



# TAMIL NADU PUBLIC SERVICE COMMISSION

Advertisement No.564  
Notification No.34 /2019

DATED 09.12.2019

Applications are invited from eligible candidates only through online mode up to 08.01.2020 for direct recruitment to the posts of **Assistant Director of Industries and Commerce (Technical) & Assistant Superintendent (Chemical Wing)** in the Department of Micro, Small and Medium Enterprises [EI(1)] Department included in Tamil Nadu Industries Service for the year 2019.

## WARNING

- All the recruitments conducted by the Tamil Nadu Public Service Commission are purely merit based.
- Tamil Nadu Public Service Commission hereby cautions the candidates against touts and agents who may cheat by making false promises of securing job through unfair means.
- Tamil Nadu Public Service Commission shall not be responsible or liable for any loss that may be caused to any candidate on account of indulging into any sort of actions with such unscrupulous elements.
- Candidates are solely responsible for their claims in online application. They cannot blame the service providers like internet cafe/browsing centre/Common Service centres for the mistakes made while applying online for recruitment. Candidates are advised to check the filled in online application before finally submitting the same.

## எச்சரிக்கை

- தேர்வாணையத்தின் தெரிவுகள் அனைத்தும் விண்ணப்பதாரர்களின் தரவரிசைப்படியே மேற்கொள்ளப்படுகின்றன.
- பொய்யான வாக்குறுதிகளை சொல்லி, தவறான வழியில் வேலைவாங்கித் தருவதாக கூறும் இடைத்தரகர்களிடம் விண்ணப்பதாரர்கள் மிகவும் கவனமாக இருக்குமாறு எச்சரிக்கப்படுகிறார்கள்.
- இதுபோன்ற தவறான மற்றும் நேர்மையற்ற நடபர்களால் விண்ணப்பதாரர்களுக்கு ஏற்படும் எந்தவொரு இழப்புக்கும் தேர்வாணையம் எந்தவிதத்திலும் பொறுப்பல்ல.
- விண்ணப்பத்தில் குறிப்பிடப்படும் அனைத்து தகவல்களுக்கும் விண்ணப்பதாரரே முழு பொறுப்பாவார். விண்ணப்பதாரர்கள் தேர்விற்கு விண்ணப்பிக்கும்போது விண்ணப்பத்தில் தவறான தகவல்கள் ஏதேனும் குறிப்பிடப்பட்டிருந்தால் அதற்கு விண்ணப்பதாரரே பொறுப்பாவாரே தவிர, இது தொடர்பாக விண்ணப்பதாரர்கள் தாங்கள் தேர்விற்கு விண்ணப்பித்த இணையதளமைய (Browsing centre /Internet cafe) உரிமையாளரை குற்றம் சாட்டக் கூடாது. விண்ணப்பதாரர்கள் தங்களது விண்ணப்பத்தினை சமர்ப்பிக்கும் முன்னர் விண்ணப்பத்தினை நன்கு சரிபார்த்த பின்னரே சமர்ப்பிக்குமாறு அறிவுறுத்தப்படுகிறார்கள்.

It is mandatory for the applicants to register their basic particulars through One - Time online Registration system on payment of Rs. 150/- (Rupees One hundred and fifty only) towards registration fee and then they should apply online for this recruitment. [The One-Time Registration will be valid for five years from the date of registration. Thereafter, the registration should be renewed by paying the prescribed fee.] One Time Registration will not be considered as an application for any post.

**Details of vacancies:**

Sl. No.	Name of the post	Name of the service	No. of vacancies	Scale of pay
1.	<b>Assistant Director of industries and Commerce (Technical) (Code No. 1897)</b>	Tamil Nadu Industries Service (Code No.043)	11	Rs.56,100-1,77,500 (Level 22) (Revised Scale of Pay)
2.	<b>Assistant Superintendent (Chemical Wing) (Code No.1894)</b>		1 GT (G) - 1	

**2. DISTRIBUTION OF VACANCIES**

The category wise breakup details, in respect of the vacancies for the above said post is as follows: -

**ASSISTANT DIRECTOR OF INDUSTRIES AND COMMERCE (TECHNICAL)**

GT(G)	GT(G) (PSTM)	BC (OBCM) (G)	BC(G) (PSTM)	BC (OBCM) W	BC(M) (G)	MBC/DC(G)	MBC/DC(W)	SC(G)	SC(W)	Total
1	1	1	1	1	1	1	1	2	1	11

**Abbreviations:-**

GT- General Turn; BC(OBCM) - Backward Class (Other than Backward Class Muslims); BC(M) - Backward Class Muslims; MBC/DC -Most Backward Class / De-notified Community; SC - Scheduled Caste; G- General; W-Women; PSTM-Person Studied in Tamil Medium.

The number of vacancies is only approximate and is liable for modification including reduction with reference to vacancy position at any time before finalisation of selection.

### 3. IMPORTANT DATES AND TIME :

Date of notification	09.12.2019	
Last date for submission of application	08. 01.2020	
Last date for payment of fee through bank	10. 01.2020	
<b>Date of written examination</b>		
<b>Paper –I Basics of Engineering (For the Post of Assistant Director of Industries and Commerce (Technical )</b>	25.04.2020 F.N.	10.00 A.M to 01.00 P.M
<b>Paper – II (General Studies) (Common to both the posts)</b>	25.04.2020 A.N	02.30 P.M to 4.30 P.M
<b>Paper –I Chemical Engineering (For the Post of Assistant Superintendent (Chemical Wing)</b>	26. 04. 2020 F.N.	10.00 A.M to 01.00 P.M

#### Note

Refer Annexure-V of this notification regarding tentative timeline for the recruitment process.

### 4. QUALIFICATIONS :

(A) AGE LIMIT (as on 01.07.2019)

(For the posts of Assistant Director of Industries and Commerce (Technical) & Assistant Superintendent (Chemical Wing).

Sl. No.	Category of Applicants	Maximum Age
1.	SCs, SC(A)s, STs, MBCs/DCs, BCs, BCMs and Destitute Widows of all categories.	No Age limit
2.	'Others' [i.e. applicants not belonging to SCs, SC(A)s, STs, MBCs/DCs, BCs and BCMs].	35 Years (Should not have completed)

#### NOTE :

"Others" [i.e Applicants not belonging to SCs, SC(A)s, STs, MBCs/DCs, BC(OBCM)s, BCMs] who have put in five years and more of service in the State/Central Government are not eligible even if they are within the age limit.

(For further details regarding [Age Limit](#) refer para 5 of [“Instructions to Applicants”](#) and [Section 3\(r\) of Tamil Nadu Government Servants \(conditions of Service\) Act, 2016](#))

**Explanation:** No maximum age limit shall mean that the applicants should not have completed 58 years of age either on the date of notification or at the time of selection/appointment to the post.

(For further details refer [Section 28 of Tamil Nadu Government Servants \(conditions of Service\) Act, 2016](#).)

### [Age Concession](#)

#### **(i) For Differently Abled Persons**

- (a) No maximum age limit for applicants who belong to SCs, SC(A)s, STs, MBCs/DCs, BC(OBCM)s and BCMs.
- (b) “Others” not belonging to any of the categories mentioned in item “a” above are eligible for age concession upto 10 years over and above the maximum age limit prescribed.

(For further details to refer [Section 64 of Tamil Nadu Government Servants \(conditions of Service\) Act, 2016](#))

#### **(ii) For Ex-servicemen**

- (a) No maximum age limit for applicants who belong to SCs, SC(A)s, STs, MBCs/DCs, BC(OBCM)s, BCMs.
- (b) The maximum age limit is 48 years for “Others” i.e. applicants not belonging to any of the categories mentioned in item “a” above.

(For further details to refer [Section 63 of Tamil Nadu Government Servants \(conditions of Service\) Act, 2016](#))

- (c) The above mentioned age concession will not apply to the Ex-servicemen applicants those who have already been recruited to any class or service or category.

(For further details to refer [Section 3\(j\) of Tamil Nadu Government Servants \(conditions of Service\) Act, 2016](#))

**(B) EDUCATIONAL QUALIFICATION (as on 09.12.2019)**

Applicants should possess the following or its equivalent qualification awarded by any University or Institution recognized by the University Grants Commission or Institution recognized by All India Council for Technical Education:

Name of the post	Qualification
<b>Assistant Director of Industries and Commerce (Technical )</b>	<p>(i) Bachelor of Engineering or Bachelor of Technology degree of any discipline except Civil engineering and Architectural Engineering And</p> <p>(ii) Practical Experience in a factory or workshop for a period of not less than one year.*</p> <p>*Note: The experience for the post of Assistant Director of Industries and Commerce (Technical) should have been obtained from a factory or workshop recognized by the State Government / Central Government.</p>
<b>Assistant Superintendent (Chemical Wing)</b>	<p>(i) A Degree in Chemical Engineering (or) Associate Member of Indian Institute of Chemical Engineering. And</p> <p>(ii) Practical Experience for a period of not less than three years in a Research Institute or Engineering Workshop or Chemical Laboratory.</p>

- (i) The qualification prescribed for the posts should have been obtained by passing the required qualification in the following order of studies: 10<sup>th</sup> + HSC or its equivalent + Bachelor's degree as required under **Section 25 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016**.  
(Results of the examination should have been declared on or before the date of notification). **(Section 20(4)(iv) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016)**
- ii) Period of practical or other experience in addition to educational or technical qualification, for an appointment, such a period of practical or other experience, as the case may be, should have been acquired after obtaining the educational or technical qualification prescribed for such appointment **(Section 25 (Explanation –III) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016)**
- iii) The qualifications considered equivalent are indicated in **Annexure - III** to this notification. (Refer also to the disclaimer annexed to the notification).
- iv) Applicants claiming equivalence of qualification other than the equivalence given in Annexure-III should upload and submit evidence for equivalence of qualification, in the form of government order issued prior to the date of this notification and produce it when called for, failing which, their application **will be summarily rejected**. The government orders regarding equivalence of qualification issued after the date of this notification will not be accepted.  
**(For further details regarding equivalence of qualification refer to para.10 of the "Instructions to Applicants")**

**(C) KNOWLEDGE IN TAMIL**

Applicants should possess adequate knowledge in Tamil. (For details refer to [Section 21 of the Tamil Nadu Government Servants \(Conditions of Service\) Act, 2016](#) and [para. 11 of the Commission's Instructions to Applicants](#))

**(D) CERTIFICATE OF PHYSICAL FITNESS**

Applicants selected for appointment to the posts will be required to produce a certificate of physical fitness in the form prescribed below:

Sl. No.	Name of the post	Standard of vision	Form of certificate of physical fitness
1.	<b>Assistant Director of Industries and Commerce (Technical )</b>	Standard-III or Better	Form prescribed for executive posts.
2.	<b>Assistant Superintendent (Chemical Wing)</b>		

Applicants with defective vision should produce eye fitness certificate from a qualified eye specialist.

**5. FEES :**

a)	<p><b><u>Registration Fee</u></b> For One Time Registration (Revised with effect from 01.03.2017 vide G.O.(Ms).No.32, Personnel and Administrative Reforms (M) Department, dated 01.03.2017).</p> <p><b><u>Note</u></b></p> <p>i) Applicants who have already registered in One Time Registration system and are within the validity period of 5 years are exempted from payment of registration fee.</p> <p>ii) Those who have registered in One-Time Registration system and paid the registration fee of Rs.150/- and received the registration ID need not pay the registration fee i.e., Rs.150/- and it is enough to pay the examination fee alone.</p>	Rs.150/-
b)	<p><b><u>Examination Fee</u></b></p> <p><b><u>Note</u></b> The Examination fee <b>should be paid</b> at the time of submitting the online application for this recruitment if they are not eligible for the concession noted below.</p>	Rs.200/-

Note:

- i) Applicants who have registered under one-time registration system must pay the prescribed examination fee for this recruitment. (One time registration is only to avail exemption from payment of registration fee for a period of five years from the date of registration and it will not be considered as prescribed examination fee for this recruitment)
- ii) Applicants who had already registered under one time registration system by paying Rs.50/- before 01.03.2017 and having validity are exempted from paying the registration fee for this recruitment

### **EXAMINATION FEE CONCESSIONS :**

Applicants can avail exemption from payment of the examination fee as per the following eligibility criteria :

<b>Category</b>	<b>Concession</b>	<b>Condition(s)</b>
(i) Scheduled Castes/ Scheduled Caste (Arunthathiyars) and Scheduled Tribes	Full Exemption	--
(ii) Differently Abled Persons, Destitute Widow of all categories.	Full Exemption	(i) For Differently Abled Persons, the disability should be not less than 40%. (ii) For DWs, the DW certificate should have been obtained from the RDO / Sub Collector / Assistant Collector
(iii) Most Backward Classes/ Denotified Communities/ Backward Classes (Other than Muslims) / Backward Class (Muslim)	Those who have not availed three free chances so far in the previous recruitments may avail exemption from payment of examination fee.	Should not have availed three free chances in the previous recruitments.
(iv) Ex-Servicemen	Those who have not availed two free chances so far in the previous recruitments may avail exemption from payment of examination fee.	(i) Should not have availed two free chances in the previous recruitments. (ii) Fee concession will not apply to those who have already been recruited to any class or service or category.

**Note:**

- (i) The three / two free chances referred to above are not for **EACH POST** but for **ANY THREE / TWO APPLICATIONS ONLY**. The claim for exemption from payment of examination fee made in any application which has been rejected / admitted or withdrawn will be counted as free chance availed.
- (ii) Failure to pay the prescribed fee along with the application in-time, will result in the rejection of application.
- (iii) The number of free chances availed by the applicant means, the total number of free chances hitherto availed by the applicant in her earlier applications submitted to the Commission for any post / recruitment.
- (iv) If the examination fee concession claimed in the application is found to exceed the admissible limits, as announced above, the application **will be rejected at any stage of selection**. The number of free chances availed by the applicants will be counted from all the previous applications submitted through One Time Registration and / or submitted directly without One Time Registration.

(For further details regarding examination fee concession, refer to [para. 12 of the "Instructions to Applicants"](#)).

**6. MODE OF PAYMENT OF FEE :**

- Examination fee of Rs.200/- (Rupees Two hundred only) is payable online through Net Banking / Credit card / Debit card or it can be paid offline within two days from the date of submission of online application by choosing the option in the online application.
- Applicants have also to pay the service charges as applicable.
- Offline mode of payment in the form of demand draft / postal order etc. **will not be accepted** and the applications forwarded with such modes of payment will be summarily rejected.

**7. CONCESSIONS :**

- (i) Concessions with regard to age and examination fees allowed to SCs, SC(A)s, STs, MBCs/DCs, BC(OBCM)s, BCMs, Destitute Widows, Differently Aabled Persons and Ex-servicemen are given in [paras. 12 to 14 of the 'Instructions to Applicants'](#).
- (ii) Persons claiming concessions referred to above and other claims made in the application have to produce evidence for such claims when called for, otherwise their application will be **rejected**.

**Note:**

In all cases, an **ex-serviceman once recruited** to a post in any class or service or category, **cannot claim the concession** of being called an ex-serviceman for his further recruitment.

(Section 3(j) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016)



**8. SCHEME OF EXAMINATION ( OBJECTIVE TYPE ) AND ORAL TEST:-**

Subject	Duration	Maximum Marks	Minimum Qualifying Marks for selection			
			SC, ST, MBC/DC BC(M) & BC	Others		
<b><u>OMR Based Examination</u></b> <b>Objective Type</b>						
<b>1) For Assistant Director of Industries and Commerce (Technical) (Degree standard) - 200 Questions</b>						
<b>(i) Paper I</b> Basics of Engineering (Code No.230)	3 hours	300	171	228		
<b>2) For Assistant Superintendent (Degree standard) -200 Questions</b>						
<b>(i) Paper I</b> Chemical Engineering (Code No.260)	3 hours	300				
<b><u>Common to both posts</u></b>						
<b>(ii) Paper II</b> (100 questions) <b>General Studies</b> (Code No.003) <b>(Degree standard) – 75</b> questions <b>and</b> <b>Aptitude and Mental Ability Test (SSLC Standard)</b> – 25 questions	2 hours	200				
<b>(iii) Interview and Records</b>		70				
<b>TOTAL</b>		<b>570</b>				

**Note**

- The questions in Paper-I (Subject Paper) **Degree standard** will be set in English only. The questions in Paper-II (General Studies) will be set both in Tamil and English.
- The syllabus for Subject Paper (Paper I) & General Studies (Paper II) are furnished at **Annexure-II** to this Notification.
- Refer [para. 22 of "Instructions to Applicants "](#)for Instructions to be followed while appearing for Competitive Examinations conducted by the Commission.

**9. EXAMINATION CENTRES:**

Name of the Centre	Centre Code	Name of the Centre	Centre Code	Name of the Centre	Centre Code
Chennai	0100	Salem	1700	Nagercoil	0800
Madurai	1000	Thanjavur	1900	Kancheepuram	0700
Coimbatore	0200	Chidambaram	0302	Karaikudi	1804
Tiruchirappalli	2500	Vellore	2700	Pudukkottai	1500
Tirunelveli	2600	Ramanathapuram	1600	Udhagamandalam	1300

**Note:**

- (i) Request for change of examination centre / venue will not be entertained with (For further details refer "[Instructions to Applicants](#)").
- (ii) The Commission reserves the right to increase/ decrease the number of examination centres and to re-allot the applicants accordingly.
- (iii) Applicants should appear for the written examinations / certificate verification/ Counselling/oral test at their own expenses.

**10. SELECTION PROCEDURE:**

**Selection will be made in two successive stages** i.e., (i) Written Examination and (ii) Oral Test in the shape of an interview. The final selection will be made on the basis of the total marks obtained by the applicants at the written examination and oral test taken together subject to the rule of reservation of appointments. Applicant's appearance in the written examination and oral test is compulsory. The applicant who has not appeared for the written examination or the oral test will not be considered for selection, even if he/she secures qualifying marks for selection.

**(For further details regarding procedure of selection refer [paragraph 23 \(b\)](#) of "[Instructions to Applicants](#)"**

**11. NO OBJECTION CERTIFICATE / INFORMATION TO THE EMPLOYER:**

No Objection Certificate obtained from appropriate authority shall be produced at the time of certificate verification. Failure to produce the same will lead to rejection of application.

For details refer to [para. 15 \(g\) of the 'Instructions to Applicants'](#). Any violation of this instruction will result in rejection of application and forfeiture of his/ her candidature.

**12. GENERAL INFORMATION:**

- A. The rule of reservation of appointments is applicable to this recruitment, only with respect to the post of Assistant Director of Industries and Commerce (Technical) and not with respect to the post of Assistant Superintendent.
- B. In G.O.(Ms.) No.145, Personnel and Administrative Reforms (S) Department, dated 30.09.2010 and G.O.(Ms.) No.40, Personnel and Administrative Reforms(S) Department dated 30.04.2014, the government have issued orders to fill 20% of all vacancies in direct recruitment on preferential basis with persons who have studied the prescribed qualification in Tamil Medium. The 20% reservation of vacancies on

preferential allotment to Persons Studied in Tamil Medium (PSTM) will apply to this recruitment, if Tamil medium of studies for these qualifications are available.

(Applicants claiming this reservation should have joined and studied the prescribed qualification in Tamil Medium and should have the certificate for the same. Having written the university examinations in Tamil language alone will not qualify the candidate to claim this reservation). If applicants who have studied the prescribed qualification in Tamil medium are not available for selection for appointment against the vacancies reserved for PSTM, such vacancies shall be filled by Non-PSTM applicants, but belonging to the respective communal category. The PSTM certificate shall be produced / uploaded by the applicants in the prescribed format / Proforma available on the Commission's website at '[www.tnpsc.gov.in](http://www.tnpsc.gov.in)' which shall be obtained from the Head of the Institution and to be submitted when called for by the Commission.

**(For further details refer to para. 27 (XIX) of the "[Instructions to Applicants](#)")**

C. The selection for appointment to the said post is purely provisional subject to the final orders in the writ petitions, if any, pending on the files of the Hon'ble High Court of Madras and its Madurai Bench.

D. **As per Sections 26 and 27(c) of Tamil Nadu Government Servants (Conditions of Service) Act, 2016, reservation of appointment to "Destitute Widows" and "Ex-servicemen" will not apply to this recruitment.**

**E. DIFFERENTLY ABLED PERSONS (DAP):**

4% reservation for Differently Abled Persons will be applicable as per G.O.(Ms.) No.20, Welfare of Differently Abled Persons (DAP 3.2) Department, dated 20.06.2018. However, the applications of DAPs will be accepted subject to the orders to be issued by the government.

F. Differently Abled Persons should submit / upload a copy of Differently Abled Certificate obtained from the competent authority specifying the nature of physical handicap, the degree of disability as instructed in para. 14(b) of the "[Instructions to Applicants](#)" when called for by the Commission. (Section 20 (5) of the [Tamil Nadu Government Servants \(Conditions of Service\) Act, 2016](#)).

G. Wherever vacancies are reserved for Arunthathiyars on preferential basis, even after filling the vacancies reserved for SC (Arunthathiyars) on preferential basis, if more number of qualified Arunthathiyars are available, they shall be entitled to compete with the Scheduled Castes other than Arunthathiyars in the inter-se-merit among them and if any posts reserved for Arunthathiyars remain unfilled for want of adequate number of qualified applicants, it shall be filled by Scheduled Castes other than Arunthathiyars.

H. Any claim made after the submission of online application will not be entertained. Evidence for all the claims made in the online application should be uploaded / submitted in time when the same are called for. Failure to upload / submit the documents within the stipulated time limit will entail rejection of application.

- I. Correct and true information regarding arrest, convictions, criminal or any disciplinary proceedings initiated / pending or finalised, debarment / disqualification by any recruiting agency, participation in agitation or any political organisation, candidature in election for Parliament / State Legislature / Local Bodies etc, if any, should also be furnished to the Commission at the time of application.

The details thereof, i.e. originals of the judgement / order / G.O. dropping further action in the departmental proceedings or any document that may prove the suitability of such applicants for appointment in such cases must be produced at the stage / time of certificate verification without fail. All such events that occur after the submission of application and till the date of his / her selection and appointment shall be reported to the Commission forthwith. Failure to report on the part of the applicant will be considered as suppression of material information and will attract suitable penal action.

- J. In-complete applications and applications containing wrong claims or in-correct particulars relating to category of reservation / eligibility / age / communal category / educational qualification / medium of instruction / physical qualification / other basic qualifications and other basic eligibility criteria will be liable for rejection.
- K. One Time Registration is not an application for any post / recruitment. Though the details / particulars have already been furnished by the applicants under One Time Registration system, the details / particulars furnished in the online application for this recruitment alone will be taken into consideration. The Commission will not be responsible for any consequences arising out of furnishing of in-correct and in-complete details in the application or omission to provide the required details in the application for this recruitment.
- L. Refer **Annexure –IV** of this notification regarding determination of community and reservation in employment for third genders.

M. **Determination of the Community for Third Gender:-**

- (i) The Third Gender candidates, who do not possess any community certificate shall be considered under Most Backward Class as per G.O.(Ms) No.28, Backward Classes, Most Backward Class and Minorities Welfare Department, dated 06.04.2015.
- (ii) The Third Gender candidates who belong to Scheduled Caste/ Scheduled Caste (Arunthathiyar)/ Scheduled Tribe communities and possess community certificate as such, shall be considered as per their respective community.
- (iii) The Third Gender candidates who belong to the communities other than Scheduled Caste/ Scheduled Caste (Arunthathiyar) / Scheduled Tribe and possess community certificate as such (not covered under point(i) above) shall be considered as per their own community or as Most Backward Class whichever is advantageous to them as per their option. Once the individual opts to be considered as a particular community, it shall be crystallized and this option shall not be changed in future.

N. **Reservation in Employment for Third Gender:-**

- (i) The Third Gender candidates who identify themselves as 'Female' shall be considered against both 30% reservation for women as well as 70% reservation for the General category (both Men & Women).
- (ii) The Third Gender candidates, who identify themselves as 'Male' or 'Third Gender', shall be considered against the 70 % reservation for General category (both Men & Women).

The above concessions shall be granted subject to production of certificate identifying them as Third Gender or Third Gender (Male) or Third Gender (Female), as the case may be, issued by the Tamil Nadu Third Gender Welfare Board (TNTGWB)."

**13. OTHER IMPORTANT INSTRUCTIONS:**

- a) Applicants should ensure their eligibility for examination. Applicants applying for the examination should go through all the instructions carefully and ensure that they fulfil all the eligibility conditions for admission to the examination. Their admission to all stages of the examination will be purely provisional subject to satisfaction of the eligibility conditions. Mere issue of memo. of admission to the applicants will not imply that their candidature has been fully cleared by the Commission.
- b) Hall Tickets for eligible applicants will be made available on the Commission's website [www.tnpsc.gov.in](http://www.tnpsc.gov.in) or [www.tnpscexams.net](http://www.tnpscexams.net) or [www.tnpscexams.in](http://www.tnpscexams.in) so as to enable the applicants to download the same. **Hall Tickets will not be sent by post.** Hence, applicants should watch the Commission's website before the scheduled date of examination.
- c) Grievance Redressal Cell for guidance of applicants: In case of any guidance / information / clarification regarding applications, candidature, etc., applicants can contact the Commission's office in person or over Telephone No. 044-25332833 / 25332855 or the Commission's Toll-Free No. 1800 425 1002 on all working days between 10.00 a.m. and 05.45 p.m. or Commission's e-mail id [contacttnpsc@gmail.com](mailto:contacttnpsc@gmail.com).

d) **COMMUNICATION TO APPLICANTS:**

Individual communication regarding the date and time of certificate verification, oral test and counselling (as applicable) will not be sent to the applicants by post. The details will be made available on the Commission's website. Applicants will be informed of the above fact only through SMS and e-mail and they should watch the Commission's website in this regard.

- e) ***After notification, during the process of recruitment till publication of result, no information under Right to Information Act would be furnished.***

f) Mobile phones and other articles **banned** :

- i) Except the permitted writing material (i.e. pen), applicants are not allowed to bring cellular phones, electronic or any other type of calculators, watches and rings with inbuilt memory notes, recording devices either as a separate piece or part of something used by the applicant such as watch or ring etc or any other electronic devices and non - electronic devices such as P&G design data book, mathematical and drawing instruments, log tables, stencils of maps, slide rules books, notes, loose sheets, rough sheets, hand bags etc., into the examination hall / room.
  - ii) If they are found to be in possession of any such things or instruments, they will not be allowed to write the examination further, besides invalidation of answer paper and / or debarment. If it is considered necessary, they will be subjected to thorough physical search including frisking on the spot (For further details refer to the "Instructions to Applicants").
  - iii) Applicants are advised, in their own interest, not to bring any of the banned items including mobile phones to the venue of the examination, as arrangements for safekeeping of the same cannot be assured.
- g) Unless specific instruction is given, applicants are not required to submit along with their application any certificates (in support of their claims regarding age, educational qualifications, physical qualification, community, physical disability etc.,) which should be submitted when called for by the Commission. Applicants applying for the examination should ensure that they fulfil all the eligibility conditions for admission to the examination. Their admission at all the stages of examination for which they are admitted by the Commission will be purely provisional, subject to their satisfying the prescribed eligibility conditions. If, on verification at any time before or after the written examination / certificate verification / Oral Test, it is found that they do not fulfil any of the eligibility conditions, their candidature for the examination will be liable for rejection / cancellation by the Commission. (For further details [refer to the "Instructions to Applicants"](#))
- h) If any of their claims is found to be incorrect, it will lead to rejection of their candidature and suitable penal action including debarment.
- i) **UNFAIR MEANS STRICTLY PROHIBITED:** No applicant shall copy from the papers of any other applicant or permit her papers to be copied or give or attempt to give or obtain or attempt to obtain irregular assistance of any description. (For further details [refer to the "Instructions to Applicants"](#))
- j) **CONDUCT IN THE EXAMINATION HALL:** No applicant should misbehave in any manner or create a disorderly scene in the examination hall or harass the staff employed by the Commission for the conduct of the examination. Any such misconduct will be viewed seriously and penalised. (For further details refer to the "Instructions to Applicants")
- k) For violation of "Instructions to Applicants" in any manner, suitable penalty will be imposed as per the "Instructions to Applicants" or as deemed fit by the Commission.

- 1) Applicants can challenge the tentative answer keys of the objective type examination through the 'Answer Key Challenge' window available in the Commission's website [Results  $\longrightarrow$  Answer Keys].

Representations, if any, challenging the tentative answer keys shall be submitted only through online mode **within seven days from the date of publication of tentative answer keys**. Representations received by post or e-mail will receive no attention.

Detailed instructions – procedures to challenge the tentative answer keys have been made available on the Commission's website. Representations made online after the closure of the window will also receive no attention.

#### 14. HOW TO APPLY:

- 1) Applicants should apply only through online mode in the Commission's websites [www.tnpsc.gov.in](http://www.tnpsc.gov.in) / [www.tnpscexams.net](http://www.tnpscexams.net) / [www.tnpscexams.in](http://www.tnpscexams.in)
- 2) "*One Time Registration*" (OTR) and "*Applicant's Dashboard*" are mandatory before applying for any post. Applicant should register only once in the One Time Registration by paying Rs.150/- as registration fee. Successfully registered One Time Registration is valid for five years from the date of registration. All the applications should be submitted using the One Time Registration ID and password registered by the applicant.
- 3) To apply under One Time Registration, the applicants should have scanned image of their photograph, certificate wherever insisted and signature in CD/DVD/Pen Drive to upload the photo, certificate and signature.
- 4) Applicants who have already registered under One Time Registration system on or before 29.09.2015 shall use their existing user ID and password to create the applicant's dashboard in the new One Time Registration system. No applicant is permitted to create more than one registration ID under One Time Registration system.
- 5) Applicants should enter the Unique ID and password to view the already available information and update them.
- 6) One Time Registration is not an application for any post. It is just a collection of information from the applicants and giving a separate dashboard to each applicant to facilitate them to maintain their own profile. Applicants who wish to apply for this recruitment shall click "[Apply](#)" against the recruitment notified in the Commission's website using the same USER ID and PASSWORD given for ONE TIME REGISTRATION.
- 7) Applicants should select the name of the post (s) and service to which they wish to apply.
- 8) Online applications uploaded without the photograph, specified documents and signature will be rejected.

9) All the particulars mentioned in the online application will be considered as final and no modifications will be allowed after the submission of the application. Once an application is submitted, no further request for change of details will be entertained. Hence, the applicants are instructed to fill the online application with utmost care.

10) PRINT OPTION:

- a) After submitting the application, applicants can save / print their application in PDF format.
- b) On entering user ID and password, applicants can download their application and print, if required.
- c) Applicants need not send the printout of the online application or any other supporting documents to the Commission. Application and all the required certificates will be verified only when the applicants come up for certificate verification.

**15. UPLOAD / SUBMISSION OF DOCUMENTS:**

Applicants should upload / submit the required documents for proof in respect of all the claims made in the application with reference to this notification as and when called for. If the required certificates are not uploaded or submitted by the applicants, within the stipulated time, their applications will be rejected.

**16. LAST DATE FOR SUBMISSION OF APPLICATION:**

Online application can be submitted upto 08.01.2020 till 11.59p.m., after which the link will be disabled.

*(For detailed information, applicants may refer to the Commission's' Instructions to Applicants' at the Commission's website [www.tnpsc.gov.in](http://www.tnpsc.gov.in))*

**Secretary**



**DISCLAIMER**

“The Government orders relating to Equivalence of qualification have been hosted in the Tamil Nadu Public Service Commission website. However the applicants while applying for the examination should furnish the details of equivalence of qualification in the form of Government orders issued prior to the date of this notification, if any, which are not mentioned in **Annexure-III** to the notification and produce the same when called for by Tamil Nadu Public Service Commission, failing which their application will be rejected. The Government Orders regarding equivalence of qualification issued after the date of this notification will not be considered.”

Secretary

**ANNEXURE-I****EXPERIENCE CERTIFICATE (MODEL FORMAT)**

1	Name and Address of the Firm/Workshop/ Company / Government Department / Public Sector under taking	:	
2	Whether the said Firm / Workshop/ Company registered under the Factories Act 1948(Central Act LXIII of 1948)	:	
3	Registration Number of Firm / Workshop / Company (Under Factories Act, 1948)	:	
4	Nature of work of the organisation (Production/Service)	:	
5	Name of the Employee and Date of Birth	:	
6	Qualification possessed by the Employee on the Date of Joining Service	:	
7	Designation and period of Experience of the Employee	:	
8	Nature of the Work/Duty performed by the Employee (To be mentioned in Brief)	:	
9	Whether the employee possesses experience as laid in para 4(B) of the notification		
	a) Period of Experience		From..... To.....
9	Whether Attendance Register / Attendance Rolls / Pay Register and other records /available for this Employee	:	Yes / No
10	Certificate by Manager of the Firm Firm/Workshop/ Company / Government Department / Public Sector under taking	:	The above said employee is experienced in this Firm/Workshop/ Company / as stated above. The above particulars furnished by us are correct

Office Seal:

Date:

Place:

Signature

Name & Designation of  
the Issuing Authority**Note:**

Firms / Workshop which issues the certificate is cautioned that issuing of any certificate containing false details will lead to legal/penal action on them.

**ANNEXURE-II****Post of Assistant Director of Industries and Commerce (Technical)  
included in Tamil Nadu Industries Service****PAPER-I****BASICS OF ENGINEERING (DEGREE STANDARD)****Code No.230****UNIT I - MATHEMATICS:**

**Matrices:** Eigen values - Eigenvectors – Cayley–Hamilton theorem – Similar and Orthogonal transformations – Reduction of a quadratic form to Canonical form by orthogonal transformation.

**Ordinary differential equations:** Order and degree – Types of Equations – Higher order linear ODE with constant coefficients - Method of variation of parameters – Cauchy's and Legendre's linear equations – Simultaneous first order linear equations with constant coefficient.

**Functions of several variables :** Partial derivatives – Total derivatives – Euler's theorem – Implicit functions–Jacobians– Taylor's theorem – Maxima and Minima.

**Integration:** Techniques of integration using integration by parts and Bernoulli's formula – Line, Surface and Volume Integrals – Change of order of integration.

**Vector Calculus:** Vectors and scalars – Directional derivatives – Gradient, Divergence and Curl of vectors – Applications of Green's theorem, Gauss divergence theorem and Stoke's theorem.

**Complex variables:** Verification of Analyticity – Construction of Analytic functions – Conformal Mappings – Bilinear transformations.

**Complex Integration:** Cauchy's integral theorem – Cauchy's fundamental theorem – Cauchy's residue theorem – Taylor's theorem – Laurent's series–Contour integration (excluding poles on the real axis)

**Laplace transform:** Existence of Laplace transform – Laplace transform of elementary functions– Properties – Laplace transform of Periodic functions – Inverse Laplace transform – Convolution theorem – Solution of linear second order ODE by Laplace transform technique

**Unit II - ENGINEERING PHYSICS:**

Newton's laws of motion – gravitation – work, energy and power - elasticity – moduli of elasticity and their determination-sound intensity level – reverberation – ultrasonics: production and detection - thermal conductivity and expansion - flow of heat-thermodynamics - heat engines – optical interference, anti-reflection coatings - diffraction

and polarization – lasers and types - optical fibres and applications - photoelectric effect - atom models - dual nature of matter and radiation - nuclear models –radioactivity - nuclear fission and fusion - crystal structures - unit cells - packing factor –imperfections – superconductivity - magnetic and dielectric materials – semiconducting materials - nano materials.

### **UNIT III - ENGINEERING CHEMISTRY:**

Fuel –Classification of fuels - Calorific value – Solid fuel – Liquid fuel – Gaseous fuel – Octane number – Cetane Number – Fuel Cells. Lubricants – Classification – Greases – Solid Lubricants. Water – Sources – Classifications – Softening process – Desalination – RO Method – Internal treatment – Treatment of Water for Municipal purposes. Plastics – High polymer – classification – Polymerization techniques – Thermoplastics – Thermosetting resins – examples. Rubber – Types of Rubber – Vulcanisation – Properties – Unvulcanised and Vulcanised. Natural Rubber – Synthetic Rubber – examples. Refractories – Classification – Manufacture of Refractories – Magnesite – Silica – Zirconia – Chromite. Abrasives – Natural – Artificial–Abrasive paper & cloth. Corrosion: Dry and Wet corrosion – Factors affecting corrosion- Different types of corrosion. Productive coating – Hot dipping- metal cladding, electrodeposition – Organic Coatings – Paints – Varnishes. Cement and lime- setting and hardening. Explosives- classifications- characteristics-requirements for good explosives- nitrocellulose- TNT- TNB-DNB-PETN-RDX. Alloys- purpose of making alloy- types of alloys- Ferrous alloys. Electrochemistry – conductors and non conductors – Kohlrausch law – Electrochemical cell-reversible and irreversible cells – EMF- Concentration cell- polarization – over voltage, decomposition potential.

### **UNIT IV - ENGLISH :**

**Grammar:** Articles – Prepositions – Tenses (simple present, present continuous, simple past, past continuous, future, & perfect tenses) – Modal verbs – Clauses – Conditional clauses – Subject-Verb agreement – conjunctions – Active & passive voice – Reported speech (Direct to Indirect speech) – Error correction – Combining sentences using connectives – Cause & effect expressions (because, so, due to, on account of, etc.) – Framing questions (converting statements into questions)

**Vocabulary:** Synonyms & antonyms – Prefixes, suffixes & intensifying prefixes (e.g. Flammable – inflammable) – Phrasal verbs – Idioms – Fixed expressions (e.g. adhere to, lodge a complaint to, etc.) – One word substitution – Collocation – Expansion of compound nouns (e.g. keyboard)

**Reading:** Reading comprehension passage – Data interpretation (e.g. comprehension questions based on table /chart) – Choosing appropriate title for a given short passage – Inferential questions based on a short reading passage – Reading comprehension questions making use of scanning & skimming strategies – Jumbled Sentences.

**Writing:** Definitions (instrument & technical terms) – Visual interpretation (picture/photo/chart etc.) – process description – Letter writing (formal / official) – email communication (email etiquette) – essays.

**UNIT V - BASICS OF COMPUTER ENGINEERING:**

**Computer Organization** - CPU and Microprocessor [ALU, Control Unit and Bus Structure] – Data Storage [Primary, Secondary and Virtual] – Input and Output Devices

**Systems Software** – Assembler – Compiler – Loader – Linker – Operating Systems

**Programming Languages** – Classification of Programming Language, High-Level Languages

**Basic Computer Networking** – Network Components [Routers, Bridges, Gateways] – ISO-OSI Reference Model – LAN – WAN – Client-Server Architecture – Internet

**Applications** – Office Tools – Word-processor – Spreadsheet – Powerpoint – Database – E-mail – Browser

**IT Enabled Services** – E-Government – E-Commerce – Multimedia

**UNIT VI - BASICS OF CIVIL AND MECHANICAL ENGINEERING:**

Introduction to Engineering mechanics – Units and Dimensions – Laws of Mechanics – Coplanar Forces – Static Equilibrium of Rigid body – Moment of a force – free body diagram – friction – laws of friction – sliding friction – wedge friction – Rolling resistance – Lader friction - Friction in screws – Screw jack – Belt friction – Properties of surfaces and solids – Centroids and centre of mass – line and areas – Rectangular, circular, triangular areas by integration – T-section, I- Section, Angle section, Hollow section – Area moment of inertia of plane areas – Parallel axis theorem – Centroid of the simple solids – Dynamics of particle – Displacement, velocity and acceleration – Different types of motion – Rectilinear, Curvilinear and Projectile motions – Newton's II-law of motion – Work Energy equation – Impulse and momentum principles.

**UNIT VII - BASICS OF ELECTRICAL AND ELECTRONICS ENGINEERING:**

Ohm's law- Kirchoff's laws - Introduction to DC and AC circuits –Power and powerfactor- single phase and three phase circuits Operating principles of moving coil and moving iron instruments (voltmeters and ammeters)- wattmeters and energy meters

Construction and principle of operation: DC motors- DC generators-Transformers-Induction motors Characteristics of PN junction diode-zener diode- half wave and full wave rectifiers- Bipolar junction transistor (CC,CE,CB configurations)-Amplifiers-Operational amplifiers Binary number system- logic gates- Boolean algebra – Half and full adders- Flip-flops – registers and counters- A/D and D/A conversion Types of analog and digital signals- Modulation and Demodulation(amplitude and frequency) Communication systems: Radio-TV- Fax- Microwave-Satellite and optical fibre

**UNIT VIII - PRINCIPLES OF MANAGEMENT:**

Management- Definition, Evolution- Taylor, Fayol, Elton Mayo, Peter Drucker Planning- Types, Steps, Forecasting, MBO, MBE Organising- Departmentation- Line and staff, Delegation and Decentralization Staffing- Manpower planning, Recruitment and selection,

Training, Performance Appraisal Directing- Leadership styles, Discipline, Communication in business Controlling- Types, Control Techniques, Budgetary Control, Statistical Control

### **UNIT IX - TOTAL QUALITY MANAGEMENT:**

Quality - vision, mission and policy statement, dimensions of product and service quality, contributions of quality gurus-Deming, Juran, Crosby, Masaaki Imai, Feigenbaum, Ishikawa, Cost of Quality, continuous process improvement- PDCA, Quality Circle, 5S, Kaizen, Statistical Process Control (SPC), 7 QC Tools, new management tools, benchmarking, 6 sigma, Process Quality, Quality Function Deployment(QFD), POKA YOKE, Total Productive Maintenance (TPM), Business Process Reengineering(BPR), ISO 9004: 2000 - QMS, ISO-14000.

### **UNIT X - ENVIRONMENTAL SCIENCE AND ENGINEERING:**

Environment— Global perspective- awareness of environmental pollution- Classification of Pollutants- Air Pollution- Composition of Air – Major sources of air pollution. Gaseous Pollutants- effect of air pollution on weather, climate, atmospheric process, NOX, SO<sub>2</sub>, CO, CO<sub>2</sub>, Fly ash, Vehicular pollution- automobile emission- prevention- green houseeffect – chlorofluoro carbon- ozone layer -ozone depletion- smog- photochemical smog, acid rain. Water pollution- types of water pollution- Factors affecting surface water – sewage and domestic waste – BOD, COD. Industrial effluent- harmful effects of industrial pollutants- agricultural discharge – detergent and toxic metal – siltation. Thermal pollutants- effect of thermal pollution- radioactive pollutant – inorganic pollutants and its detrimental effects. Soil Pollution- sources of soil pollution- effect of carbon waste- noise pollution- sources of noises of pollution- types of noise pollution- prevention and control

**Post of Assistant Superintendent (Chemical Wing) included in Tamil Nadu Industries Service.**

**PAPER-I**

**CHEMICAL ENGINEERING (DEGREE STANDARD) CODE NO: 260**

**UNIT-I: CHEMICAL PROCESS CALCULATIONS AND CHEMICAL ENGINEERING THERMODYNAMICS**

Properties of gases liquids and solids, Humidity and saturation, Gas laws, Material and Energy balances- involving recycle, by pass and purge systems, Material and Energy balance with reactions. Thermodynamics functions - Chemical and Phase Equilibrium - Laws of Thermodynamics - Ideal and non-ideal gases and solutions – fugacity, partial molal properties.

**UNIT- II: MECHANICAL OPERATIONS AND ENGINEERING MATERIALS**

Size Reduction, law, particle size Analysis, Mixing and agitation, Filtration, Sedimentation and Settling, Materials of construction for chemical Industries, Metallic, Non-metallic and Polymeric materials, corrosion. Grinding, Law. Smart materials for Chemical Engineering applications.

**UNIT- III: CHEMICAL TECHNOLOGY AND RENEWABLE ENERGY SOURCES**

Acids, Fertilizers, marine Chemicals, Cement, Glass, Ceramic and Refractories. Petroleum Refining Products, Fermentation Products, Oils, Soaps and Detergents, Pulp and paper, Dyes, sugar, leather and rubber. Potential for energy resources, energy conversion, solar, thermal, photoelectric, ocean, geothermal, wind energy, bio-energy sources, battery and fuel Cells.

**UNIT -IV: TRANSFER OPERATIONS**

Momentum: Newtonian and Non-Newtonian fluids, Compressible and incompressible fluids flow through packed bed, Fluidized bed and closed ducts, Fluid Machinery. Heat transfer: conduction, convection and radiation, Heat transfer with phase change, heat exchangers, Evaporation. Mass transfer: Diffusion, Theories of mass transfer, Inter phase mass transfer, Analogy. Distillation, Extraction, Absorption, Adsorption, Drying.

**UNIT - V: CHEMICAL REACTION ENGINEERING**

Chemical Kinetics, Rate equations, Interpretation of rate data, Design of reactors, order of reaction, Catalysis, Thermal characteristics of reactors. Isothermal and adiabatic fixed bed reactors, non-isothermal and non-adiabatic fixed bed reactors. Two-phase fluidized bed model, slurry reactors, trickle bed reactor. Experimental determination and evaluation of reaction kinetics for heterogeneous systems.

**UNIT - VI: INSTRUMENTATION AND PROCESS CONTROL**

Principles of measurements and classification of process instruments, measurement of temperature, pressure, fluid flow, liquid weight and weight flow rate, viscosity, pH, concentration, electrical and thermal conductivity,

humidity of gases. Laplace transformation, application to solve ODEs. Open-loop systems, first order systems, first order systems in series, linearization and its application in process control, second order systems and their dynamics; transportation lag. Closed loop control systems, feed-back control systems, BODE diagram, stability criterion, tuning of controller settings, cascade control, feed forward control, Smith predictor controller, control of distillation towers and heat exchangers.

### **UNIT - VII: NUMERICAL AND COMPUTATIONAL METHODS**

Curve fitting, Equations with real and rational Coefficients, Imaginary roots and irrational roots, Transformation of equations. Numerical solutions of linear and non linear algebraic equations- solution of initial value and boundary value ordinary and non-linear differential equations, solution of partial differential equations. Partial Differential equation – finite element, finite difference method. Matrix, determinants and properties – Elementary Row transformations algebraic equations; ordinary differential equations and non homogeneous first order ordinary differential equations rank of Matrix – Eigen value problems, Orthogonal and orthonormal vectors; Gram-Schmidt orthogonalization; Theorem for Eigenvalues and Eigenfunctions.

### **UNIT - VIII: SEPARATION OPERATIONS**

Crystallization, Membrane separation processes. frame, tubular, spiral wound and hollow fibre membrane reactors, dialysis, reverse osmosis, nano/ultra filtration, microfiltration. Ion Exchange chromatography and electrodialysis, Separations involving pervaporation and permeation techniques for solids, liquids and gases, supercritical fluid extraction.

### **UNIT-IX: ENVIRONMENTAL ENGINEERING AND SAFETY IN CHEMICAL INDUSTRIES**

Air, Water and soil pollution, causes, effects and remedies, Nuclear waste disposal, Noise control, Wastewater treatment by various methods: Chemical, biochemical and advanced oxidation process. Industrial hygiene, occupational safety. Industrial safety principles, site selection and plant layout, chemical hazards classification, Safety in operations and processes, hazardous identification techniques.

### **UNIT - X: DESIGN AND OPTIMIZATION**

Problem formulation, degree of freedom analysis, objective functions, Simplex method, Barrier method, sensitivity analysis, Convex and concave functions, unconstrained NLP, Newton's method, Quasi-Newton's method, Direct substitution, Quadratic programming, Cost estimation, Plant utilities, Heat exchanger networks, Pinch technology.



**PAPER-II****GENERAL STUDIES (DEGREE STANDARD)****Objective Type****UNIT-I : GENERAL SCIENCE**

- (i) Scientific Knowledge and Scientific temper - Power of Reasoning - Rote Learning Vs Conceptual Learning - Science as a tool to understand the past, present and future.
- (ii) Nature of Universe - General Scientific Laws – Mechanics - Properties of Matter, Force, Motion and Energy - Everyday application of the basic principles of Mechanics, Electricity and Magnetism, Light, Sound, Heat, Nuclear Physics, Laser, Electronics and Communications.
- (iii) Elements and Compounds, Acids, Bases, Salts, Petroleum Products, Fertilizers, Pesticides.
- (iv) Main concepts of Life Science, Classification of Living Organisms, Evolution, Genetics, Physiology, Nutrition, Health and Hygiene, Human diseases.
- (v) Environment and Ecology.

**UNIT-II: CURRENT EVENTS**

- (i) History - Latest diary of events - National symbols - Profile of States - Eminent personalities and places in news – Sports - Books and authors.
- (ii) Polity - Political parties and political system in India - Public awareness and General administration - Welfare oriented Government schemes and their utility, Problems in Public Delivery Systems.
- (iii) Geography - Geographical landmarks.
- (iv) Economics - Current socio - economic issues.
- (v) Science - Latest inventions in Science and Technology.

**UNIT- III: GEOGRAPHY OF INDIA**

- (i) Location – Physical features - Monsoon, rainfall, weather and climate - Water resources - Rivers in India - Soil, minerals and natural resources - Forest and wildlife - Agricultural pattern.
- (ii) Transport - Communication.
- (iii) Social geography – Population density and distribution - Racial, linguistic groups and major tribes.
- (iv) Natural calamity – Disaster Management – Environmental pollution: Reasons and preventive measures – Climate change – Green energy.

**UNIT – IV: HISTORY AND CULTURE OF INDIA**

- (i) Indus valley civilization - Guptas, Delhi Sultans, Mughals and Marathas - Age of Vijayanagaram and Bahmani Kingdoms - South Indian history.
- (ii) Change and Continuity in the Socio - Cultural History of India.
- (iii) Characteristics of Indian culture, Unity in diversity – Race, language, custom.
- (iv) India as a Secular State, Social Harmony.

**UNIT-V: INDIAN POLITY**

- (i) Constitution of India - Preamble to the Constitution - Salient features of the Constitution - Union, State and Union Territory.
- (ii) Citizenship, Fundamental rights, Fundamental duties, Directive Principles of State Policy.
- (iii) Union Executive, Union legislature – State Executive, State Legislature – Local governments, Panchayat Raj.
- (iv) Spirit of Federalism: Centre - State Relationships.
- (v) Election - Judiciary in India – Rule of law.
- (vi) Corruption in public life – Anti-corruption measures – Lokpal and LokAyukta - Right to Information - Empowerment of women - Consumer protection forums, Human rights charter.

### **UNIT-VI: INDIAN ECONOMY**

- (i) Nature of Indian economy – Five year plan models - an assessment – Planning Commission and Niti Ayog.
- (ii) Sources of revenue – Reserve Bank of India – Fiscal Policy and Monetary Policy - Finance Commission – Resource sharing between Union and State Governments - Goods and Services Tax.
- (iii) Structure of Indian Economy and Employment Generation, Land reforms and Agriculture - Application of Science and Technology in agriculture - Industrial growth - Rural welfare oriented programmes – Social problems – Population, education, health, employment, poverty.

### **UNIT-VII: INDIAN NATIONAL MOVEMENT**

- (i) National renaissance – Early uprising against British rule - Indian National Congress - Emergence of leaders – B.R.Ambedkar, Bhagat Singh, Bharathiar, V.O.Chidambaranar, Jawaharlal Nehru, Kamarajar, Mahatma Gandhi, Maulana Abul Kalam Azad, Thanthai Periyar, Rajaji, Subash Chandra Bose and others.
- (ii) Different modes of Agitation: Growth of Satyagraha and Militant movements.
- (iii) Communalism and partition.

### **UNIT- VIII : History, Culture, Heritage and Socio - Political Movements in Tamil Nadu**

- (i) History of Tamil Society, related Archaeological discoveries, Tamil Literature from Sangam age till contemporary times.
- (ii) Thirukkural :
  - (a) Significance as a Secular literature
  - (b) Relevance to Everyday Life
  - (c) Impact of Thirukkural on Humanity
  - (d) Thirukkural and Universal Values - Equality, Humanism, etc
  - (e) Relevance to Socio - Politico - Economic affairs
  - (f) Philosophical content in Thirukkural

- (iii) Role of Tamil Nadu in freedom struggle - Early agitations against British Rule - Role of women in freedom struggle.
- (iv) Evolution of 19th and 20th Century Socio-Political movements in Tamil Nadu - Justice Party, Growth of Rationalism - Self Respect Movement, Dravidian movement and Principles underlying both these movements, Contributions of Thanthai Periyar and Perarignar Anna.

### **UNIT – IX : Development Administration in Tamil Nadu**

- (i) Human Development Indicators in Tamil Nadu and a comparative assessment across the Country – Impact of Social Reform movements in the Socio - Economic Development of Tamil Nadu.
- (ii) Political parties and Welfare schemes for various sections of people – Rationale behind Reservation Policy and access to Social Resources - Economic trends in Tamil Nadu – Role and impact of social welfare schemes in the Socio - economic development of Tamil Nadu.
- (iii) Social Justice and Social Harmony as the Cornerstones of Socio - Economic development.
- (iv) Education and Health systems in Tamil Nadu.
- (v) Geography of Tamil Nadu and its impact on Economic growth.
- (vi) Achievements of Tamil Nadu in various fields.
- (vii) e-governance in Tamil Nadu.

### **UNIT-X: APTITUDE AND MENTAL ABILITY**

- (i) Simplification – Percentage - Highest Common Factor (HCF) - Lowest Common Multiple (LCM).
- (ii) Ratio and Proportion.
- (iii) Simple interest - Compound interest - Area - Volume - Time and Work.
- (iv) Logical Reasoning - Puzzles-Dice - Visual Reasoning - Alpha numeric Reasoning – Number Series.

**ANNEXURE-III**

Sl. No.	Degree considered as Equivalent to the Qualification prescribed in the Rule	G.O.
1	<p>1. B.Tech, (Chemical and Electro Chemical Engineering) Degree awarded by Anna University is equivalent to Chemical Engineering.</p> <p>2. B.Tech.(Petrochemical Technology) Degree awarded by Bharathidasan University is equivalent to B.E (Chemical Engineering)</p>	G.O.(Ms).No.178, Higher Education (J1) Department, dated 17-07-2015
2	<p>Government of India has recognized the following courses of Section A &amp; B Examination as revised, conducted by the Institution of Engineers (India), Kolkata as equivalent to Degree in the Appropriate branch of Engineering of the Recognized Universities in India.</p> <ol style="list-style-type: none"> <li>1. Aerospace Engineering</li> <li>2. Agricultural Engineering</li> <li>3. Chemical Engineering</li> <li>4. Computer Science &amp; Engineering</li> <li>5. Electrical Engineering.</li> <li>6. Electronics and Communication Engineering</li> <li>7. Environmental Engineering</li> <li>8. Marine Engineering</li> <li>9. Mechanical Engineering</li> <li>10. Materials &amp; Metallurgical Engineering</li> <li>11. Mining Engineering</li> <li>12. Production Engineering</li> <li>13. Textile Engineering</li> </ol>	The Gazette of India, February 11, 2006(MAGHA 22, 1927) Part-I-Section1
3	B.Tech Petrochemical Technology Degree awarded by Anna University(Tiruchirappalli) is equivalent to Degree in B.E. Chemical Engineering	G.O(Ms)No.284 Higher Education (J1) Department dated 03.10.2017

**ANNEXURE IV****Abstract**

Social Welfare and Nutritious Meal Programme Department – Third Gender Welfare – Determination of the Community and Reservation in Employment for Third Gender – Orders – Issued.

**Social Welfare and Nutritious Meal Programme [SW8 (2)] Department**

**G.O.(Ms) No.90**

**Dated 22.12.2017**

சேறலிளம்பி, மார்கழி 7

திருவள்ளூர் ஆண்டு 2048

**Read:**

1. G.O. (Ms) No.127, Labour and Employment Department, dated 27.10.2014
2. G.O. (Ms) No.28, Backward Classes, Most Backward Class and Minorities Welfare Department, Dated 06.04.2015
3. G.O. (Ms) No.71, Social Welfare and Nutritious Meal Programme Department, Dated 06.11.2015

**Read also:**

4. From the Secretary, Tamil Nadu Public Service Commission, D.O.Letter No.4471/RND-D2/2013, dated 12.07.2016
5. From the Director of Social Welfare, Letter Roc.No.21096/WW.1(3)/2017, dated 31.07.2017

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**ORDER:-**

In the Government Order first read above, orders were issued that Third Gender may register their names in Employment Exchange offices based on the certificate identifying them as Transgender issued by the Tamil Nadu Transgender Welfare Board (TGWB) and to sponsor their names for appointment in the vacancies reserved for women category namely 30% and as well as vacancies reserved for General Category (both Men and Women) namely 70%.

2. In the Government Order second read above, orders were issued classifying the "Transgender of Eunuch (Thirunangai or Aravani)" as Most Backward Class by including at Sl.No.36-C in the list of Most Backward Classes.

3. In the Government Order third read above, among other things orders were issued, that Transgender will be identified as 'Third Gender' apart from the Binary Gender System and they have the right to decide their self-identified gender as male or female or as the third gender.

4. The Secretary, Tamil Nadu Public Service Commission in the D.O. letter fourth read above has sought for following clarifications in this matter with regard to:-

- (i) Considering the Transgender under 30% reservation for Women

- (ii) Treating the Transgender candidates who have claimed communal status under Scheduled Caste/ Scheduled Caste (A)/ Scheduled Tribe by producing respective Community Certificate confirming their claim.

5. After careful examination, in consultation with the concerned departments and the Director of Social Welfare, the Government hereby issue the following order regarding the determination of community and reservation in employment for the Third Gender in order to streamline the procedures to be followed by the recruiting agencies like Tamil Nadu Public Service Commission, Teachers Recruitment Board, Uniformed Services Recruitment Board, Medical Recruitment Board, etc., and Employment Exchange offices / appointing authorities, in sponsoring / recruiting / selecting the Third Gender candidates for appointment in Government Service:-

**Determination of the Community:-**

- (i) The Third Gender candidates, who do not possess any community certificate may be considered under Most Backward Class as per G.O.(Ms).No.28, Backward Classes, Most Backward Class and Minorities Welfare Department, dated 06.04.2015.
- (ii) The Third Gender candidates who belong to Scheduled Caste/Scheduled Caste (A)/Scheduled Tribe communities, and possess community certificate as such, may be considered as per their respective community.
- (iii) The Third Gender candidates who belong to the communities other than Scheduled Caste/Scheduled Caste (A)/Scheduled Tribe and possess community certificate as such (not covered under point (i) above) may be considered as per their own community or as Most Backward Class whichever is advantageous to them as per their option and once the individual exercises option for community selection it should be crystallized and this option should not be changed in future.

**Reservation in Employment:-**

- (i) The Third Gender candidates who identify themselves as "Female" by self-declaration supported by the certificate (ID card) issued by the Tamil Nadu Third Gender Welfare Board (TNTGWB) may be considered against both 30% reservation for women as well as 70% reservation for the General category (both Men & Women).
- (ii) The Third Gender candidates, who identify themselves as "Male" or "Third Gender", may be considered against the 70% reservation for General category (both Men & Women) as the case may be.

The above concessions may be granted subject to production of certificate identifying them as Third Gender or Third Gender (Male) or Third Gender (Female) issued by the Tamil Nadu Third Gender Welfare Board (TNTGWB), as the case may be.

(By Order of the Governor)

K. Manivasan,  
Principal Secretary to Government

To  
The Director of Social Welfare, Chennai-15  
The Commissioner of Social Defence, Chennai-10

The Director, Integrated Child Development Services Scheme, Chennai-113  
 The Secretary, Tamil Nadu Public Service  
 Commission, Chennai-3  
 ✓ All District Collectors  
 All Departments of the Secretariat, Chennai-9  
 The Commissioner of Backward Classes and Minorities Welfare, Chennai-5  
 The Director of Most Backward Class and Denotified Communities, Chennai-5  
 The Director of Adi Dravidar Welfare, Chennai-5  
 The Director of Tribal Welfare, Chennai-5  
 The Member Secretary, Tamil Nadu Backward Classes Commission, Chennai-4  
 The Teacher Recruitment Board, Chennai-6  
 The Tamil Nadu Uniformed Services Recruitment  
 Board, Chennai-8  
 The Medical Services Recruitment Board, Chennai -6  
 The Director of Employment and Training, Chennai-32  
 The Secretary to Government of India, Ministry of Social  
 Justice and Empowerment, New Delhi

**Copy to:**

The Hon'ble Chief Minister's Office, Chennai-9  
 The Senior Personal Assistant to the Minister for Social Welfare and Nutritious Meal  
 Programme, Chennai-9  
 All Sections in Social Welfare and Nutritious Meal Programme Department, Chennai-9  
 Stock file/Spare copy

// Forwarded by Order //

*V. T. Sanyal*  
 Section Officer

*27/12/97*

*21/9*



**ANNEXURE - V****TENTATIVE TIMELINE FOR THE RECRUITMENT PROCESS**

<b>Sl. No.</b>	<b>Process</b>	<b>Timeline</b>
1.	Publication of Results	May 2020
2.	Certificate upload for C.V.	June 2020
3.	Certificate Verification	June 2020
4.	Date of Oral Test	July 2020
5.	Final Selection List	July 2020

**Secretary**