation, evaporation, evapo-transpiration, watershed, infiltration, unit hydrographs, hydrograph analysis, flood estimation and routing, reservoir capacity, reservoir and channel routing, surface run-off models, ground water hydrology - steady state well hydraulics and aquifers; Application of Darcy's law.

Irrigation: Duty, delta, estimation of evapo-transpiration; Crop water requirements; Design of lined and unlined canals, head works, gravity dams and spillways; Design of weirs on permeable foundation; Types of irrigation systems, irrigation methods; Water logging and drainage; Canal regulatory works, cross-drainage structures, outlets and escapes.

Environmental Engineering

Water and Waste Water: Quality standards, basic unit processes and operations for water treatment. Drinking water standards, water requirements, basic unit operations and unit processes for surface water treatment, distribution of water. Sewage and sewerage treatment, quantity and characteristics of wastewater. Primary, secondary and tertiary treatment of wastewater, effluent discharge standards. Domestic wastewater treatment, quantity and characteristics of domestic wastewater, primary and secondary treatment. Unit operations and unit processes of domestic wastewater, sludge disposal.

Air Pollution: Types of pollutants, their sources and impacts, air pollution meteorology, air pollution control, air quality standards and limits.

Municipal Solid Wastes: Characteristics, generation, collection and transportation of solid wastes, engineered systems for solid waste management (reuse/ recycle, energy recovery, treatment and disposal).

Noise Pollution: Impacts of noise, permissible limits of noise pollution, measurement of noise and control of noise pollution.

Transportation Engineering

Transportation Infrastructure: Highway alignment and engineering surveys; Geometric design of highways - cross-sectional elements, sight distances, horizontal and vertical alignments; Geometric design of railway track; Airport runway length, taxiway and exit taxiway design.

Highway Pavements: Highway materials - desirable properties and quality control tests; Design of bituminous paving mixes; Design factors for flexible and rigid pavements; Design of flexible pavement using IRC: 37-2012; Design of rigid pavements using IRC: 58-2011; Distresses in concrete pavements.

Traffic Engineering: Traffic studies on flow, speed, travel time - delay and O-D study, PCU, peak hour factor, parking study, accident study and analysis, statistical analysis of traffic data; Microscopic and macroscopic parameters of traffic flow, fundamental relationships; Control devices, signal design by Webster's method; Types of intersections and channelization; Highway capacity and level of service of rural highways and urban roads.

Geomatics Engineering

Principles of surveying; Errors and their adjustment; Maps - scale, coordinate system; Distance and angle measurement - Levelling and trigonometric levelling; Traversing and triangulation survey; Total station; Horizontal and vertical curves.

Photogrammetry - scale, flying height; Remote sensing - basics, platform and sensors, visual image interpretation; Basics of Geographical information system (GIS) and Geographical Positioning system (GPS).

Section-B: 20 Marks.

General Awareness and Numerical Ability :

- i) Analytical & Numerical Ability
- ii) General Awareness
- iii) English
- iv) Related to Telangana Culture & Movement
- v) Computer Knowledge