



**TELANGANA STATE POWER GENERATION CORPORATION LIMITED**  
**VIDYUT SOUDHA :: HYDERABAD - 82**  
**CIN: U40102TG2014SGC094070, Phone No: 040-23499511.**  
**Website: [www.tsgenco.co.in](http://www.tsgenco.co.in) Email-Id: [cgm.adm@tsgenco.co.in](mailto:cgm.adm@tsgenco.co.in)**  
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**Notification No.01/CGM(Adm)/2023**

**DIRECT RECRUITMENT FOR THE POST OF "ASSISTANT ENGINEER"**  
**[Electrical; Mechanical; Electronics; and Civil]**  
**[LIMITED & GENERAL RECRUITMENT]**

The Telangana State Power Generation Corporation Limited (TSGENCO) is one of the pivotal organizations of the State of Telangana, engaged in the generation of power, with an installed capacity of 6485.26 MW. The TSGENCO having undertaken new green-field Power Projects to supply quality and quantity power at an affordable cost, invites applications from the eligible candidates for the post of **"Assistant Engineer" [Electrical; Mechanical; Electronics; and Civil]**.

**PARA-I:**

1. Applications are invited "On-line" from the qualified and eligible candidates in the prescribed Proforma Application, to be made available on the TSGENCO Website [www.tsgenco.co.in](http://www.tsgenco.co.in), to the post of "Assistant Engineer" [Electrical; Mechanical; Electronics; and Civil].

- i) The starting Date for payment of fees ONLINE: 07.10.2023.
- ii) Commencement of ONLINE Applications: 07.10.2023, 11:00 AM onwards.
- iii) The last date & time for payment of Fee ONLINE: 29.10.2023 upto **13.00 Hours.**
- iv) Last date & time for submission of ONLINE Applications: 29.10.2023 upto **23.59 Hours.**
- v) Hall-tickets can be downloaded 07 (seven) days prior to the Date of Examination.
- vi) The TSGENCO reserves the right to reschedule the date of examination.
- vii) The candidates are instructed to read this Notification carefully and to go through, without fail.

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2. The Date of Examination is on **03-12-2023**. The duration of the Examination will be 2 [TWO] Hours [120 Minutes].
3. The candidates who possess requisite qualification as on the date of the Notification alone may apply ONLINE by satisfying themselves about the terms and conditions of this recruitment Notification. The details of vacancies are given below:

<b>Direct Recruitment of "Assistant Engineers" [Electrical; Mechanical; Electronics; &amp; Civil]</b>		
<b>Sl.No.</b>	<b>Branch</b>	<b>No. of Vacancies</b>
<b>1</b>	<b>Electrical</b>	<b>LR: 42 GR: 145</b>
<b>2</b>	<b>Mechanical</b>	<b>LR: 03 GR: 74</b>
<b>3</b>	<b>Electronics</b>	<b>GR: 25</b>
<b>4</b>	<b>Civil</b>	<b>LR: 49 GR: 01</b>
		<b>TOTAL: 339</b>
<b>Note-(i): LR: Limited Recruitment : 94 GR: General Recruitment : 245</b>		
<b>Note-(ii):</b>		
(a) The details of vacancies Zone-Wise; Community-Wise; and of PH are as shown in <b>ANNEXURE-I</b> .		
(b) The vacancies notified are subject to variation, based on work exigencies and necessity; and shall be filled-up, duly following the "Rule of Reservation", in terms of Service Rules/Regulations, in vogue.		
(c) The vacancies notified are purely confined to the Power Generating Stations [Thermal & Hydel] across the TSGENCO, situated in Zone-I and Zone-II. Therefore, the aspirants who are willing to work in the Power Generating Stations alone may apply, as the aspirants coming up for selection through the selection process, shall be posted to the respective Power Generating Stations [Thermal & Hydel], where they shall be required to work throughout the entire service in the TSGENCO and will not be considered for posting in Hyderabad.		

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4. **EDUCATIONAL QUALIFICATIONS:** Applicants must possess the qualifications from a recognized University as detailed below, as on the date of Notification:

NAME OF THE POST	EDUCATIONAL QUALIFICATIONS
<b>a) Assistant Engineer/ Electrical:</b>	Must possess a Bachelors Degree in Electrical Engineering/Electrical & Electronics Engineering of a recognized 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/AICTE [or] any other qualification recognized as equivalent thereto [or] a Pass in Sections "A" & "B" of AMIE (India) Examination conducted by the Institution of Engineers in Electrical; Electrical & Electronics Engineering.
<b>b)Assistant Engineer/ Mechanical:</b>	Must possess a Bachelors Degree in Mechanical Engineering of a recognized 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/AICTE [or] any other qualification recognized as equivalent thereto [or] a Pass in Sections "A" & "B" of AMIE (India) Examination conducted by the Institution of Engineers in Mechanical Engineering.
<b>c)Assistant Engineer/ Electronics</b>	Must possess a Bachelors Degree in Electronics & Communication Engineering/Instrumentation Controls Engineering/Electronics & Control Engineering/ Instrumentation & Power/Power Electronics of a recognized 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/AICTE [or] any other qualification recognized as equivalent thereto [or] a Pass in Sections "A" & "B" of AMIE (India) Examination conducted by the Institution of Engineers in Electronics Engineering
<b>d) Assistant Engineer/ Civil</b>	Must possess a Bachelors Degree in Civil Engineering of a recognized 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/AICTE [or] any other qualification recognized as equivalent thereto [or] a Pass in Sections "A" & "B" of AMIE (India) Examination conducted by the Institution of Engineers in Civil Engineering.

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**Note: "Equivalent Qualifications"** – At the time of verification of Certificates, if it is noticed that any applicant possessing other than the prescribed Qualifications and claims that it is an equivalent to the prescribed Qualification, then an Expert Technical Committee will be constituted. The Committee will go into the details of the subjects studied therein vis-a-vis recognition accorded under Central Act or State Act or Provincial Act or Institutions recognized by UGC/AICTE; and take a decision as to its equivalency or otherwise. The decision of the Technical Committee in this regard shall be final and binding on such applicants/claimants and no grievances or correspondence thereof in this regard shall be entertained under any circumstances.

5. **AGE:** Minimum **18** years & Maximum **44** years. **The age will be reckoned as on 01-07-2023.**

**Note:** The upper age limit is raised upto 10 years [i.e.] from 34 years to 44 years as per the G.O.Ms.No.42, GAD(Ser.A), dtd.19-03-2022, as adopted by the TSGENCO vide TGOO.No.43/CGM(Adm)/2022, dtd.24-06-2022.

**Age Relaxations:** The upper age limit prescribed above is however relaxable in respect of the following categories of candidates/applicants, belonging to the State of Telangana only:

<b>Sl. No.</b>	<b>Category of candidates</b>	<b>Permissible Age Relaxation</b>
1.	BCs [Non-creamy layer only]; EWS; SC; and ST.	05 years
2.	Physically challenged persons	10 years

6. **Fee:**

(i) **Application processing Fee:**

Each applicant must pay an amount of **Rs.400/-**-(Rupees Four Hundred only) towards ONLINE application processing fee.

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(ii) **Examination Fee:**

The applicants have to pay an amount of **Rs.300/-**(Rupees Three Hundred Only) towards "**Examination Fee**". However, the applicants belonging to SC/ST/BC/EWS and Physically Challenged categories are exempted from payment of "**Examination Fee**". Mere exemption from payment of examination fees does not confer any right on the candidate to treat them as belonging to SC/ST/BC/EWS and PH Categories.

Note: The applicants belonging to other States are not exempted from payment of "**Examination Fee**".

(iii) **Mode of Payment of Fee:**

(a) The Fee mentioned at PARA-I(6)(i) & (ii) is to be paid ONLINE through any of the following modes of payment, duly following the ONLINE instructions:-

- i. Debit card
- ii. Credit card
- iii. Internet Banking
- iv. UPI payment

(b) The Fee once paid/remitted shall not be refunded or adjusted under any circumstances. Failure to pay the Application Processing Fee and Examination Fee, wherever applicable, will entail total rejection of the application. Unless full payment of both Examination Fee [unless exempted] and Application Fees is made, the candidature of the applicant will not be considered for processing and will be summarily rejected and no correspondence or concession in this regard will be entertained.

(c) The TSGENCO will not be responsible for the Technical snag encountered during the process of payment of fee and will not take responsibility for remittance of the amount back to their accounts. The candidates shall consult their Bank in this regard.

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(d) After payment of Fee, the candidate has to log on to the Website <https://www.tsgenco.co.in> and Click on "APPLY ONLINE" link on Homepage [Latest News] to view the detailed Notification 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 detailed Notification can also be viewed from the "CAREERS" link on Homepage.

**PARA-II:**

**CENTRES FOR THE WRITTEN EXAMINATION:**

The Written Examination for recruitment to the post of "Assistant Engineer" [Electrical, Mechanical, Electronics & Civil] will be held at different Centers located in "twin-cities" of Hyderabad and Secunderabad [GHMC & HMDA limits] only.

**PARA-III:**

**HOW TO APPLY; HOW TO MAKE THE PAYMENT OF FEE; AND UPLOAD/  
SUBMIT THE APPLICATION FORM:**

The applicant has to go through the detailed Notification [Click the link to get] for ONLINE submission of Application and then proceed further.

**Note:** Please also read the following Annexures appended to the Notification before filling the application form:

- Annexure-I: Break up of Vacancies.
- Annexure-II: Syllabus of Written Examination.
- Annexure-III: Proforma of School Study Certificate.
- Annexure-IV: Proforma of Residence Certificate (if not studied in School through Regular mode).
- Annexure-V: Meritorious Sports Person Certificates (Form-1, Form-2, Form-3 & Form-4)

**STEP-I:- Payment of Fee:** The applicant/candidate has to visit the TSGENCO web site <https://www.tsgenco.co.in> to view the detailed Notification. The applicant should pay the prescribed Fee mentioned at PARA-I(6)(i) & (ii) of the Notification, ONLINE by visiting the Link in the Website duly following ONLINE Instructions and to ensure to make note of the "Fee Paid Receipt" with "Journal or Transaction Ref. Number" in the First instance.

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**Note:** The applicant should ensure that the Certificates viz., BE/B.Tech, SSC, Community, Non-Creamy layer Certificate for BCs etc., are available on hand while filling up of the particulars at the time of payment of Fee. The Name and Date of Birth should be filled up as per the SSC Certificate and Community Certificate [issued by the Government of Telangana] viz. SC/ST/BC-A/BC-B/BC-C/BC-D/BC-E/OC(EWS). The particulars which are filled at the time of payment of Fee will be carried over to the ONLINE Application Form and cannot be altered. The candidate need to fill only the other particulars as asked in the ONLINE application form.

**STEP-II:- Submission of Application:**

After payment of Fee, the Candidate/Applicant has to logon to the website <https://www.tsgenco.co.in> and click on "APPLY ONLINE" link in the "Latest news" on Homepage, to view the detailed notification, User Guide and Application Form. The applicant has to provide payment details (Journal/Transaction Ref. Number and date) and Date of Birth details and then invariably fill all the relevant fields in the Application along with uploading of the scanned copy of passport size photograph with signature (see instructions for scanning and uploading photograph with signature) and submit the filled-in application form. Immediately on submission of application, applicant will get an acknowledgement in the form of a downloadable "Pdf" document.

**EDIT OPTION:** Edit option is provided to the candidates/applicants during the period from 10:00 AM on 01-11-2023 to 02-11-2023, upto 17:00 Hrs, for making corrections to the incorrect data entered, if any, in the online application form. This edit option will be strictly considered for one time only. Hence, the candidate/applicant should be utmost careful while using the Edit option as this data will be considered as Final upto the Selection. The candidates/applicants are instructed to verify/see their bio-data and other particulars which are available in the downloaded "Pdf" file and make required corrections to the incorrect data entered, if any, in his/her respective application by availing this EDIT Option on one time basis. The candidate/applicant has to download the corrected "Pdf" for future reference and which will be treated as Final. If no corrections are required to his/her particulars in the online application, there is no need

to avail EDIT Option. No separate advertisement/Notification will be issued in any news paper or No separate individual intimation shall be given in this regard.

NOTE:

1. The TSGENCO is not responsible for any discrepancy in Bio-data particulars while submitting the application form through On-line. The candidates/applicants are therefore advised to strictly follow the instructions and User guide in his/her own interest before submitting the application.
2. The particulars furnished by the applicant/candidate 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 the TSGENCO under any circumstances unless specifically called for. Applicants should be careful in filling-up the application form and submission. If any lapse is detected during the scrutiny/verification of certificates, 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 payment of FEE, Uploading/Submission of Application Form, the candidates/applicants are required to go through the detailed notification and should carefully ensure his/her eligibility for this Notification/examination. No relevant column of the Application Form should be left blank; otherwise application form will be rejected.
5. The TSGENCO will not make any corrections in the application form submitted by the Applicant/candidate.
6. The applicant must click on "CONFIRM" and "SUBMIT BUTTON" after filling and preview of the application. Otherwise, the application particulars will not be saved in the database.

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7. The candidates/applicants are instructed to verify/see their bio-data and other particulars which are available in the downloaded "Pdf" file and make required corrections to the incorrect data entered, if any, in his/her respective application by availing EDIT Option only once. Candidates/applicants have to download the corrected "Pdf" for future reference and which will be treated as Final.

8. The Hand written/Typed/Photostat copies/Outside printed Application Forms will not be entertained and liable for rejection. The TSGENCO will not be held responsible for the applications submitted in any other mode.

9. The Candidates are required to retain a copy of the filled-in application form with Reference ID for future reference.

10. Candidates/applicants have to submit application only through online mode well in advance of the last date to avoid last day rush.

11. The candidates/applicants are hereby informed that the vacancies notified are purely confined to the Power Generating Stations [Thermal & Hydel] across the TSGENCO, situated in Zone-I and Zone-II. Therefore, the candidates/applicants who are willing to work in the Power Generating Stations alone may apply. The candidates coming up for selection through the selection process, shall be posted only to the respective Power Generating Stations [Thermal & Hydel] where they shall be required to work throughout the entire service in the TSGENCO and will not be considered for posting in Hyderabad. Therefore, the candidates willing to work in the Power Generating Stations alone should apply.

12. For any problems related to Online submission and downloading of Hall-Tickets, please contact Help Desk No.040-49171747. Call Timings: 10:30 AM to 1:00 PM & 2:00 PM to 5:00 PM) or log on to [www.tsgenco.co.in](http://www.tsgenco.co.in) and click on to "complaint box".

#### **PARA –IV:**

#### **GENERAL PROVISIONS:**

1. The applicants must compulsorily fill up all relevant columns of the application and submit the applications through Website only. The particulars made available in the Website shall be processed through computer and the eligibility decided in terms of Notification.

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2. The Applications received ONLINE in the prescribed pro-forma available in the website and within the time shall only be considered and the TSGENCO will not be held responsible for any kind of discrepancy.

3. Applicants must upload his/her own scanned recent passport size photo and signature through "**jpg**" format in the following steps:

**INSTRUCTIONS FOR SCANNING OF PHOTOGRAPH AND SIGNATURE:**

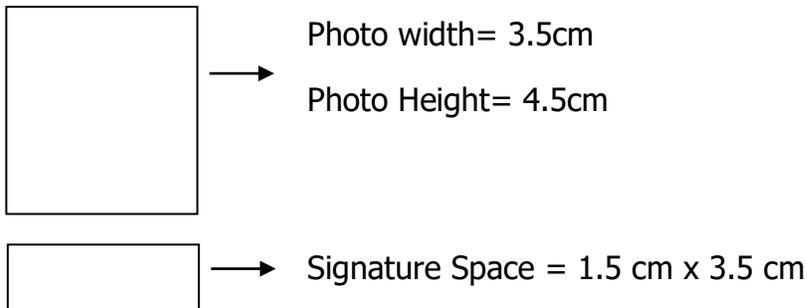


Photo width= 3.5cm; Photo Height= 4.5cm;

Signature width = 3.5 cm; Signature Height = 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 sizes containing photograph and signature separately. Please do not scan the complete page.
- iii) The images consisting of the photo [3.5 cm x 4.5 cm] and the signature [1.5 cm x 3.5 cm] are required to be scanned and stored in \*.jpg format on local machine.
- iv) Ensure that the size of the scanned image of Photo is not more than 50KB and that of Signature is not more than 20KB.
- v) If the size of the file is more than 20/50 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.

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- vii) The signature must be signed only by the candidate/applicant 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 images shown above are:

Size of the file for photo < 50 KB;

Size of the file for Signature < 20 KB

Dpi setting = 200 dpi

True Colour

The candidate has to upload his/her Photo and 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:**

(i) The claim of the candidates with regard to the date of birth, educational/technical qualifications, Community, EWS, and Physically Handicapped status are accepted only provisionally on the information furnished by them in their application form and is subject to the verification and satisfaction of the TSGENCO. 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 candidate must satisfy the eligibility criteria laid down in the notification during certificate verification. The candidature is therefore provisional at all the stages and TSGENCO reserves the right to reject candidature at any stage of the selection even after declaration of results, if any mistake is noticed at a later date.

(ii) Applicant must compulsorily fill-up all relevant fields of application and submit application through Website only.

7. **Invalidation of OMR Answer Sheet:-**

- a) If any candidate/applicant fails to "bubble" or "wrongly bubbles" the Question Booklet Series/Number, Hall-Ticket Number in the OMR Answer Sheet, such Answer Sheets are invariably invalidated, as the answer sheets are valued by "Optical Mark Reader". This stipulation is to avoid any sort of human interface in evaluation of the Answer Scripts.
- b) Tampering of OMR answer sheet by using whitener, eraser, blade and chalk powder etc., and also tampering of barcode by any means leads to invalidation.
- c) No request for re-consideration of such rejected/invalidated cases will be entertained.

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8. (A) The following Certificates must be kept ready by the candidates at the time of submitting the application online and should be produced for the purpose of verification:

- i) Date of Birth Certificate (SSC/CBSE/ICSE)
- ii) School Study Certificates (From Class-I to Class-VII)
- iii) Graduation Certificate along with Marks Memo.
- iv) Community Certificate/EWS Certificate; and
- v) Non-Creamy layer Certificate for BC Candidates.

The following Certificates in prescribed pro-forma should be produced by the candidates at the time of verification of certificates.

- iv) PDF Application Form;
- v) Hall Ticket;
- vi) Aadhaar Card/Voter Id/Passport/Driving License/Bank Passbook with Photograph/PAN Card;
- vii) Permanent Community Certificate in original obtained from Govt. of Telangana State in the name of the candidate/applicant with Father name is only acceptable in respect of BCs, SCs & STs clearly indicating the Sub-Caste and Group.
- viii) Non-Creamy Layer certificate for BCs as per Form-VII B (certificate issued in the name of the candidate/applicant as S/o or D/o is only acceptable) obtained from competent authority of Telangana Government.
- x) Candidates claiming to be belonging to Economically Weaker Sections (EWS) shall obtain a Latest Income and Asset Certificate for EWS reservation obtained from Competent authority of Telangana Government in the name of the candidate/applicant with Parent's name as per G.O.Ms.No.244, General Administration (SER-D) Department, Dtd.24-08-2021 and other guidelines/instructions issued by the Govt. of Telangana.

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- xi) Certificate of Residence (where the Candidate has not studied in Educational Institutions) (1<sup>st</sup> to 7<sup>th</sup> Class period) obtained from Competent authority of Telangana Government. (Proforma attached).
- xi) No Objection Certificate from the Employer (even if employed at any later stage of recruitment).
- xii) Certificate claiming Sports reservation.

In case of PH candidates, Visually Handicapped/Hearing Disability & Hearing Impairment/Orthopaedically Handicapped/Multiple Disabilities, Certificates should be obtained from Competent Medical Authority in SADAREM format relevant to them.

(B) Guidelines for evaluation of various disabilities and procedure for certification are mentioned in G.O.Ms.No.23, Department for Women, Children, Disabled & Senior Citizens (DW) Dtd.26-5-2011 read with G.O.Ms.No.06, Department for Women, Children, Disabled & Senior Citizens (Estt.), dtd.12-4-2016 and G.O.Ms.No.05 Department for Women, Children, Disabled & Senior Citizens(Schemes), dtd.13-06-2018.

(i) Physically Challenged candidates who are claiming reservations under Disability quota must note that they will be referred to State Medical Board (Appellate Medical Authority) after completion of certificate verification. The report of Medical Board is final.

(ii) Request for re-medical-examination by the State Medical Board (Appellate Medical Authority) for assessment of disability will not be entertained.

(iii)The Certificate Formats are available on the TSGENCO website [<https://www.tsgenco.co.in>]

**Note:** Candidates must provide correct details in the application form failing which candidature will be invalidated.

For eg: If a candidate has entered the community as BC-B in the online application and whereas at the time of Certificate Verification he produced BC-A Certificate to the TSGENCO, then his candidature for BC-B is rejected and BC-A will not be accepted at that stage. He will be considered only for OC (General) category for selection process, if otherwise eligible according to

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rules. If a candidate has entered the reservation details as belonging to EWS in the online application and whereas at the time of Certificate Verification he did not produce EWS Certificate then his candidature for EWS is rejected and will be considered only against OC(General) category.

9. The Candidates will be required to appear for "Written Examination" as and when conducted, at their own cost.

10. Written Examination will be conducted in ENGLISH language only and in the twin Cities [Hyderabad & Secunderabad].

11. Mere admission for Written Examination or calling the qualified candidates in the Written Examination for Certificates verification in the ratio of 1:1 does not confer any right for appointment. The candidate must satisfy the eligibility criteria laid down in the notification during certificate verification.

12. The decision of the Selection Committee/TSGENCO is final in selection and allotment of candidates.

**PARA-V:**

**IMPORTANT LEGAL PROVISIONS GOVERNING THE RECRUITMENT PROCESS:-**

1. **Vacancies**: The Recruitment will be made to the vacancies notified, which are subject to variation, based on work exigencies and necessity; and shall be filled-up, duly following the "Rule of Reservation", in terms of Service Rules/Regulations, in vogue. There shall be no "Waiting List" as per G.O.Ms.No.81, General Administration (Ser.A) Dept., dtd.22.02.1997, as adopted by the TSGENCO, vide B.P(P&G-Per) Ms.No.100, dtd.23-07-1997.

2. The Unfilled and Non-Joining vacancies will be Carried Forward to next recruitment.

3. **Recruitment**: The Recruitment will be processed as per this Notification and also as per the Rules and Regulations of the TSGENCO existing and in force as on date.

4. **Rules**: All are informed that various conditions and criterion prescribed herein are governed by the Rules and Regulations/Orders existing in the TSGENCO and in force as on date.

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5. **Transparency in Recruitment & 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 scrupulously followed. A candidate shall be disqualified for appointment, if he himself and 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.

6. **Zonal/Local**: As per Regulation-22(B) of APSEB Service Regulations Part-II, as adopted, direct recruitment to the posts notified shall be made following the reservation prescribed in Column-4 & 5 of Table-A, to the "Local" candidates and also posts to be filled up by "Open Competition", respectively, of the two Zones specified in the Table-B and confined to the State of Telangana.

<b>Zones</b>	<b>Districts covered</b>	<b>Name of the Generating Station</b>
I	Adilabad, Nirmal, Mancherial, Asifabad, Komarambheem, Hanamkonda[earlier Warangal Urban], Warangal[earlier Warangal Rural], Mahabubabad, Medak, Siddipet, Jayashanker Bhupalpally, Mulugu, Karimnagar, Sircilla Rajanna, Jagityal, Peddapalli, Khammam, Bhadradi Kothagudem, Nizamabad, Kamareddy	Kakatiya Thermal Power Project Stages I&II; Peddapalli MHS; Ramagundam Thermal Station; Paleru MHS; Kothagudem Thermal Power Station-V&VI Stages; Kothagudem Thermal Power Station-VII Stage; Bhadradi Thermal Power Station; Pochampadu MHS; Nizam Sagar MHS.
II	Hyderabad, Rangareddy, Vikarabad, Medchal Malkajigiri, Mahabubnagar, Jogulamba Gadwal, Wanaparthi, Jangoan, Nagarkurnool, Narayanpet, Sangareddy, Nalgonda, Suryapet, Bhongir-Yadadi.	Yadadi Thermal Power Station A&B; Srisailem Left Bank HES; Nagarjuna Sagar HES, Nagarjuna Sagar Left Canal HES; Puttamgandi (AMRPLIS); Pulichintala HES; Priyadarshini Jurala HES; Lower Jurala HES; Singur MHS.

The candidates recruited on the Zonal basis shall be transferred within the respective Zones only. The "Selection List" will be drawn into Two parts. The First Part will comprise of 5% of the posts consisting of combined merit list of "Local" as well as

“Non-Local”. The remaining Second Part will comprise the balance 95% of the posts in the respective Zones, consisting of “Locals” only and the posts will be filled duly following the “Rule of Reservation”.

a) The candidates will be selected and allotted to Zones as per their Rank in the merit list and as per zonal preferences for allotment of Non-local candidates against vacancies available. Selection shall be made on State-Wide merit, in respect of Non-local candidates and allotment of Zones shall be made as per the preference given by candidates against the actual vacancies.

b) While the Corporation calls for preference of candidates in respect of Zones in the application form, it is hereby clarified that the said preferences are only indicative for being considered to the extent possible but not binding. Therefore, the TSGENCO has the power to assign a successful candidate to any of the notified posts in the Zone in respect of Non-local candidates, for which he/she is considered to be qualified and eligible, subject to fulfilling the selection criteria. Mere claim of preference for any Zone for allotment against vacancy does not confer a right to selection for that Zone in particular or any Zone in general.

7. **Employee Details:** The persons already in Government Service/Autonomous bodies/Govt. Aided Institutions etc., whether in permanent or temporary capacity or as work charged employees are required to inform in writing to their Employer that they applied for this recruitment and required to submit “No Objection Certificate” from the concerned Employer to the TSGENCO as and when required to do so. The persons who are employed after submission of application or at any later stage for this recruitment should also submit “No Objection Certificate” from their Employer concerned to the TSGENCO as and when required to do so.

8. **Caste & Community:** The Community Certificate issued by the competent authority, not below the rank of Tahsildar (Obtained from the Government of Telangana) should be submitted at appropriate time in respect of SC, ST & BC [BC-A, BC-B, BC-C, BC-D & BC-E] candidates. **No person who professes a Religion**

**different from Hinduism shall be deemed to be a member of "Scheduled Caste".**

**Note: The applicants belonging to other States are not entitled for any kind of community reservation.**

9. **Percentage of reservation:** The following percentages of reservations are applicable, subject to the orders of the Government, from time to time:-

**(i)EWS = 10% :** The EWS reservation is applicable as per G.O.Ms.No.65, 242, 243 & 244 GA(SER.D) Dept., dtd.19-03-2021, 24-08-2021 as adopted by the TSGENCO vide TGOO No.83/CGM(Adm)/2021 dtd.16.09.2021.

**Economically Weaker Sections** means the persons who are not covered under the Scheme of reservations for the SCs, STs and BCs and whose family has gross annual income below Rs.8.00 Lakhs (Rupees Eight Lakhs only) are identified as "Economically Weaker Sections" for the benefit of reservation. Candidates belonging to Economically Weaker Section category shall submit the latest Income and Asset Certificate issued by any of the following Authorities of Government of Telangana State:

- a) District Magistrate/Additional District Magistrate/ Collector/ Sub-Divisional Magistrate/Tahsildar.
- b) Revenue Officer not below the rank of Tahsildar
- c) Sub-Divisional Officer of the area where the Candidate and/or his family normally resides.

The EWS Certificate has to be produced at an appropriate time. In case of failure to produce the same on the day of verification of certificates, the candidature against EWS will be rejected and will be considered against OC(General) category as per his/her eligibility.

**(ii) 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.

**(iii) SC = 15%**

**(iv) ST = 10%** As per G.O.Ms.No.130, General Administration (Ser.D) Department, dtd.09.11.2022, enhancing the reservation for Scheduled Tribes from 6% to 10% read with G.O.Ms.No.135, General Administration (Ser.D) Department, Dtd.23.11.2022, as adopted by the TSGENCO vide TGOO No.259/CGM(Adm)/2023, dtd.17.01.2023.

**(v) PH = 04%** - Reservation to Disabled persons is subject to the Special Rules/Adhoc Rules of the Government of Telangana governing the posts. The extent of Disability will be decided by State Appellate Medical Authorities.

If eligible disabled women candidates of VH(W)/HH(W)/OH(W)/MH(W) category are not available in the initial recruitment, the same shall be filled up by the eligible Male candidates with same category of disability, respectively, as per G.O.Ms.No.96 General Administration (Ser.D) Department, dtd.22/07/2019, as adopted by the TSGENCO vide TGOO.No.40/CGM (Adm)/2022, dtd.24-06-2022. Hence, eligible male candidates of VH/HH/OH/MH disabled category can also apply for the posts meant for Women Categories.

For Carried Forward PH vacancies, if eligible disabled candidates of that particular category are not available, the same shall be filled up by the method of interchanging as per G.O.Ms.No.96 General Administration (Ser.D) Department, dtd.22.07.2019. Hence, candidates of all the disabled categories can apply.

**(vi) Sports Quota =2%** - **"Meritorious Sportsman"** means the individual who has participated in the discipline or obtained Medals mentioned in the Annexure-I & II respectively to G.O.Ms.No.74, YAT&C(Sports) Department, dated 09-08-2012 or as may be revised by the Government from time to time, as adopted by TSGENCO, vide GOO.No.485/JS(Per)/2012, dtd.13-12-2012.

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The Meritorious Sportsman who possess the necessary certificate issued by the competent authority clearly certifying that the qualifying participation was prior to the date of this Notification, will come under this Reservation and it will be applicable to the following categories only:

**Category 1)** - A sports person who won medals or represented India in an International Competition/Multinational Competition in any one of the recognized Games/Sports which are mentioned in Annexure-I of GO Ms No.74, YATC (Sports) Department, dated 9-8-2012 as adopted by TSGNECO vide G.O.O.No.485/JS(Per)/2012, dtd.13-12-2012

**Category 2)** - A sports person who won medals or represented a State in India in a National Competition in any one of the recognized Games/Sports which are mentioned in Annexure I of GO Ms No. 74, YATC (Sports) Department, dated 9-8-2012 and as subsequently amended from time to time

**Category 3)** - A sports person who won medals or represented a University from State of Telangana in the Inter-University Competition at National level / Zonal level / Regional level in any one of the recognized Games/Sports which are mentioned in Annexure I of GO Ms No. 74, YATC (Sports) Department, dated 9-8-2012 and as subsequently amended from time to time Rc No.60/ Rect. /Admn-1 /2022, dated 20<sup>th</sup> May, 2022.

NOTE:-(i) Candidates who come under category (1) above shall be considered initially to fill the vacancies under MSP reservation. If sufficient number of Candidates of category (1) are not available, then the Candidates from category (2) and thereafter from category (3) shall be considered for the relevant Posts;

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ii) Where there is more number of Candidates possessing the certificates of same category available, then marks secured by them during the final selection shall be taken to decide the inter-se-merit;

iii) In the event of non-availability of eligible sports persons, the vacancies reserved for them shall be deemed to be allotted to "Open Competition" in the same recruitment.

(vii) **Women = 33 1/3 %** - The reservation for women as prescribed shall be implemented horizontally, following the law laid down by the Hon'ble Supreme Court in the case of Rajesh Kumar Daria Vs. Rajasthan Public Service Commission [2007(8)SCC785], read with orders that may be issued by the Government, if any, in the matter, before the completion of Final Selection process, shall also be implemented.

**Note:** Candidates producing certificates issued by the Competent Authorities in Telangana State alone are eligible to claim various reservations like SC/ST/BC/EWS/PH etc.

10. **Creamy Layer:** In terms of G.O.Ms.No.20, Backward Classes Welfare (OP) Department, dtd.31-10-2017, as adopted by the TSGENCO, vide TGOO.No.546/CGMHR)/2017, dtd.17-11-2017, 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. The B.C. Candidates whose Parent's income is less than the 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.

**PARA-VI:**

**RESERVATION TO LOCAL CANDIDATES:**

- (i) **Local Reservation:** 95% is applicable as per Regulation-22(B) of APSEB Service Regulations Part-II, as adopted.
- (ii) **Local Candidate:** 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.
- (iii) **Definition of Local candidate:-** Local Candidate means a candidate for direct recruitment to any post shall be regarded as a local candidate in relation to a local area -
  - (a) if he has studied in an educational institution or educational institutions in such local area for a period of not less than four consecutive academic years ending with the academic year in which he appeared or, as the case may be, first appeared for the relevant qualifying examination; or
  - (b) where during the whole or any part of the four consecutive academic years ending with the academic year in which he appeared or as the case may be first appeared for the relevant qualifying examination he has not studied in any educational institution, if he has resided in that local area for a period of not less than four years immediately preceding the date of commencement of the qualifying examination in which he appeared, or as the case may be, first appeared.

**Explanations:-** For the purpose of this paragraph -

- (i) 'educational institution' means a University or any educational institution recognized by the State Government, a University or other competent authority;
- (ii) **relevant qualifying examination in relation to a post means:**
  - (a) the examination, a pass in which is the minimum educational qualification prescribed for the post;

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(b) the Seventh Class examination or an examination declared by the State Government to be equivalent to the Seventh Class examination; whichever is lower;

(iii) in reckoning the consecutive academic years during which a candidate has studied, any period of interruption of his study by reason of his failure to pass any examination shall be disregarded;

(iv) the question, whether any candidate for direct recruitment to any post has resided in any local area shall be determined with reference to the places where the candidate actually resided and not with reference to the residence of his parents or other guardian.

(2) A candidate for direct recruitment to any post who is not regarded as a local candidate under sub-paragraph (1) in relation to any local area shall -

(i) If he has studied in educational institutions in the State for a period of not less than seven consecutive academic years ending with the academic year in which he appeared or as the case may be, first appeared for the relevant qualifying examination be regarded as a local candidate in relation to -

**(A)** Such local area where he has studied for the maximum period out of the said period of seven years; or

**(B)** Where the periods of his study in two or more local areas are equal, such local areas where he has studied last in such equal periods;

(ii) (A) If during the whole or any part of the seven consecutive academic years ending with the academic year in which he appeared or as the case may be first appeared for the relevant qualifying examination, he has not studied in the educational institutions in any local area, but has resided in the State during the whole of the said period of seven years, be regarded as a local candidate in relation to -

i) Such local area where he has resided for the maximum period out of the said period of seven years; or

ii) Where the periods of his residence in two or more local areas are equal, such local area where he has resided last in such equal periods;

(B) In cases where Visually Handicapped and Hearing Handicapped persons studied in the special schools meant for them, the native place of the parents of such Visually Handicapped and Hearing Handicapped persons shall be taken as Local area of the said candidates.

(C) 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 class I to Class VII. 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 the Tahsil. If, however, a candidate has resided in more than one Tahsil during the relevant 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. The relevant Certificates issued by the competent authority may be got ready and kept with the candidates to produce the same as and when required.

**NOTE:**

(A) Residence Certificate will not be accepted, if a candidate has studied in any educational Institution upto VII Class or equivalent examination, such candidates have to produce study certificates invariably. 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.

(B) Each of the Zones comprise of the Districts and the Power Generating Stations as mentioned in Clause-6 of Para-V of this Notification.

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**PARA-VII:**

**SYLLABUS AND SCHEME OF EXAMINATION:**

- (i) **Syllabus**:- The Syllabus for the Written Examination is as shown in **Annexure-II**.
- (ii) **Scheme of Examination**:- The "Written Examination" shall comprise of 100 Marks consisting of 100 Multiple Choice Questions and each question carrying 1(One) Mark. The Section "A" consisting of 80 Questions on core technical subject and the Section "B" consisting of 20 questions on English, General Awareness, Analytical and Numerical Ability including Telangana History, Culture and post-development of Telangana State after formation, Basic knowledge of Computer for handling office works such as MS Office etc. The Duration of the Written Examination will be 2(two) hrs (120 minutes).
- (iii) **Hall Tickets**: The Hall Tickets will be made available on the TSGENCO Website on the scheduled date 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 by the candidate till the final selection.
- (iv) **Date of examination**: The written examination for recruitment to the post of "Assistant Engineer" (Electrical; Mechanical; Electronics & Civil;) will be held on 03-12-2023.
- Note**: Any change in the Scheduled Date of Written Examination will be published in the website only.
- (v) **Examination Centers**: The written examination for recruitment of "Assistant Engineers" (Electrical, Mechanical, Electronics & Civil) will be held at different Centers located in the Twin cities of Hyderabad and Secunderabad [GHMC & HMDA limits] only.
- (vi) **Instructions to Candidates at the time of Written Examination**:
1. The Written Examination is of two hours duration. The Date, Time and Venue of the Examination will be indicated on the Hall Ticket. The Candidates should reach the Examination Centre in time. The Candidates have to report at least 60 Minutes before the Examination Time at the examination Center/Venue.

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Candidates will not be allowed into the Examination Hall after the examination has commenced 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 Written Examination 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 whitener, eraser, blade and chalk powder etc. 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 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 TSGENCO.

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 evaluated.

7. The applicants are not allowed to bring any Electronic Devices/Gadgets such as Smart/Mobile Phones, Calculators, Tablets, iPad, Bluetooth, Pagers, Programmable Devices or Storage Media like Pen-drive, Smart Watches, Camera etc., or any other equipment or related accessories either in working or switched off mode capable of being used as a communication device during the

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examination. Use of Electronic devices or Gadgets in the examination hall shall be punishable with imprisonment for a term which shall not be less than three years but which may extend upto seven years and with fine which shall not be less than Rupees Five Thousand, but which may extend upto Rupees One Lakh. Loaning and interchanging of articles among the applicants/candidates is not permitted in the examination hall and any form of malpractice will not be permitted in the exam hall and applicants/candidates are advised not to bring any of the banned items including mobile phones to the venue of the examination, as arrangement for safe-keeping cannot be assured.

**PUBLICATION OF KEY:**

(i) The TSGENCO will publish the "provisional key" on its Website on the following day after conduct of the Written Examination. Any objections with regard to the "provisional key" shall be required to be filed **within 48 Hours**, from the date of publication of the provisional key through the link provided in the TSGENCO Website, by giving detailed justification. The objections physically in the form of Representations or through Emails etc. are not entertained in any circumstances.

(ii) The objections with detailed justification received in the prescribed Pro-forma within due date only will be referred to the Expert Committee for moderation and the decision of the Expert Committee thereon shall be final and binding on all the concerned. Accordingly, Final Key and the results will be published in the Website.

(iii) Any objections on Final Key will not be entertained under any circumstances.

(iv) The Marks for the "deleted" questions, if any, will be awarded to each candidate proportionately to determine the merit of the candidate.

**(v) After completion of the examination, the images of the OMR Sheets will be hosted on the Website for reference. The candidates, by entering the required log-in credentials, can download the images of the OMR Sheets. The candidates are advised to retain their images of OMR Sheets for future purpose until completion of the recruitment process. The Duplicate images of the OMR Sheets will not be issued under any circumstances.**

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**PARA-VIII:**

**PROCEDURE FOR SELECTION:**

- (i) The selection of candidates for appointment will be made purely based on “merit marks” obtained by the candidates in the Written Examination. The “Written Examination” shall comprise of 100 Marks consisting of 100 multiple choice questions and each question carrying 1(One) Mark. The Section “A” consisting of 80 Questions on core technical subject and the Section “B” consisting of 20 questions on English, General Awareness, Analytical and Numerical Ability including Telangana History, Culture and post-development of Telangana State after formation, Basic knowledge of Computer for handling office works such as MS Office etc. The Duration of the Written Examination will be 2(two) Hours [120 minutes].
- (ii) **In the event of tie in written exam marks, candidate whose Age is higher will be ranked high. In the event of tie thereon, the marks obtained in Part-A will form basis for deciding the rank. Still in case of further tie, the year of passing of the qualifying examination of B.Tech will be the basis for deciding the Rank of the candidate.**
- (iii) Only those candidates who qualify in the written examination by being ranked high in the descending order [with the highest and ends with the smallest], community wise, will be called for verification of Original Certificates in the ratio of **1:1**.
- (iv) The minimum marks to qualify for selection shall be not be less than 40% Marks for the candidates belonging to OC, EWS & Meritorious Sportsperson; not less than 35% for BCs; and not less than 30% for SCs, STs and PH. Thus, the minimum qualifying marks in the Written Examination for selection shall be as follows:

	<b><u>Category</u></b>		<b><u>Minimum Qualifying Marks</u></b>
(i)	OC, EWS & Meritorious Sportsperson	-	40%
(ii)	BC	-	35%
(iii)	SC/ST	-	30%
(iv)	PH	-	30%

**Note:** Mere securing minimum qualifying marks does not confer any right on a candidate for being called for verification of original Certificates or for appointment. The candidate must satisfy the eligibility criteria laid down in the notification during certificate verification.

- (v) The "Selection List" will be drawn into Two parts. The First Part will comprise of 5% of the posts consisting of combined merit list of "Local" as well as "Non-Local". The remaining Second Part will comprise the balance 95% of the posts in the respective Zones, consisting of "locals" only and the posts will be filled duly following the "Rule of Reservation".
- (vi) The vacancies notified are purely confined to the Power Generating Stations [Thermal & Hydel] across the TSGENCO, situated in Zone-I and Zone-II. Therefore, the aspirants who are willing to work in the Power Generating Stations alone may apply, as the aspirants coming up for selection through the selection process, shall be posted to the respective Power Generating Stations [Thermal & Hydel] where they shall be required to work throughout the entire service in the TSGENCO and will not be considered for posting in Hyderabad.

**PARA-IX:**

**DISQUALIFICATION:** The whole recruitment and selection process is carried out with utmost secrecy and confidentiality, 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. The candidates convicted in criminal case(s) involving "moral turpitude" shall be declared as "disqualified" for selection.

**PARA-X:**

**TERMS AND CONDITIONS OF SERVICE:**

1. **Scale of Pay: Rs.65600-2940-74420-3505-84935-3505-91945-4095-112420-4700-131220 (RPS-2022).**

2. **Training cum Probation:** The candidates appointed to the post shall be placed on training-cum-probation for a period of 2(two) years, which includes one year training. At the time of joining, they shall have to deposit their original Certificates such as Date of Birth (SSC), Bachelors Degree, Caste and Study / Residence Certificates /EWS Certificate / Meritorious Sportsperson Certificates, as the case may be, etc.
3. **Place of Posting:** The vacancies notified are purely confined to the Power Generating Stations [Thermal & Hydel] across the TSGENCO, situated in Zone-I and Zone-II. Therefore, the aspirants who are willing to work in the Power Generating Stations alone may apply, as the aspirants coming up for selection through the selection process, shall be posted to the respective Power Generating Stations [Thermal & Hydel], where they shall be required to work throughout the entire service in the TSGENCO and will not be considered for posting in Hyderabad.
4. **General Rules:** The conditions of service of the candidate shall be governed by the Service Rules and Regulations as applicable or as framed by the TSGENCO and as amended from time to time. The tri-partite Agreement entered into between the erstwhile APSEB, erstwhile Government of AP and the Employees Associations is not applicable to these candidates and they shall at no stage be entitled to claim any right whatsoever arising out of the said tri-partite Agreement. The candidate shall only be governed by the provisions of EPF & MP Act, 1952 and the Employees PF Scheme in terms of the orders issued in G.O.O.No.708/GM(Adm)/2002, dtd.06.02.2003, read with T.G.O.O.No.56/CGM(Adm)/2023, dtd.07.07.2023 and other allied Acts/Rules. The Employer's share of PF contribution @ 12% shall be remitted on the "Statutory Ceiling Limit" of Rs.15,000/- (Basic Pay + DA) per month [i.e.] Rs.1,800/- P/M, as fixed under the provisions of the "EPF&MP Act, 1952" read with "EPF Scheme, 1952" [or] as amended by the concerned authority from time to time, with regard to the rate of contribution or the Statutory Ceiling limit of Basic Pay [+] DA, as the case may be.

5. **Execution of Service Bond:**

- (i) At the time of joining, the candidate shall have to execute a Bond to serve the TSGENCO for a minimum period of 5(five) years, including two years probation. During the probation period, the candidate has to undergo one year training.
- (ii) If the candidate leaves the TSGENCO during the two year period of probation, including Training, he/she shall refund the total emoluments received by him/her during the probation-cum-training period Plus Rs.50,000/- (Rupees Fifty Thousand only) towards liquidated damages.
- (iii) If the candidate leaves the TSGENCO after two years training-cum-probation period, and within Five years Bond period, he/she shall pay to the TSGENCO a sum of Rs.1,00,000/- (Rupees One Lakh only) towards liquidated damages.

**PARA XI:**

**DEBARMENT:**

- (i) The 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" for 5(five) years from appearing in any of the Examinations conducted by the Telangana Power Utilities and summarily rejection of their candidature for this recruitment and future recruitments.
- (ii) 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 Examination or Selection held by TSGENCO and other TS Power Utilities.

**PARA-X:**

**SPECIAL INSTRUCTIONS TO CANDIDATES:** Candidates are directed to follow the TSGENCO website regularly to know the latest developments of this Recruitment and any changes/Modifications/Addendum/Corrigendum, Date of Examination, publication of provisional key, final key and declaration of Results, calling the candidates for verification of Certificates etc. Therefore, the Candidates are informed that no individual communication with regard to this recruitment will be made by the TSGENCO with the candidates in any form. Hence, the candidates must regularly visit the Website of TSGENCO for updates. Candidates are requested to go through the User Guide before filling up the online application form.

**PARA- XI:**

**INSTRUCTIONS TO IN-SERVICE EMPLOYEES:** The employees working in the TSGENCO 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-XII:**

**TSGENCO's DECISION SHALL BE FINAL:** The decision of the TSGENCO in all aspects 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. The TSGENCO reserves its right to alter and/or modify any of the terms and conditions laid down in the Notification for conducting the various stages up to selection, duly intimating details thereof to all concerned through Web communication, as warranted by any unforeseen circumstances arising during the course of this process, or as deemed necessary by TSGENCO at any stage.

Date:04.10.2023  
Place:Hyderabad

D.PRABHAKAR RAO  
CHAIRMAN & MANAGING DIRECTOR

**ANNEXURE-I - BREAK-UP OF VACANCIES**

**ELECTRICAL - LIMITED RECRUITMENT**

ZONES	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		Sports Quota	Total
	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W		
<b>Zone-I</b>																						
<b>Open</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Local</b>	-	1	-	-	2	-	3	1	-	-	1	2	-	-	2	-	-	-	-	-	-	-
<b>ZONE-II</b>																						
<b>Open</b>	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Local</b>	-	6	-	-	3	-	4	3	-	-	3	-	2	-	4	2	-	-	-	1 HH	-	-
<b>TOTAL- 42</b>																						

**MECHANICAL - LIMITED RECRUITMENT**

ZONES	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		Sports Quota	Total
	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W		
<b>Zone-I</b>																						
<b>Open</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1HH	-	-
<b>Local</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Zone-II</b>																						
<b>Open</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Local</b>	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
<b>TOTAL-03</b>																						

## CIVIL - LIMITED RECRUITMENT

ZONES	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		Sports Quota	Total
	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W		
	<b>Zone-I</b>																					
<b>Open</b>	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	<b>2</b>
<b>Local</b>	-	6	-	-	-	1	3	3	-	-	2	1	-	-	1	1	-	1	1VH	1VH	-	<b>21</b>
<b>Zone-II</b>																						
<b>Open</b>	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	<b>3</b>
<b>Local</b>	-	6	-	-	2	1	2	2	-	-	3	-	1	-	1	2	1	1	1 VH	-	-	<b>23</b>
<b>TOTAL-49</b>																						

<b>ELECTRICAL - GENERAL RECRUITMENT</b>												
ZONES	OC	EWS	BC-A	BC-B	BC-C	BC-D	BC-E	SC	ST	PH	Sports Quota	Total
<b>Zone-I</b>												
<b>Open</b>	2	-	-	-	-	-	-	1	-	-	-	<b>3</b>
<b>Local</b>	14	5	3	6	1	3	2	8	5	1VH+1MR	1	<b>50</b>
<b>ZONE-II</b>												
<b>Open</b>	2	-	1	-	-	-	-	1	-	1VH	-	<b>5</b>
<b>Local</b>	26	9	6	8	1	7	3	13	10	1HH 1MR 1OH	1	<b>87</b>
<b>TOTAL- 145</b>												

<b>MECHANICAL - GENERAL RECRUITMENT</b>												
ZONES	OC	EWS	BC-A	BC-B	BC-C	BC-D	BC-E	SC	ST	PH	Sports Quota	Total
<b>Zone-I</b>												
<b>Open</b>	-	1	-	-	-	-	-	-	-	-	-	<b>1</b>
<b>Local</b>	9	3	2	3	1	1	1	3	3	1HH	-	<b>27</b>
<b>Zone-II</b>												
<b>Open</b>	-	-	-	-	-	-	-	1	1	-	-	<b>2</b>
<b>Local</b>	13	5	3	5	1	2	2	6	4	1VH + 1HH	1	<b>44</b>
<b>TOTAL-74</b>												

<b>ELECTRONICS - GENERAL RECRUITMENT</b>												
ZONES	OC	EWS	BC-A	BC-B	BC-C	BC-D	BC-E	SC	ST	PH	Sports Quota	Total
<b>Zone-I</b>												
<b>Open</b>	Nil											
<b>Local</b>	3	1	1	1	-	-	-	2	1	-	-	<b>9</b>
<b>Zone-II</b>												
<b>Open</b>	1	-	-	-	-	-	-	-	-	-	-	<b>1</b>
<b>Local</b>	5	1	1	1	-	2	1	1	2	1HH	-	<b>15</b>
<b>TOTAL-25</b>												

<b>CIVIL - GENERAL RECRUITMENT</b>												
ZONES	OC	EWS	BC-A	BC-B	BC-C	BC-D	BC-E	SC	ST	PH	Sports Quota	Total
<b>Zone-I</b>												
<b>Open</b>	NIL											
<b>Local</b>	NIL											
<b>Zone-II</b>												
<b>Open</b>	NIL											
<b>Local</b>	1	-	-	-	-	-	-	-	-	-	-	<b>1</b>
<b>TOTAL-01</b>												

**Note:** 33 1/3% reservation to women shall be implemented horizontally in each category, in the posts notified for General Recruitment.

## ANNEXURE-II - SYLLABUS

### ELECTRICAL ENGINEERING

#### Section –A Total 80 Marks

##### **1. Electrical Materials :**

Electrical Engineering Materials, crystal structures and defects, ceramic materials, insulating materials, magnetic materials– basics, properties and applications; ferrites, ferro-magnetic materials and components; basics of solid state physics, conductors; Photo-conductivity; Basics of Nano materials and Superconductors.

##### **2. Electric Circuits and Fields:**

Circuit elements, network graph, KCL, KVL, Node and Mesh analysis, ideal current and voltage sources, Thevenin's, Norton's, Superposition and Maximum Power Transfer theorems, transient response of DC and AC networks, Sinusoidal steady state analysis, basic filter concepts, two-port networks, three phase circuits, resonance, Magnetically coupled circuits, Gauss Theorem, electric field and potential due to point, line, plane and spherical charge distributions, Ampere's and Biot-Savart's laws; inductance, dielectrics, capacitance; Maxwell's equations.

##### **3. Electrical and Electronics Measurements:**

Principles of measurement, accuracy, precision and standards; Bridges and potentiometers; moving coil, moving iron, dynamometer and induction type instruments, measurement of voltage, current, power, energy and power factor, instrument transformers, digital voltmeters and multi-meters, phase, time and frequency measurement, Q-meters, oscilloscopes, potentiometric recorders, error analysis, Basics of sensors, Transducers, basics of data acquisition systems.

##### **4. Analog and Digital Electronics:**

Operational amplifiers – characteristics and applications, combinational and sequential logic circuits, multiplexers, multi-vibrators, sample and hold circuits, A/D and D/A converters, basics of filter circuits and applications, simple active filters; Microprocessor basics- interfaces and applications, basics of linear integrated circuits; Analog communication basics, Modulation and de-modulation, noise and bandwidth, transmitters and receivers, signal to noise ratio, digital communication basics, sampling, quantizing, coding, frequency and time domain multiplexing, power line carrier communication systems.

## **5. Systems and Signal Processing:**

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, Fourier and Laplace transforms, Z transforms, Discrete Fourier transform, FFT, linear convolution, discrete cosine transform, FIR filter, IIR filter, bilinear transformation.

## **6. Control Systems:**

Modeling of physical systems, Principles of feedback, transfer function, block diagrams and signal flow graphs, steady-state errors, transforms and their applications; Routh-hurwitz criterion, Nyquist techniques, Bode plots, root loci, lag, lead and lead-lag compensation, stability analysis, transient and frequency response analysis, state space model, state transition matrix, controllability and observability, linear state variable feedback, PID and industrial controllers.

## **7. Electrical Machines:**

Single phase transformers, three phase transformers - connections, parallel operation, auto-transformer, energy conversion principles, DC machines - types, windings, generator characteristics, armature reaction and commutation, methods of excitation, starting and speed control of motors, Induction motors - principles, types, performance characteristics, starting and speed control, Synchronous machines - performance, regulation, parallel operation of generators, motor starting, characteristics and applications, servo and stepper motors.

## **8. Power Systems:**

AC and DC transmission concepts, transmission line models and performance, cable performance, insulation, corona and radio interference, power factor correction, Per unit quantities, symmetrical components, analysis of symmetrical and unsymmetrical faults, Switchgear Protection: Principles of over current, differential and distance protections, various types of circuit breakers and their functions, Relays, Protection for Generator, Transformers, feeder and Bus bars, Grounding, Protection against Over Voltages. functions of Radial and ring-main distribution systems, concept of power system stability, swing curves and equal area criterion. Power System Operation & Control, Matrix representation of power systems, load flow analysis, voltage control and economic operation, HVDC transmission and FACTS concepts, Concepts of power system dynamics, smart grid concepts. Batteries and battery chargers.

## **09. Power Plant Engineering:**

Basic power generation concepts, Steam Power Plants with Sub- critical, critical and super critical technology, Combustion Process, Gas Turbine Plant, Direct Energy Conservation, Hydro Electric Power Plant , nuclear & Power from Non-conventional sources, Introduction to Quality management and Environmental protection. Power plant economics-Capital cost, Investment of fixed charges, operating cost, arrangements for power distribution, load curves, connected load, maximum demand, demand factor, average load, load factor, diversity factor, Environmental considerations- Effluents from Power Plants and impact of environment, Pollution and pollution standards-Methods of pollution control , Power plant components-their theory and design, types and applications.

## **10. Power Electronics and Drives:**

Basics of Semiconductor diodes and transistors and characteristics, Junction and field effect transistors (BJT, FET and MOSFETS), Triacs, GTOs and IGBTs - static characteristics and principles of operation, triggering circuits, phase control rectifiers, bridge converters - fully controlled and half controlled, principles of choppers and inverters, basic concepts of adjustable speed DC and AC drives, DC-DC switched mode converters, DC-AC switched mode converters, resonant converters, high frequency inductors and transformers, power supplies.

## **11. Thermodynamics:**

Thermodynamic systems and processes; properties of pure substance; Zeroth, First and Second Laws of Thermodynamics; Entropy, Irreversibility and availability; analysis of thermodynamic cycles related to energy conversion: Rankine, modified Rankine, Otto, Diesel and Dual Cycles; ideal and real gases; compressibility factor; Gas mixtures.

## **12. Heat-Transfer:**

Modes of heat transfer; one dimensional heat conduction, resistance concept and electrical analogy, heat transfer through fins; unsteady heat conduction, lumped parameter system, Heisler's charts; thermal boundary layer, dimensionless parameters in free and forced convective heat transfer, heat transfer correlations for flow over flat plates and through pipes, effect of turbulence; heat exchanger performance, LMTD and NTU methods; radiative heat transfer, Stefan- Boltzmann law, Wien's displacement law, black and grey surfaces, view factors, radiation network analysis.

### **Section –B Total 20 Marks.**

#### **General Awareness and Numerical Ability:**

- i) Analytical & Numerical Ability
- ii) General Awareness
- iii) English
- iv) Telangana Culture, Movement. Post formation development of Telangana State.
- v) Basic knowledge of Computer for handling office works such as MS Office etc.

**Sd/-  
CGM(Adm)**

# **MECHANICAL ENGINEERING**

## **Section –A Total 80 Marks**

### **1.Engineering Mechanics:**

Free-body diagrams and equilibrium; friction and its applications including rolling friction, belt-pulley, brakes, clutches, screw jack, wedge, vehicles, etc.; trusses and frames; virtual work; kinematics and dynamics of rigid bodies in plane motion; impulse and momentum (linear and angular) and energy formulations; Lagrange's equation.

### **2.Mechanics of Materials:**

Stress and strain, elastic constants, Poisson's ratio; Mohr's circle for plane stress and plane strain; thin cylinders; shear force and bending moment diagrams; bending and shear stresses; concept of shear centre; deflection of beams; torsion of circular shafts; Euler's theory of columns; energy methods; thermal stresses; strain gauges and rosettes; testing of materials with universal testing machine; testing of hardness and impact strength.

### **3.Theory of Machines:**

Displacement, velocity and acceleration analysis of plane mechanisms; dynamic analysis of linkages; cams; gears and gear trains; flywheels and governors; balancing of reciprocating and rotating masses; gyroscope.

### **4. Vibrations:**

Free and forced vibration of single degree of freedom systems, effect of damping; vibration isolation; resonance; critical speeds of shafts.

### **5. Thermodynamics:**

Thermodynamic systems and processes; properties of pure substance; Zeroth, First and Second Laws of Thermodynamics; Entropy, Irreversibility and availability; analysis of thermodynamic cycles related to energy conversion: Rankine, modified Rankine, Otto, Diesel and Dual Cycles; ideal and real gases; compressibility factor; Gas mixtures.

## **6. Fluid Mechanics:**

Fluid properties; fluid statics, forces on submerged bodies, stability of floating bodies; control-volume analysis of mass, momentum and energy; fluid acceleration; differential equations of continuity and momentum; Bernoulli's equation; dimensional analysis; viscous flow of incompressible fluids, boundary layer, elementary turbulent flow, flow through pipes, head losses in pipes, bends and fittings; basics of compressible fluid flow.

## **7. Heat-Transfer:**

Modes of heat transfer; one dimensional heat conduction, resistance concept and electrical analogy, heat transfer through fins; unsteady heat conduction, lumped parameter system, Heisler's charts; thermal boundary layer, dimensionless parameters in free and forced convective heat transfer, heat transfer correlations for flow over flat plates and through pipes, effect of turbulence; heat exchanger performance, LMTD and NTU methods; radiative heat transfer, Stefan- Boltzmann law, Wien's displacement law, black and grey surfaces, view factors, radiation network analysis.

## **8. Engineering Materials:**

Structure and properties of engineering materials, phase diagrams, heat treatment, stress-strain diagrams for engineering materials.

## **9. Casting, Forming and Joining Processes:**

Different types of castings, design of patterns, moulds and cores; solidification and cooling; riser and gating design. Plastic deformation and yield criteria; fundamentals of hot and cold working processes; load estimation for bulk (forging, rolling, extrusion, drawing) and sheet (shearing, deep drawing, bending) metal forming processes; principles of powder metallurgy. Principles of welding, brazing, soldering and adhesive bonding.

## **10. Machining and Machine Tool Operations:**

Mechanics of machining; basic machine tools; single and multi-point cutting tools, tool geometry and materials, tool life and wear; economics of machining; principles of non-traditional machining processes; principles of work holding, jigs and fixtures; abrasive machining processes; NC/CNC machines and CNC programming.

### **11. Metrology and Inspection:**

Limits, fits and tolerances; linear and angular measurements; comparators; interferometry; form and finish measurement; alignment and testing methods; tolerance analysis in manufacturing and assembly; concepts of coordinate-measuring machine (CMM).

### **12. Computer Integrated Manufacturing:**

Basic concepts of CAD/CAM and their integration tools; additive manufacturing.

### **13. Production Planning and Control:**

Forecasting models, aggregate production planning, scheduling, materials requirement planning; lean manufacturing.

### **14. Inventory Control:**

Deterministic models; safety stock inventory control systems.

### **15. Operations Research:**

Linear programming, simplex method, transportation, assignment, network flow models, simple queuing models, PERT and CPM.

### **16. IC Engines, Refrigeration and Air conditioning:**

SI and CI Engines, Engine Systems and Components, Performance characteristics and testing of IC Engines; Fuels; Emissions and Emission Control. Vapour compression refrigeration, Refrigerants and Working cycles, Compressors, Condensers, Evaporators and Expansion devices, other types of refrigeration systems like Vapour Absorption, Vapour jet, thermoelectric and Vortex tube refrigeration. Psychometric properties and processes, Comfort chart, Comfort and industrial air conditioning, Load calculations and Heat pumps.

### **17. Power Plant Engineering:**

Basic power generation concepts, Steam Power Plants with Sub- critical, critical and super critical technology, Combustion Process, Gas Turbine Plant, Direct Energy Conservation, Hydro Electric Power Plant, nuclear & Power from Non-conventional sources, Power plant economics-Capital cost, Investment of fixed charges, operating cost, arrangements for power distribution, load curves, connected load, maximum demand, demand factor, average load, load factor, diversity factor, Environmental considerations- Effluents from Power Plants and impact of environment, Pollution

and pollution standards-Methods of pollution control , Power plant components-their theory and design, types and applications.

### **18. Design of Machine Elements:**

Design for static and dynamic loading; failure theories; fatigue strength and the S-N diagram; principles of the design of machine elements such as riveted, welded and bolted joints. Shafts, Spur gears, rolling and sliding contact bearings, Brakes and clutches, flywheels.

### **19. Basic Electrical Engineering:**

Electrical Circuits-Basics, Ohm's Law, Kirchhoff' Law, Inductive & Capacitive Networks, Series & Parallel Circuits, Star & Delta Transformers, Instruments-Basic Principles of indicating instruments, PMMC & Moving Iron Instruments, DC Machines-DC Generator, DC motors and their applications, Transformers-Operation, EMF Equation, Losses, efficiency & Regulation, AC Machines-Operation of Synchronous and Induction motors, their Characteristics & applications, Basics of batteries and their uses.

### **Section –B Total 20 Marks.**

#### **General Awareness and Numerical Ability:**

- i) Analytical & Numerical Ability
- ii) General Awareness
- iii) English
- iv) Telangana Culture, Movement. Post formation development of Telangana State.
- v) Basic knowledge of Computer for handling office works such as MS Office etc.

**Sd/-  
CGM(Adm)**

## CIVIL ENGINEERING

### Section –A Total 80 Marks

#### **1.Engineering Mechanics:**

System of forces, free-body diagrams, equilibrium equations; Internal forces in structures; Frictions and its applications; Centre of mass; Free Vibrations of undamped SDOF system.

#### **2. Solid Mechanics:**

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

#### **3. 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.

#### **4. Building Materials & Construction Management:**

Stone, Lime, Glass, Plastics, Steel, FRP, Ceramics, Aluminum, Fly Ash, Basic Admixtures, Timber, Bricks and Aggregates: Classification, properties and selection criteria.

**Cement:** Types, Composition, Properties, Uses, Specifications and various Tests; Lime & Cement Mortars and Concrete: Properties and various Tests; Design of Concrete Mixes: Proportioning of aggregates and methods of mix design.

**Construction Management:** Types of construction projects; Project planning and network analysis - PERT and CPM; Cost estimation.

#### **5. Fluid Mechanics, Open Channel Flow, Pipe Flow:**

Fluid properties; Dimensional Analysis and Modeling; Fluid dynamics including flow kinematics and measurements, CFD Analysis, orifices and mouthpieces, notches and weirs, impact of jets; Flow net; Viscosity, Boundary layer and control, Drag, Lift, Principles in open channel flow, Flow Patterns, Flow controls. Hydraulic jump; Surges; Pipe networks.

## **6. Hydraulic Machines and Hydro power:**

Various pumps, Air vessels, Hydraulic turbines – types, classifications & performance parameters; Power house – classification and layout, storage, pondage, control of supply.

## **7. Hydrology and Water Resources Engineering:**

Hydrological cycle, Ground water hydrology, Well hydrology and related data analysis; Streams and their gauging; River morphology; Flood, drought and their management; Capacity of Reservoirs.

**Water Resources Engineering:** Multipurpose uses of Water, River basins and their potential; Irrigation systems, water demand assessment; Resources - storages and their yields; Water logging, canal and drainage design, Gravity dams, falls, weirs, Energy dissipaters, barrage Distribution works, Cross drainage works and head-works and their design; Concepts in canal design, construction & maintenance; River training, measurement and analysis of rainfall.

## **8. Water Supply Engineering:**

Sources, Estimation, quality standards and testing of water and their treatment; Rural, Institutional and industrial water supply; Physical, chemical and biological characteristics and sources of water, Pollutants in water and its effects, Estimation of water demand; Drinking water Standards, Water Treatment Plants, Water distribution networks.

## **9. Waste Water Engineering:**

Planning & design of domestic waste water, sewage collection and disposal; Plumbing Systems. Components and layout of sewerage system; Planning & design of Domestic Waste-water disposal system; Sludge management including treatment, disposal and re-use of treated effluents; Industrial waste waters and Effluent Treatment Plants including institutional and industrial sewage management.

## **10. Solid Waste Management:**

Sources & classification of solid wastes along with planning & design of its management system; Disposal system, Beneficial aspects of wastes and Utilization by Civil Engineers.

### **11. Air Pollution:**

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

### **12. Geo-technical Engineering:**

Soil exploration - planning & methods, Properties of soil, classification, various tests and inter- relationships; Permeability, Capillarity & Seepage, Compressibility, consolidation and Shearing resistance, Earth pressure theories and stress distribution in soil; Properties and uses of geo-synthetics.

### **13. Foundation Engineering:**

Types of foundations & selection criteria, bearing capacity, settlement analysis, design and testing of shallow & deep foundations; Slope stability analysis, Earthen embankments, Dams and Earth retaining structures: types, analysis and design, Principles of ground modifications.

### **14. Surveying:**

Classification of surveys, various methodologies, instruments & analysis of measurement of distances, elevation and directions; Field astronomy, Global Positioning System; Map preparation; Photogrammetry; Remote sensing concepts; Survey Layout for culverts, canals, bridges, road/railway alignment and buildings, Setting out of Curves.

### **15. Transportation Engineering:**

Highways - Planning & construction methodology, Alignment and geometric design; Traffic Surveys and Controls; Principles of Flexible and Rigid pavements design.

**Tunneling** - Alignment, methods of construction, disposal of muck, drainage, lighting and ventilation. Railway Systems – Terminology, Planning, designs and maintenance practices; track modernization. Harbors – Terminology, layouts and planning.

### **16. Design of Steel Structures:**

Principles of Working Stress methods, Design of tension and compression members, Design of beams and beam column connections, built-up sections, Girders, Industrial roofs, Riveted and welded joints, Principles of Ultimate load design.

### **17. Design of Concrete and Masonry structures:**

Limit state design for bending, shear, axial compression and combined forces; Design of beams, Slabs, Lintels, Foundations, Retaining walls, Tanks, Staircases; Principles of pre-stressed concrete design including materials and methods; Earthquake resistant design of structures; Design of Masonry Structure.

### **18. Power Plant Engineering:**

Basic power generation concepts, Steam Power Plants with Sub- critical, critical and super critical technology, Combustion Process, Gas Turbine Plant, Direct Energy Conservation, Hydro Electric Power Plant, nuclear & Power from Non-conventional sources, Power plant economics-Capital cost, Investment of fixed charges, operating cost, arrangements for power distribution, load curves, connected load, maximum demand, demand factor, average load, load factor, diversity factor, Environmental considerations- Effluents from Power Plants and impact of environment, Pollution and pollution standards-Methods of pollution control , Power plant components-their theory and design, types and applications, Basics of batteries and their uses.

### **Section –B Total 20 Marks.**

#### **General Awareness and Numerical Ability:**

- i) Analytical & Numerical Ability
- ii) General Awareness
- iii) English
- iv) Telangana Culture, Movement. Post formation development of Telangana State.
- v) Basic knowledge of Computer for handling office works such as MS Office etc.

**Sd/-  
CGM(Adm)**

# ELECTRONICS ENGINEERING

## Section –A Total 80 Marks

### **1. Networks, Signals and Systems:**

**Circuit analysis:** KCL, KVL, Node and mesh analysis, superposition, Thevenin's theorem, Norton's theorem, reciprocity.

**Sinusoidal steady state analysis:** phasors, complex power, maximum power transfer. Time and frequency domain analysis of linear circuits: RL, RC and RLC circuits, solution of network equations using Laplace transform. Linear 2-port network parameters, wye-delta transformation.

**Continuous-time signals:** Fourier series and Fourier transform, sampling theorem and applications.

**Discrete-time signals:** DTFT, DFT, z-transform, discrete-time processing of continuous-time signals. LTI systems: definition and properties, causality, stability, impulse response, convolution, poles and zeroes, frequency response, group delay, phase delay.

### **2. Electronic Devices:**

Energy bands in intrinsic and extrinsic semiconductors, equilibrium carrier concentration, direct and indirect band-gap semiconductors.

**Carrier transport:** diffusion current, drift current, mobility and resistivity, generation and recombination of carriers, Poisson and continuity equations. P-N junction, Zener diode, BJT, MOS capacitor, MOSFET, LED, solar cell, Laser, photo diode, Photo-resistor and their characteristics, Basics of Fiber Optics.

### **3. Analog Circuits:**

**Diode circuits:** clipping, clamping and rectifiers. BJT and MOSFET amplifiers: biasing, ac coupling, small signal analysis, frequency response. Current mirrors and differential amplifiers.

**Op-amp circuits:** Amplifiers, summers, differentiators, integrators, active filters, Schmitt triggers and oscillators.

#### 4. Digital Circuits:

**Number representations:** binary, integer and floating-point-numbers.

**Combinatorial circuits:** Boolean algebra, minimization of functions using Boolean identities and Karnaughmap, logic gates and their static CMOS implementations, arithmetic circuits, code converters, multiplexers, decoders.

**Sequential circuits:** latches and flip-flops, counters, shift-registers, finite state machines, propagation delay, setup and hold time, critical path delay. Data converters: sample and hold circuits, ADCs and DACs.

**Semiconductor memories:** ROM, SRAM, DRAM.

**Computer organization:** Machine instructions and addressing modes, ALU, data-path and control unit, instruction pipelining.

**Microprocessor:** 8086/8088 and Micro controller: 8051.

#### 5. Control Systems:

Basic control system components; Feedback principle; Transfer function; Block diagram representation; Signal flow graph; Transient and steady-state analysis of LTI systems; Frequency response; Routh-Hurwitz and Nyquist stability criteria; Bode and root-locus plots; Lag, lead and lag-lead compensation; State variable model and solution of state equation of LTI systems.

#### 6. Communications:

**Random processes:** autocorrelation and power spectral density, properties of white noise, filtering of random signals through LTI systems.

**Analog communications:** Amplitude modulation and demodulation, angle modulation and demodulation, spectra of AM and FM, super heterodyne receivers.

**Information theory:** Entropy, mutual information and channel capacity theorem.

**Digital communications:** PCM, DPCM, digital modulation schemes (ASK, PSK, FSK, QAM), bandwidth, inter-symbol interference, MAP, ML detection, matched filter receiver, SNR and BER. Fundamentals of error correction, Hamming codes, CRC.

## **7. Electro magnetics:**

**Maxwell's equations:** differential and integral forms and their interpretation, boundary conditions, wave equation, Poynting vector.

**Plane waves and properties:** reflection and refraction, polarization, phase and group velocity, propagation through various media, skin depth.

**Transmission lines:** equations, characteristic impedance, impedance matching, impedance transformation, S-parameters, Smith chart. Rectangular and circular waveguides, light propagation in optical fibers, dipole and monopole antennas, linear antenna arrays.

## **8. Basic Electrical Engineering:**

Electro-magnetism, Faraday's & Lenz's laws, induced EMF and its uses; Single-phase AC circuits; Transformers, efficiency; Basics-DC machines, induction machines, and synchronous machines, Basics of batteries and their uses.

## **9. Materials Science:**

Electrical Engineering materials; Crystal structure & defects; Ceramic materials-structures, composites, processing and uses; Insulating laminates for electronics, structures, properties and uses; Magnetic materials, basics, classification, ferrites, ferro/para-magnetic materials and components; Nano materials-basics, preparation, purification, sintering, nano particles and uses; Nano-optical/magnetic/electronic materials and uses; Superconductivity, uses.

## **10. Power Plant Engineering:**

Basic power generation concepts, Steam Power Plants with Sub- critical, critical and super critical technology, Combustion Process, Gas Turbine Plant, Direct Energy Conservation, Hydro Electric Power Plant, nuclear & Power from Non-conventional sources, Power plant economics-Capital cost, Investment of fixed charges, operating cost, arrangements for power distribution, load curves, connected load, maximum demand, demand factor, average load, load factor, diversity factor, Environmental considerations- Effluents from Power Plants and impact of environment, Pollution and pollution standards-Methods of pollution control, Power plant components-their theory and design, types and applications.

## **11. Electrical & Electronic Measurements:**

Static and dynamic characteristics of Measurement Systems. Error and uncertainty analysis. Statistical analysis of data and curve fitting. Bridges and potentiometers, measurement of R, L and C. Measurements of voltage, current, power, power factor and energy. A.C & D.C current probes. Extension of instrument ranges. Q-meter and waveform analyzer. Digital voltmeter and multi meter. Time, phase and frequency measurements. Cathode Ray Oscilloscope. Serial and parallel communication. Shielding and grounding. Transducers and their applications to the measurement of non-electrical quantities like temperature, pressure, strain, displacement liquid level. Measurement of pH, conductivity, viscosity and humidity.

### **Section –B Total 20 Marks.**

#### **General Awareness and Numerical Ability:**

- i) Analytical & Numerical Ability
- ii) General Awareness
- iii) English
- iv) Telangana Culture, Movement. Post formation development of Telangana State.
- v) Basic knowledge of Computer for handling office works such as MS Office etc.

**Sd/-  
CGM(Adm)**

**ANNEXURE-III**

**SCHOOL STUDY CERTIFICATE**

Note: Should be obtained from the Head of Educational Institution (s)

1. Name of the Candidate :
2. Father's Name :
3. Date of Birth and Age :

Class	Name and place of School	District	Duration of Study Giving Month and Year
I			
II			
III			
IV			
V			
VI			
VII			

It is certified that the particulars furnished above are as per our records.

Station:

Date:

Signature of the Head of the  
Educational Institute (S)

## **ANNEXURE-IV**



### **GOVERNMENT OF TELANGANA REVENUE DEPARTMENT**

Application No

RC

Date : / / .

#### **CERTIFICATE OF RESIDENCE**

(To be produced by such candidates who have not studied in any educational institution during the whole or any part of the relevant 4/7 years period but claim to be local candidates by virtue of residence for which there is reservation for local candidates)

It is hereby certified

- (a) That Sri/Smt./Kum \_\_\_\_\_, S/o, D/o, \_\_\_\_\_ appeared for the first time for the 7<sup>th</sup> Class Examination in \_\_\_\_\_ (Month) \_\_\_\_\_ (Year)
- (b) That he/She has not studied in any educational institution during the \_\_\_\_\_ of the \_\_\_\_\_ consecutive academic years ending with the academic year in which he/she first appeared for the aforesaid examination.
- (c) That in the \_\_\_\_\_ years immediately preceding the commencement of the aforesaid examination he/she resided in the following place/places namely:

Sl.No	Village/Town	Mandal/Tahsil	District	Period
1				
2				
3				
4				
5				

Office Seal :

Certified By:

Station :

Officer of Revenue Department not below the rank of Tahsildar holding independent charge of a Tahsil.

Date :

\*STRIKE OFF "WHOLE"/PART, AS THE CASE MAY BE

**ANNEXURE-V**

**(ANNEXURE TO G.O.Ms.No.74, YOUTH ADVANCEMENT, TOURISM & CULTURE (SPORTS) DEPARTMENT Dated:09-08-2012)**

**ANNEXURE – I**

LIST OF RECOGNISED SPORTS DISCIPLINES FOR TWO PERCENT (2%)  
RESERVATION IN DIRECT RECRUITMENT IN GOVERNMENT DEPARTMENTS /  
GOVERNMENT INSTITUTIONS

- (1) FOOTBALL
- (2) HOCKEY
- (3) VOLLEYBALL
- (4) HANDBALL
- (5) BASKET BALL
- (6) TENNIS
- (7) TABLE TENNIS
- (8) SHUTTLE BADMINTON
- (9) KABBADI
- (10) ATHLETICS
- (11) SWIMMING
- (12) GYMNASTICS
- (13) WEIGHTLIFTING
- (14) WRESTLING
- (15) BOXING
- (16) CYCLING
- (17) ROWING
- (18) SHOOTING
- (19) FENCING
- (20) ROLLER SKATING
- (21) SAILING / YATCHING
- (22) ARCHERY
- (23) CRICKET
- (24) CHESS
- (25) KHO-KHO
- (26) JUDO
- (27) TEAKWANDO
- (28) SOFTBALL
- (29) BODY BUILDING (Uniform Services like Police, Excise etc).

**VASUDHA MISHRA  
PRINCIPAL SECRETARY TO GOVERNMENT**

**(ANNEXURE TO G.O.Ms.No.74, YOUTH ADVANCEMENT, TOURISM & CULTURE (SPORTS) DEPARTMENT Dated:09-08-2012)**

**ANNEXURE – II**

PRIORITIES OF SPORTS & GAMES FOR RECRUITMENT OF TWO PERCENT (2%)  
RESERVATION UNDER SPORTS QUOTA

1. Gold Medal in Olympic Games.
2. Silver Medal in Olympic Games.
3. Bronze Medal in Olympic Games.
4. Gold Medal in World Championship/Cup for Seniors - Grand Slam Tennis.
5. Silver Medal in World Championship/Cup for Seniors - World No.2 in Tennis.
6. Bronze medal in World Championship/Cup for Seniors - World No.3 in Tennis.
7. Gold Medal in World Universiad/All England Badminton Championship - Davis Cup - Afro-Asian Games.
8. Silver Medal in World Universiad/All England Badminton Championship - Davis Cup - Afro-Asian Games.
9. Bronze Medal in World Universiad/All England Badminton Championship - Davis Cup - Afro-Asian Games.
10. Participation in Olympic Games – World Championship/Cup – Wimbledon - U.S Open – French Open – Australian Open.
11. Participation in World Universiad – Davis Cup – Afro-Asian Games.
12. Gold Medal in Asian Games - Commonwealth Games.
13. Silver Medal in Asian Games - Commonwealth Games.
14. Bronze Medal in Asian Games - Commonwealth Games.
15. Gold Medal in Asian Championship - Commonwealth Championship - Asia Pacific Championship.
16. Silver Medal in Asian Championship - Commonwealth Championship - Asia Pacific Championship.
17. Bronze Medal in Asian Championship - Commonwealth Championship - Asia Pacific Championship.
18. Participation in Asian Games – Commonwealth Games.
19. Gold Medal in SAF Games - SAARC Championship.
20. Silver Medal in SAF Games - SAARC Championship.
21. Bronze Medal in SAF Games - SAARC Championship.
22. Participation in Asian Championship – Commonwealth Championship - Asia Pacific Championship.

Contd.,...2...

23. Gold Medal in National Championship - National Games - Inter State - Inter Zonal - Open Nationals for Seniors - Federation Cup.
24. Silver Medal in National Championship - National Games - Inter State - Inter Zonal - Open Nationals for Seniors - Federation Cup.
25. Bronze Medal in National Championship - National Games - Inter State - Inter Zonal - Open Nationals for Seniors - Federation Cup.
26. Participation in SAF Games – SAARC Championship.
27. Participation in National Championship – National Games – Inter State – Inter Zonal – Open Nationals for Seniors – Federation Cup.
28. Gold Medal in World Championship / Cup for Juniors/World School Games.
29. Silver Medal in World Championship / Cup for Juniors/World School Games.
30. Bronze Medal in World Championship / Cup for Juniors / World School Games.
31. Gold Medal in Asian Championship for Juniors – Asian School Games.
32. Silver Medal in Asian Championship for Juniors – Asian School Games.
33. Bronze Medal in Asian Championship for Juniors – Asian School Games.
34. Participation in World Championship / Cup for Juniors / World School Games.
35. Participation in Asian Championship for Juniors – Asian School Games.
36. Gold Medal / First place in the All India Inter University Championship.
37. Silver Medal / Second place in the All India Inter University Championship.
38. Bronze Medal / Third place in the All India Inter University Championship.
39. Gold Medal / First place in the National Championship for Juniors / Youth National Games.
40. Silver Medal / Second place in the National Championship for Juniors / Youth National Games.
41. Bronze Medal / Third place in the National Championship for Juniors / Youth National Games.
42. Gold Medal in South Zone for Seniors.
43. Silver Medal in South Zone for Seniors.
44. Bronze Medal in South Zone for Seniors.
45. Participation in the All India Inter University Tournament.
46. Participation in the National Championship for Juniors - Youth National Games.
47. First place in Zonal Inter University Championship.

48. Second place in Zonal Inter University Championship.
49. Third place in Zonal Inter University Championship.
50. Participation in South Zone Senior Championship.
51. Participation in Zonal Inter University Championship.
51. (a) Gold Medal in South Zone for Juniors.
51. (b) Silver Medal in South Zone for Juniors.
51. (c) Bronze Medal in South Zone for Juniors.
52. Gold medal / First place in the National Sports Festival for women.
53. Silver medal / Second place in the National Sports Festival for women.
54. Bronze medal / Third place in the National Sports Festival for women.
55. Gold Medal in World Championship / Cup for Sub-Juniors.
56. Silver Medal in World Championship / Cup for Sub-Juniors.
57. Bronze Medal in World Championship / Cup for Sub-Juniors.
58. Gold Medal in National School Games U-19 & U-17.
59. Silver Medal in National School Games U-19 & U-17.
60. Bronze Medal in National School Games U-19 & U-17.
61. First place in All India CBSE & ICSE.
62. Second place in All India CBSE & ICSE.
63. Third place in All India CBSE & ICSE.
64. Gold Medal / First place in All India Rural Sports Tournament.
65. Silver Medal / Second place in All India Rural Sports Tournament.
66. Bronze Medal / Third place in All India Rural Sports Tournament.
66. (a) Participation in South Zone Juniors.
67. Gold Medal / First place in Inter District for Seniors.
68. Silver Medal / Second place in Inter District for Seniors.
69. Bronze Medal / Third place in Inter District for Seniors.
70. Participation in the World Championship for Sub-Juniors.
71. Participation in National Championship for Women.
72. Participation in National School Games.
73. Participation in All India CBSE & ICSE.
74. Participation in All India Rural Sports.
75. First place in Inter District for Juniors.
76. Second place in Inter District for Juniors.
77. Third place in Inter District for Juniors.
78. First place in State / Inter District Women Sports Festival.

79. Second place in State / Inter District Women Sports Festival.
80. Third place in State / Inter District Women Sports Festival.
81. First place in the Inter Collegiate Competition.
82. Second place in the Inter Collegiate Competition.
83. Third place in the Inter Collegiate Competition.
84. First place in State / Inter District Rural Sports tournament.
85. Second place in State / Inter District Rural Sports tournament.
86. Third place in State / Inter District Rural Sports tournament.
87. Participation in State / Inter District Championship for Seniors.
88. Participation in State / Inter District Championship for Youth & Juniors.
89. Participation in State / Inter District Championship for Women Sports Festival.
90. Participation in State / Inter District Championship for School Games U-19, U-17, CBSE, ICSE & Rural Sports.

**VASUDHA MISHRA**  
**PRINCIPAL SECRETARY TO GOVERNMENT**

**(ANNEXURE TO G.O.Ms.No.74, YOUTH ADVANCEMENT, TOURISM & CULTURE (SPORTS) DEPARTMENT Dated:09-08-2012)**

**ANNEXURE – III**

**FORM – 1**

(For representing India in an international Competition / Multinational Competition in one of the recognized Games/Sports)

NATIONAL FEDERATION/NATIONAL ASSOCIATION OF \_\_\_\_\_

Certificate to a meritorious sportsperson for Employment to Group-I & II Post Service under the State Government.

Certified that Shri/Smt./Kumari\_\_\_\_\_Son/Wife/Daughter of Shri \_\_\_\_\_ resident of (complete address)\_\_\_\_\_ represented the Country in the game/event of\_\_\_\_\_in \_\_\_\_\_ Competition/ Tournament held at \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_. The position obtained by the individual/team in the above said Competition/Tournament was\_\_\_\_\_.

The Certificate is being given on the basis of records available in the Office of National Federation/National Association of \_\_\_\_\_

Place \_\_\_\_\_

Date \_\_\_\_\_

Signature\_\_\_\_\_

Name\_\_\_\_\_

Designation \_\_\_\_\_

Name of the Federation/  
National Association

Address \_\_\_\_\_

Seal \_\_\_\_\_

Note:- This Certificate will be valid only when signed personally by the Secretary, National Federation/National Association.

**VASUDHA MISHRA  
PRINCIPAL SECRETARY TO GOVERNMENT**

**Contd.,.....2...**

**FORM – 2**

(For representing a State in India in a National Competition in one of the recognized Games/Sports)

STATE ASSOCIATION OF \_\_\_\_\_

Certificate to a meritorious sportsperson for Employment to Group-III Posts/ Service under the State Government/similar posts in Government Institutions.

Certified that Shri/Smt./Kumari \_\_\_\_\_ Son/Wife/Daughter of Shri \_\_\_\_\_ resident of (complete address) \_\_\_\_\_ represented the State of \_\_\_\_\_ in the game/event of \_\_\_\_\_ in the National Competition/Tournament held at \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_.

The position obtained by the individual/team in the above said Competition/ Tournament was \_\_\_\_\_

The Certificate is being given on the basis of records available in the Office of the State Association of \_\_\_\_\_.

Place \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Designation \_\_\_\_\_

Name of the State

Association \_\_\_\_\_

Address \_\_\_\_\_

Seal \_\_\_\_\_

Note:- This Certificate will be valid only when signed personally by the Secretary of the State Association.

**VASUDHA MISHRA**  
**PRINCIPAL SECRETARY TO GOVERNMENT**

**Contd.,.....3....**

**FORM – 3**

(For representing a University from Telangana State in the Inter-University Competition at National level / Zonal level / Regional level in one of the recognized Games/Sports).

UNIVERSITY OF \_\_\_\_\_

Certificate to a meritorious sportsperson for Employment to Group-IV Posts / Service under the State Government/similar posts in Govt. Institutions.

Certified that Shri/Smt./Kumari \_\_\_\_\_ Son/Wife/Daughter of Shri \_\_\_\_\_ resident of (complete address) represented the University of \_\_\_\_\_ in the game/event of \_\_\_\_\_ in Inter-University Competition/Tournament held at \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_

The position obtained by the individual/team in the above said Competition/ Tournament was \_\_\_\_\_.

The Certificate is being given on the basis of records available in the Office of Dean of Sports or Officer in overall charge of Sports in the University of \_\_\_\_\_.

Place \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Designation \_\_\_\_\_

Name of the University \_\_\_\_\_

Address \_\_\_\_\_

Seal \_\_\_\_\_

Note:- This Certificate will be valid only when signed personally by Dean/Director or other Officer in overall charge of Sports in the concerned University.

**VASUDHA MISHRA**  
**PRINCIPAL SECRETARY TO GOVERNMENT**

**Contd.,....4....**

**FORM – 4**

(For representing a State School Team in the National Games for School children in one of the recognized Games/Sports)/Representation at Regional & State level.

DISTRICT EDUCATIONAL OFFICER ..... Govt. of Telangana State /  
District Sports Development Officers, District Sports Authority.

Certificate to a meritorious sportsman for Employment to Last Grade Service under the State Government/similar posts in Govt. Institutions.

Certified that Shri/Smt./Kumari\_\_\_\_\_Son/Wife/Daughter  
of Shri\_\_\_\_\_resident of (complete address)

\_\_\_\_\_.  
represented the\_\_\_\_\_State School Team in the game/event of  
\_\_\_\_\_ in the National Games for School / Regional level / State Level  
held at\_\_\_\_\_from\_\_\_\_\_to\_\_\_\_\_.

The position obtained by the individual/team in the above said  
Competition/ Tournament was \_\_\_\_\_

The Certificate is being given on the basis of records available in the Office  
of District Educational Officer/District Sports Development Authority.

Place \_\_\_\_\_

Date \_\_\_\_\_

Signature\_\_\_\_\_

Name\_\_\_\_\_

Designation\_\_\_\_\_

Address\_\_\_\_\_

Seal \_\_\_\_\_

Note:- This Certificate will be valid only when signed personally by the District Educational Officer or overall in-charge of Sports/Games for School in the concerned District / or District Sports Development Officer, District Sports Authority.

**VASUDHA MISHRA**  
**PRINCIPAL SECRETARY TO GOVERNMENT**