



# TAMIL NADU PUBLIC SERVICE COMMISSION

Advertisement No. 602  
Notification No.21/2021

DATED 24.12.2021

Applications are invited from eligible candidates, only through online mode upto **23.01.2022** for direct recruitment to the post of **Chemist included in Tamil Nadu Industries Subordinate Service.**

## **WARNING**

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

## **எச்சரிக்கை**

- தேர்வாணையத்தின் தெரிவுகள் அனைத்தும் விண்ணப்பதாரரின் தரவரிசைப்படியே மேற்கொள்ளப்படுகின்றன.
- பொய்யான வாக்குறுதிகளை சொல்லி, தவறான வழியில் வேலை வாங்கிதருவதாக கூறும் இடைத்தரகர்களிடம் விண்ணப்பதாரர் மிகவும் கவனமாக இருக்குமாறு எச்சரிக்கப்படுகின்றனர்.
- இதுபோன்ற தவறான மற்றும் நேர்மையற்றவர்களால் விண்ணப்பதாரருக்கு ஏற்படும் எவ்வித இழப்புக்கும் தேர்வாணையம் எந்தவிதத்திலும் பொறுப்பாகாது.
- இணையவழி விண்ணப்பத்தில் குறிப்பிடப்படும் அனைத்துத் தகவல்களுக்கும் விண்ணப்பதாரரே முழுப்பொறுப்பாவார். விண்ணப்பதாரர், தேர்விற்கு இணையவழியில் விண்ணப்பிக்கும் பொழுது, ஏதேனும் தவறு ஏற்படின், தாங்கள் விண்ணப்பித்த இணைய சேவை மையங்களையோ/ பொதுச்சேவை மையங்களையோ குற்றம் சாட்டக் கூடாது. விண்ணப்பதாரர் பூர்த்தி செய்யப்பட்ட இணையவழி விண்ணப்பத்தினை இறுதியாக சமர்ப்பிக்கும் முன்னர் நன்கு சரிபார்த்த பின்னரே சமர்ப்பிக்குமாறு அறிவுறுத்தப்படுகிறார்.

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:**

Name of the Post	Name of the Service	No. of vacancies	Scale of pay
Chemist in Industries and Commerce Department (Post Code:1913)	Tamil Nadu Industries Subordinate Service (Code No:044)	03	Rs.37,700-1,19,500/- (Level-20)

**Unless and otherwise specified, the number of vacancies notified is approximate and is liable to modification as indicated in para. 11-A of Instructions to Applicants.**

**2. DISTRIBUTION OF VACANCIES: -**

The rule of reservation of appointments is applicable for this recruitment and the Distribution of vacancies will be announced later.

**Note:-**

- \*(i) The distribution would be subject to the orders of the Supreme Court on the Special Leave to Appeal [SLP] filed by the Government with regard to the Act 8 of 2021.
- (ii) Information regarding MBC (V) MBC-DNC, and other MBC are required for distribution depending upon the outcome of Special Leave Petition before the Hon'ble Supreme Court.

**3. IMPORTANT DATES AND TIME: -**

A	Date of Notification	24.12.2021	---
B	Last date for submission of online applications	23.01.2022	---
C	Date of Examination	Paper-I (Subject Paper) (P.G. Degree Standard)	19.03.2022 09.30 A.M. to 12.30 P.M.
		Paper-II Part-A Tamil Eligibility Test (SSLC Standard) Part-B General Studies (Degree Standard)	19.03.2022 02.00 P.M. to 05.00 P.M.

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

**4. QUALIFICATIONS:-****(A) AGE LIMIT (as on 01.07.2021)**

Categories of Applicants	Maximum Age
SCs, SC(A)s, STs, MBCs/ DNCs, BC(OBCM)s, BCMs and DWs of all castes	No Maximum Age Limit
"Others" [i.e. Applicants not belonging to SCs, SC(A)s, STs, MBCs/ DNCs, BC(OBCM)s and BCMs]	30* Years (Should not have completed)

**Note: \* In G.O (Ms).No.91, Human Resources Management (S) Department, dated 13.09.2021, Maximum Age Limit has been increased from 30 to 32 years.**

**Age Concession for Ex-servicemen:**

- (a) **The maximum age limit is 50 years for "others" (i.e) Applicants not belonging to SCs, SC(A)s, STs, MBCs/ DNCs, BCs and BCMs. (Section 63 (1) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016.)**
- (b) The above mentioned age concession will not apply to those Applicants who have already been recruited to any class or service or category. [Section 3(j) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016.]

**Note:**

- (i) "Others" (i.e., Applicants not belonging to SCs, SC(A)s, STs, MBCs/ DNCs, BC(OBCM)s and BCMs) who have put in 5 years and more of service in the State / Central Government are not eligible to apply even if they are within the age limit. [for further details refer [para. 3\(F\) of "instructions to Applicants"](#) and [section 3\(r\) of the Tamil Nadu Government Servants \(Conditions of Service\) Act, 2016.](#)]
- (ii) **No maximum age limit shall mean that the applicants should not have completed 60 years of age either on the date of Notification or at the time of selection/ appointment to the post.**

**(B) EDUCATIONAL QUALIFICATION: (as on 24.12.2021)**

Applicants should possess the following or its equivalent qualification awarded by any University or Institution recognized by the University Grant Commission on the date of this Notification.

Educational qualification	Experience
A First or Second Class Degree in M.Sc., in Chemistry or Chemical Technology or Industrial Chemistry or An Associateship Diploma of the Institution of Chemists (India).	Experience in research in Pure or Applied Chemistry or Analytical Chemistry for a period of not less than two years.

**Note:**

- (i) The educational qualifications prescribed for this post should have been obtained by passing the required qualification in the following order of studies viz. SSLC + HSC or its equivalent +U.G. degree+ P.G. Degree as required under section 25 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016. The results of 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) Experience should have been gained after passing the prescribed Educational Qualification.
- (iii) The qualifications considered as equivalent are indicated in [Annexure-I](#) to this Notification.

- (iv) Applicants claiming equivalence of qualification to the prescribed qualification should upload and submit evidence for equivalence of qualification in the form of Government Order issued on or before the date of this notification when called for, failing which, their application **will be summarily rejected after due process**. The Government Orders regarding equivalence of qualification issued after the date of this notification will not be accepted for this recruitment. (For further details regarding equivalence of qualification refer Note under Para 9 of the "Instructions to Applicants")

### (C) CERTIFICATE OF PHYSICAL FITNESS:-

Applicants selected for appointment to the said post will be required to produce a certificate of physical fitness in the form prescribed below. The model format is enclosed with Annexure-IV of the notification. The said Certificate should be submitted by the selected candidate to the Appointing Authority at the time of joining to the said post.

Name of the Post	Standard of Vision Prescribed	Form of Certificate of Physical Fitness
Chemist in Industries and Commerce Department	Standard – III or Better	Form prescribed for Executive Posts

**Applicants with defective vision should produce eye fitness certificate from a qualified eye specialist working in Government Hospital.**

### (D) KNOWLEDGE IN TAMIL

Applicants should possess adequate knowledge in Tamil on the date of this Notification. (For details refer [para 14-I of the Commission's "Instructions to Applicants"](#)).

### 5. FEES:-

a)	<p><b>Registration Fee</b></p> <p>For One-Time Registration (Revised with effect from 01.03.2017 vide G.O.(Ms).No. 32, Personnel and Administrative Reforms Department, dated 01.03.2017)</p> <p><b>Note</b> Applicants who have already registered in One-Time online Registration system and within the validity period of 5 years are exempted.</p>	Rs.150/-
b)	<p><b>Examination Fee:-</b></p> <p><b>Note:</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 fee concession noted below.</p>	Rs.150/-

### **Note**

- (i) **Linking Aadhaar number with One Time Registration (OTR) is mandatory for applicants. (for further details refer Para 2-B of Instructions to applicants)**
- (ii) **One Time Registration is valid for five years from the date of registration. After completion of five years, the applicant must renew the One Time Registration by paying the fee prescribed. The One time Registration is different from the application for the examination. An applicant should make an online application separately for each and every examination for which he intends to appear (Para 2-C of Instructions to applicants)**

- (iii) Applicants who have already registered in One-Time online Registration system by paying Rs.50/- before 01.03.2017 and having validity, those who have registered for One-Time Registration on or after 01.03.2017 by paying Rs.150/- towards One-Time online Registration are exempted from paying the registration fee for this recruitment.

#### **EXAMINATION FEE CONCESSIONS:**

<b>Category</b>	<b>Concession</b>
(i) Scheduled Castes/ Scheduled Caste (Arunthathiyars)	Full Exemption
(ii) Scheduled Tribes	Full Exemption
(iii) Most Backward Classes/ Denotified Communities	Three Free Chances
(iv) Backward Classes (Other than Muslim) / Backward Classes (Muslim)	Three Free Chances
(v) Ex-Servicemen	Two Free Chances
(vi) Destitute Widow	Full Exemption

#### **Note:**

- The total number of free chances availed, will be calculated on the basis of claims made in previous applications.
- The number of free chances availed by the applicant may be verified by the Commission at any stage of the selection process.
- In case an applicant makes a false claim for exemption from payment of application fee by suppressing information regarding his/ her previous application(s), his/ her candidature shall be rejected after due process and he/ she shall be debarred for a period of one year, from appearing for examinations and selections conducted by the Commission.
- Applicants are directed to carefully choose the options "Yes" or "No" regarding availing the fee concession. The choice made, cannot be modified or edited after successful submission of online application.
- Applicants are advised in their own interest, to keep an account of the number of times fee concession has been availed, irrespective of the information displayed in the <Application History> of the applicant dashboard.
- An application (irrespective of the post applied for) claiming fee concession will operate to exclude one chance from the number of free chances allowed.
- Applicants who have availed the maximum number of free chances permitted / applicants who do not wish to avail of the fee concession / applicants who are not eligible for fee concession, shall choose the option "No" against the query regarding fee concession. Such applicants shall thereafter pay the requisite fee through the prescribed mode of payment.
- Failure to pay the prescribed fee in time, along with the online application, will result in the rejection of application after due process. [\(For further details regarding examination feeconcession, refer to para 6 of "Instructions to Applicants"\)](#)

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

- Written Examination fee of **Rs.150/-** (Rupees One Hundred and fifty Only) is payable by online through Net Banking / Credit card / Debit card on or before last date of submission of online application.
- Applicants have also to pay the service charges as applicable.
- Applicants can avail exemption from paying examination fee as per eligibility criteria.

- **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.**
- Applicants who have made One-Time Registration must pay the prescribed examination fee for this recruitment unless fee exemption is claimed (One-Time Registration is only to avail exemption for Registration fee for a period of 5 years from the date of registration and it will not be considered as prescribed examination fee for this recruitment). [For further details regarding the Examination fee, refer para. 2(V) of "Instructions to Applicants"].

## 7. CONCESSIONS

- Concessions in the matter of age and/or examination fees allowed to SCs, SC(A)s, STs, MBCs/ DNCs, BCs(OBCMs), BCMs, Destitute Widows, Persons with Benchmark Disability, Ex-servicemen, other categories of persons etc., are given in [para. 3\(D\), 5 & 6 of the 'Instructions to Applicants'](#).
- Persons claiming concession referred to above and other claims made in the application have to produce evidence for such claim, when called for, otherwise their application will be rejected after due process.

### 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 Tamil Nadu Government Servants (Conditions of Service) Act 2016.**

## 8. SCHEME OF EXAMINATION - OBJECTIVE TYPE (OMR METHOD) AND ORAL TEST:-

Subject	Duration	Maximum Marks	Minimum Qualifying Marks for Selection	
			SCs, SC(A)s, STs, MBCs/ DNCs, BC(OBCM)s and BCMs.	Others
<b>PAPER I (Objective Type)</b> <b>(Subject Paper)</b> (200 Questions) (PG Degree standard) Chemistry (code No.244)	3 Hours	300	153	204
<b>PAPER II (Objective Type)</b> <b>Part-A</b> Tamil Eligibility Test (SSLC standard) (100 Questions / 150 Marks)	3 Hours	Note: • Minimum qualifying marks – 60 marks (40% of 150) • Marks secured in Part-A of Paper-II will not be taken into account for ranking.		
<b>Part-B</b> (General Studies) (100 Questions/ 150 marks) (Code No.003)  (General Studies) (Degree Standard) - 75 Questions and Aptitude and Mental Ability (SSLC Standard)-25 Questions		150*		
<b>Interview and Records</b>		60		
<b>Total</b>		510		

**\*Note:-**

- (i) Answer sheets of Paper-I and Paper-II of the candidates will not be evaluated, if the candidate does not secure minimum qualifying marks in Part-A of Paper-II.
- (ii) Only marks secured in Paper-I and Part B of Paper II will be considered for ranking.
- (iii) The Questions in Paper-I and Paper - II will be set both in English and Tamil.
- (iv) Refer para 17 of "Instructions to Applicants" in regard to instructions to be followed while appearing for competitive examinations conducted by the Commission.
- (v) The Syllabus for Examination is furnished in the Annexure III of the notification and also available in the Commission's website [www.tnpsc.gov.in](http://www.tnpsc.gov.in).

**9. SELECTION PROCEDURE**

**The selection will be made in two successive stages, viz. (i) Written Examination and (ii) an Oral Test in the form of an Interview.**

The final selection will be made on the basis of total marks obtained by the candidates in 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 in any one of the papers in the written examination will not be considered for selection even if he/she secures the minimum qualifying marks for selection. (For details refer Para 18 (B) of Commission's "Instructions to Applicants").

**10. CENTRES FOR EXAMINATION**

Examination will be held at the following centres.

Sl.No.	Name of the Centre	Centre code	Sl.No.	Name of the Centre	Centre code
1.	Chennai	0101	4.	Trichirappalli	2501
2.	Coimbatore	0201	5.	Tirunelveli	2601
3.	Madurai	1001			

**Note:**

- (i) Applicant should choose any two of the above centres for writing the examination. [For further details refer para 2(R) of Instruction to Applicants]
- (ii) Request for change of Examination centre will not be permitted (For further details refer para 17 (A) (ii) of "Instructions to Applicants")
- (iii) The Commission reserves the right to increase or decrease the number of examination centres and to re-allot the applicants accordingly.
- (iv) Applicants should appear for the written examinations/ certificate verification/ Oral Test at their own expenses.

**11. EMPLOYMENT DETAILS:**

- (A) Candidates who are in the service of the Indian Union or a State in India or in the employment of Local Bodies or Universities or Quasi Government Organizations or Public Sector Units constituted under the authority of the Government of India or of a State in India, whether in regular service or in temporary service, must inform the Commission of such fact, at the time of applying. Suppression of the fact of employment by candidates shall result in rejection of candidature after due process. (Refer Para 14 (P) of Commission's "Instructions to Applicants")

**(B) DECLARATION REGARDING CRIMINAL CASES(OR)DISCIPLINARY CASES:**

- (i) Candidate's who have declared pending criminal or disciplinary cases in their online application, must upload/ produce the copy of First Information Report (FIR) or memorandum of charges/ show cause notice, as the case may be. Failure to upload/ produce such papers when called for, shall result in rejection of candidature after due process.
- (ii) Candidates who have declared conviction in criminal cases or punishment in disciplinary cases, in their online application, must upload/ produce the relevant court orders and/ or release orders or memorandum of proceedings, as the case may be, when called for. Failure to upload/ produce such papers, shall result in rejection of candidature after due process.
- (iii) In case any criminal case is filed / disciplinary action is taken against or conviction / punishment is imposed on candidate after submission of the on-line application at any stage of the recruitment process before the completion of the entire selection process, such candidates should report this fact to the Commission in the next immediate stage when Commission calls for uploading/producing documents. Failure to comply with these instructions shall result in rejection of candidature and debarment for a period of one year. For further details refer [para. 14 \(S\)](#) of "Instructions to Applicants". Any violation of instruction therein will result in rejection of application after due process and forfeiture of his/her candidature.

**12. GENERAL INFORMATION:**

(A) The rule of reservation of appointments is applicable to this recruitment.

**(B) Persons Studied in Tamil Medium:**

- i) As per Section 2(d) of the Tamil Nadu Appointment on preferential basis in the services under the State of Persons Studied in Tamil Medium Act, 2010, as amended by Act 35 of 2020, **Person Studied in Tamil Medium means a person who has studied through Tamil medium of instruction upto the educational qualification prescribed for direct recruitment in the rules or regulations or orders applicable to any appointment in the services under the State.**
- ii) Candidates Claiming to be Persons Studied in Tamil Medium must upload /produce evidence for the same in the form of SSLC/HSC/Transfer Certificate, Provisional Certificate / Convocation Certificate / Degree Certificate/P.G Degree Certificate / Mark Sheets / Certificate from the Board or University or from the Institution as the case may be with a recording that he had undergone the entire duration of the respective courses through Tamil Medium of Instruction. (For further details refer to [para. 14 \(R\)](#) of "Instructions to Applicants")
- (iii) Candidates must upload/ produce documents as evidence of having studied in Tamil medium, all educational qualifications upto the educational qualification prescribed.

**Example:**

**If the prescribed educational qualification is Post-Graduate Degree, then the candidate should have studied the SSLC, HSC, Degree and Post-Graduate Degree through Tamil medium of instruction. [[para. 14 \(R\) example \(e\)](#) of "Instructions to Applicants"]**



- (iv) If no such document as evidence for "PSTM" is available, a certificate from the Registrar / Principal / Head Master / Controller of Examination / Director of Education Institution, as the case may be, in the prescribed format (Available in the Instructions to Applicants) must be uploaded/produced, for each and every educational qualification up to the educational qualification prescribed.
- (v) Failure to upload/produce such documents as evidence for "Persons Studied in Tamil Medium" for all educational qualifications up to the educational qualification prescribed, shall result in the rejection of candidature after due process.
- (vi) Documents uploaded/produced as proof of having studied in Tamil medium, for the partial duration of any course/private appearance at any examination, shall not be accepted and shall result in the rejection of candidature after due process.  
(for further details refer [Para 14\(R\) of "Instructions to Applicants"](#)).
- (C) The selection for appointment to the said posts 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 the Tamil Nadu Government Servants (Conditions of Service) Act, 2016**, reservation of appointment to "Destitute Widow" and "Ex-serviceman" are not applicable to this recruitment.
- (E) Reservation for Persons with Benchmark Disability (DAP) is not applicable in this recruitment.
- (F) If no qualified and suitable women applicants are available for selection against the vacancies reserved for them, those vacancies will be filled by male applicants belonging to the respective communal categories. [**Section 26(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. [**Section 27 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016**].
- (H) **Evidence for all the claims made in the online application should be uploaded /submitted in time when documents are called for. Any subsequent claim made after submission of online application will not be entertained. Failure to upload / submit the documents within the stipulated time limit will entail rejection of application after due process.**
- (I) Suppression of following material information in the online application regarding (i) free chances availed (ii) Employment in the Service of the Indian Union or a State in India or in the employment of Local Bodies or University or Quasi Government Organization or Public Sector units constituted under the authority of the Government of India or of a State in India in regular service or temporary service (iii) Wilful suppression of criminal cases / disciplinary action pending / punishments if any, against the applicant (iv) violation of undertaking given by the applicant in the online application etc., may invite suitable penal action including debarment for a specific period as decided by the Commission for various recruitments/ selections conducted by the Commission, besides rejection of application after due process.

(J) 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 Legislative/ 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 judgment / 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 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.

**(K) Incomplete applications and applications containing wrong claims or incorrect particulars relating to category of reservation / eligibility / age / Gender/ communal category / educational qualification / medium of instruction / physical qualification / other basic qualifications and other basic eligibility criteria will be summarily rejected after due process.**

(L) 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 claims made 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 incorrect and incomplete details in the application or omission to provide the required details in the application for this recruitment.

**(M) Determination of Community for Transgender:**

- (i) The **Transgender** candidates, who do not possess any community certificate may choose to 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 or under "Others".
- (ii) The **Transgender** candidates who belong to Scheduled Caste/ Scheduled Caste (Arunthathiyars)/ Scheduled Tribe communities and possess community certificate as such, shall be considered as per their respective community.
- (iii) The **Transgender** candidates who belong to the communities other than Scheduled Caste/ Scheduled Caste (Arunthathiyars) / Scheduled Tribe and possess community certificate as such, are permitted to choose to be considered as belonging to their own community or as Most Backward Class, whichever is advantageous to them, at the time of One TimeRegistration itself. Once the individual opts to be considered a particular community it shall be crystallized and this option shall not be changed in future. (Refer Para 14 (F) (vi -xi) of Instructions to Applicants)

**(N) Reservation in Employment for Transgender:-**

- (i) The Transgender 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 Transgender candidates, who identify themselves as 'Male' or 'Transgender', shall be considered against the 70% reservation for General category (both Men & Women).
- (iii) The above concessions shall be granted subject to production of certificate identifying them as Transgender or Transgender (Male) or Transgender (Female), as the case may be, issued by the Tamil Nadu Transgender Welfare Board (TNTGWB)."

**13. OTHER IMPORTANT INSTRUCTIONS:**

- (a) Before applying for/ appearing for the examination, the Applicants should ensure their eligibility for such examination and that they fulfil all the conditions in regard to age, educational qualifications, number of chances for free concession, etc., as prescribed by the Commission's notification. Their admission to all stages of the examination will be purely provisional, subject to the satisfying the eligibility conditions. Mere admission to the written examination/Certificate Verification /Counselling or inclusion of name in the selection list will not confer on the candidates any right to appointment. The candidature is therefore, provisional at all stages and the Commission reserves the right to reject candidature at any stage after due process, even after selection has been made, if a wrong claim or violation of rules or instructions is confirmed (Refer Para 11 (B) (C) & (D) of "Instructions to Applicants")
- (b) The memorandum of admission (hall ticket) for eligible applicants will be made available in the Commission's website [www.tnpsc.gov.in](http://www.tnpsc.gov.in) or [www.tnpscexams.in](http://www.tnpscexams.in) for downloading by applicants. The memorandum of admission will not be sent by post. The applicants must comply with each and every instruction given in the memorandum of admission. (Refer in Note (g) of Para 2 (V) of "Instructions to Applicants")
- (c) **Online Correspondence** :- Applicants requiring clarification can contact the Commission's office in person or over the Commission's Toll-Free No. 1800 419 0958 on all working days between 10.00 a.m. and 05.45 p.m. Queries relating to One Time Registration/ online application may be sent to [helpdesk@tnpscexams.in](mailto:helpdesk@tnpscexams.in). Other queries may be sent to [contacttnpsc@gmail.com](mailto:contacttnpsc@gmail.com). (Refer in Note (h)(i)(j) under Para 2(V) of "Instructions to Applicants".
- (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. Commission is not responsible for non-delivery of SMS/e-mail due to any reasons.
- (e) ***During the process of recruitment from Notification till completion of entire Selection process, no information under Right to Information Act, GRC and CM special cell petitions, would be furnished.***

**(f) MOBILE PHONES AND OTHER ARTICLES BANNED :**

- i) Except the permitted writing material (i.e. Black ballpoint pen Only), 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
  - 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. [\(for further details refer Para 17-E of "Instructions to Applicants"\)](#)
- (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 recruitment should ensure that they fulfil all the eligibility conditions for admission to the recruitment. Their admission at all the stages of recruitment 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 recruitment will be rejected summarily by the Commission after due process.
- (h) If any of their claims is found to be incorrect, it will lead to rejection after due process 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 his / her papers to be copied or give or attempt to give or obtain or attempt to obtain irregular assistance of any description.
- (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.
- (k) For violation of "Instructions to Applicants" in any manner, suitable penalty will be imposed as per [Para 17-E "Instructions to Applicants"](#) or as deemed fit by the Commission.
- (l) Tentative answer keys will be hosted in the Commission's website within 3 days (three days) from the date of conduct of objective type examination. candidates can challenge the tentative answer keys of the objective type examination through the "Answer Key Challenge" window available in the Commission's website [Results → 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.

The challenges submitted on time, through the online mode, shall be referred to a committee comprising of experts in each subject. The decision on the final answer key shall be made, based on the recommendations of the expert committee and paper evaluation shall commence thereafter.

The Commission shall not publish the final answer key until the completion of the entire selection process.

Requests from the candidates for furnishing of their marks or answer paper copy before the completion of the entire selection process, will not be entertained by the Commission.

After conclusion of the entire selection process, Complete particulars of all candidates who had applied for recruitment to post shall be made available in the Commission’s website ([Refer Para 17 \(D\), \(v\)-\(xiii\) of “Instructions to Applicants”](#))

#### **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.in](http://www.tnpscexams.in).
2. One-Time Registration (OTR) using Aadhaar is 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 5 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 system, the applicants should have a scanned image of their photograph, certificate wherever insisted and signature in CD/DVD/Pen Drive to upload the same as per the specifications given in the guidelines for scanning and uploading of photograph and signature. ([Refer Para 2 of “Instructions to Applicants”](#))
4. No applicant is permitted to create more than one registration ID in One- Time Registration System.
5. Applicants should enter the Unique ID and password to view the already available information and update them. They shall not share the ID with any other person or agency.
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. Applicant who wishes to apply for any post shall click “[Apply](#)” against the post Notified in the Commission’s Website and use the same USER ID and PASSWORD given for ONE -TIME REGISTRATION.
7. Applicants should select the name of the post or service for which they wish to apply.
8. Applicants are required to upload their photograph and signature as per the [para. 2-N, O and P of the “Instructions to Applicants”](#).

9. Online application submitted without the photograph, specified documents and signature will be rejected after due process.
10. 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 in the online application form with the utmost care and caution as no correspondence regarding change of details will be entertained.

#### **11. Print Option**

- a) After submitting the application, applicants can print / save 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.

12. **One -Time Registration will not be considered as an application for any post.** (For further details refer para 2 of 'Instructions to Applicants')

#### **15. UPLOAD OF DOCUMENTS:**

Applicants should upload the required documents for proof in respect of all the claims made in the application with reference this notification as and when called for. If the required certificates are not uploaded by the applicant, within the stipulated time, his/ her application will be rejected after due process. (For further details refer para 13 of "Instructions to Applicants")

#### **16. LAST DATE FOR SUBMITTING APPLICATION:**

The Online Application can be submitted upto 23.01.2022 till 11.59 p.m., after which the link will be disabled. (For detailed information applicants may refer Commission's '[Instructions to Applicants](#)' at the Commission's website [www.tnpsc.gov.in](http://www.tnpsc.gov.in) )

**DISCLAIMER**

“The Government orders relating to Equivalence of qualification are available in the Annexure-I to this Notification. However, if the applicant possesses an equivalence of qualification other than one mentioned in the Annexure I and if Government orders to this effect have been issued on or before the date of this notification, applicants should furnish the details of the same while applying and should produce a copy of the Government orders, when called for by the Tamil Nadu Public Service Commission, failing which their application will be rejected after due process. **The Government orders regarding equivalence of qualification issued after the date of this notification will not be considered for this recruitment”.**

**Secretary**

**ANNEXURE – I**

The following qualifications are declared as Equivalent to the prescribed Educational Qualification

<b>S.No</b>	<b>Qualification</b>	<b>G.O. in which ordered</b>
1)	M.Sc., (Applied Chemistry) awarded by Gandhigram University is equivalent to M.Sc., (Chemistry).	G.O.Ms.No.133, Personnel and Administrative Reforms (M) Department, dated 28.07.1999.
2)	M.Sc., (Applied Chemistry) awarded by Anna University is equivalent to M.Sc., (Chemistry).	G.O.Ms.No.164, Personnel and Administrative Reforms (M) Department, dated 21.08.2000.
3)	M.Sc., Analytical Chemistry awarded by University of Madras as equivalent to M.Sc.,(Chemistry). M.Sc., (Organic Chemistry), M.Sc.,(In-organic Chemistry) and M.Sc., (Physical Chemistry) awarded by Annamalai University as equivalent to M.Sc., (Chemistry).	G.O.Ms.No.165, School Education (M2) Department, dated 04.07.2012.
4)	M.Sc., Industrial Chemistry awarded by Bharathidasan University and Alagappa University is equivalent to M.Sc., Chemistry.	G.O.Ms.No.24, Higher Education (K2) Department, dated 13.02.2013.
5)	M.Sc (Chemical Sciences) Degree is equivalent to M.Sc Chemistry	G.O.(Ms).No.323, Higher Education (K2) Department, dated 13.11.2017
6)	M.Sc (Nano Science and Technology Chemistry Based) awarded by Bharathiar University is equivalent to M.Sc Chemistry for purpose of employment in Public Services.	G.O.(Ms).No.55, Higher Education (K2) Department, dated 15.03.2018
7)	M.Sc., Chemistry specialization in Green Chemistry awarded by Manonmanium Sundaranar University is equivalent to M.Sc., Chemistry for the purpose of employment in Public Services	G.O.(Ms).No.65, Higher Education (K2) Department, dated 24.04.2019
8)	M.Sc., (Physical Chemistry), M.Sc., (Inorganic Chemistry) and M.Sc., (Organic Chemistry) offered by University of Madras is equivalent to M.Sc., (Chemistry) for the purpose of employment in Public Services	
9)	M.Sc., (Organic Chemistry), M.Sc., (Analytical Chemistry) awarded by Periyar University is equivalent to M.Sc., (Chemistry)	
10)	M.Sc., (Organic Chemistry) Degree offered by Manonmanium Sundaranar University is equivalent to M.Sc., Chemistry	G.O.(Ms.)No.266, Higher Education (K2) Department, dated 29.11.2019
11)	M.Sc., (Industrial Chemistry) offered by AVVM Sri Poondi Pushpam College affiliated to Bharathidasan University is equivalent to M.Sc., (Chemistry)	
12)	M.Sc., Chemistry (5 year Integrated) Degree offered by Annamalai University is equivalent to M.Sc., Chemistry degree for the purpose of employment in Public Services	



**ANNEXURE-II****FORMAT OF EXPERIENCE CERTIFICATE FOR THE POST OF CHEMIST IN INDUSTRIES  
AND COMMECRE DEPARTMENT**

1.	Name and Address of the Institution / Organisation	:	
2.	Whether the said Institution / Organisation is a recognized one?	:	
3.	Registration Number of Institution / Organisation if any	:	
4.	Name of the Employee and Date of Birth	:	
5.	Qualification possessed by the Employee on the Date of Joining Service in the above said Institution / Organisation	:	
6.	Designation and period of Experience of the Employee	:	From .....To .....
7.	Nature of the Work/Duty performed by the Employee (To be mentioned in brief)	:	
8.	Whether the Employee possesses experience as laid in para 4(B) of this notification.	:	Yes / No
9.	Whether Attendance Register / Attendance Rolls / Pay Register and other records /available for this Employee	:	Yes / No
10.	Certificate from the Institution / Organisation	:	The above said employee having experience in this Institution / Organisation as stated above. The above particulars furnished by me are correct

Office Seal:

Date:

Place:

Signature.

Name &amp; Designation of the issuing Authority

**Note:**

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

**ANNEXURE-III**  
**PAPER-I**  
**CHEMISTRY**  
**P.G. DEGREE STANDARD**

**UNIT 1. Reaction Kinetics:-**

**Subject Code No.244**

Rate laws - rates constant for first, second, third and zero order reaction - Half life period - Arrhenius theory - collision theory - Absolute reaction rate theory – ionic reaction - salt effect - catalysis – Laws of photo chemistry, quantum efficiency – photo physical processes of electronic excited molecules. Green Chemistry – reactions and reagents

**Chemical Equilibrium:-**

partial molar quantities, Gibbs - Duhem equation, Equilibrium constant – temperature dependence of equilibrium constant - phase rule and its applications to two and three components systems.

**UNIT 2. Solid State:-**

Crystal systems - designation of crystal faces, lattice structure and unit cell - law of rational indices - Bragg's law and x rays diffraction by crystals - Schottky and Frenkel defects - Electrical properties - Insulators and semiconductors - band theory of solids – Superconductors – Nano materials preparations and properties.

**Electrochemistry:-**

Types of Reversible electrodes - Nernst equation - calculation of thermo dynamic quantities of cell reactions - overpotential and hydrogen over voltage – Determination of pKa of acids by potentiometric methods - Kohlrausch's law - Ostwald's dilution law - Debye - Huckel Onsager equation for Strong electrolytes - (no derivation required) - Primary and Secondary fuelcells - corrosion and prevention – drycells and storage Batteries

**UNIT 3. Structure and Bonding:-**

Electronic configuration of atoms, Term symbols and periodic properties of elements, Ionic radii, ionisation potential electron affinity, electronegativity, concept of Hybridization, molecular orbitals and electronic configuration of homonuclear and heteronuclear diatomic molecules, shapes of polyatomic molecules VSEPR theory, symmetry elements and point groups for simple molecules, Bond lengths, Bond angles, bond order and bond energies Types of chemical bond (weak and strong) inter molecular forces, structure of simple and covalent bonds – covalent character in ionic bond and partial ionic character – lattice energy.

**Acids and Bases:-**

Bronsted and Lewis acids and bases - pH and pKa acid - base concept in non - aqueous media – HSAB concept - Buffer Solutions. Redox Reactions:- Oxidation numbers, Redox potential, Electrochemical series – application of EMF measurements - Redox indicators.

**Chemistry of Non - transition elements:-**

General characteristics, structure and reaction of simple compounds - boranes - silicates Oxoacids of N,P,S and halogens - xenon compounds - interhalogens, Pseudo halides and noble gas compounds – metal clusters – S,N ring and chain compounds - inorganic Polymers

such as silicones, Borazines and phosphonitrilic compounds. IUPAC Nomenclature of simple organic and Inorganic compounds.

#### **UNIT 4. Organic Reaction Mechanism:-**

General methods (Kinetic and non Kinetic) of study of reaction mechanisms Methods of determining reaction mechanism. – isotopic labelling SN1, SN2 mechanisms - addition substitution, elimination and rearrangements -free radical mechanism - aromatic substitution - and stability of reactive intermediate (Carbocations, Carbanion's free radicals, nitrates and benzyne) - Polar effects - Hammett's equation and its modification.

#### **Chemistry of important organic reaction:-**

Aldol condensation - Claisen condensation - perkin reactions - cannizzaro reaction - Friedel craft reaction - Favorski reaction - Stork enamine reaction - Michael addition - Baeyer - villiger reaction - Chichibabin reaction - Asymmetric synthesis pericyclic reactions - classification and examples - Woodward and Hoffmann rules. - use of OsO<sub>4</sub>, NBS, diborane, NaBH<sub>4</sub>, LiAlH<sub>4</sub> in organic Synthesis.

#### **UNIT 5. Quantum Chemistry:-**

Planck's quantum theory wave - particle duality, uncertainty principle, operators and commutation relations, postulates of quantum mechanics, Schrodinger wave equation, particle in one dimensional box and three dimensional box - harmonic oscillator, rigid rotator and hydrogen atom, angular momentum, spin - orbit coupling.

#### **Classical thermodynamics and elements of statistical thermodynamics:-**

First law of thermodynamics:- heat capacity - isothermal adiabatic processes - Thermochemical laws - Kirchoff's equation second law of thermodynamics, entropy, in reversible and irreversible processes - Gibe's free energy and Helmholtz free energy - Third law of thermodynamics.

#### **UNIT 6. Spectroscopy:-**

Rotational spectra of diatomic molecules - Isotopic substitution and rotational constants - vibrations spectra of linear symmetric, linear asymmetric and bent triatomic molecules - electronic spectra - selection rules - nuclear magnetic resonance - chemical shifts - spin - spin coupling - electron spin resonance and hyperfine splitting theoretical principles of mass spectroscopy. Application's of UV, IR, NMR, ESR and mass spectroscopy for structural elucidation of organic compounds, inorganic complexes and free radicals.

#### **UNIT 7. Chemistry of Co-ordination Compounds:-**

structural aspects, isomerism - octahedral and tetrahedral, crystal - splitting of orbitals - CFSE - magnetism and colour of transition metal ions - charge transfer spectra - crystal field theory and ligand field theory – MO theory complexes of pi acceptor ligands - stereochemistry of inorganic co-ordination compounds – ORD and CD Techniques.

#### **Chemistry of lanthanides and actinides:-**

Electronic configuration - occurrence and Separation techniques -oxidation states, colour. magnetic and spectroscopic properties – lanthanide contraction , use of lanthanide compounds as shift reagents.

**UNIT 8. Organometallic compounds and bio inorganic chemistry:-**

Metal carbonyls, Metal nitrosyls, metal alkyl, alkenes and arene compounds – organo metallic compounds in catalysis - Chemistry of porphyrins - chlorophyll, hemoglobin, myoglobin, ferredoxin, rubredoxin, and cytochromes, copper proteins, enzymes, zinc enzymes, toxicity of metals and the effect of excess and deficient levels, metal complexes in therapy.

**UNIT 9. Stereochemistry:-**

Elements of symmetry - optical and geometric isomerism E, Z and R,S notation's - Conformational analysis of simple cyclic and acyclic systems - Effects of conformation on reactivity in acyclic compounds and cyclohexanes.

**Carbohydrates:-**

Classification - configuration and general reactions of monosaccharides - Chemistry of glucose, fructose, Sucrose and Maltose, Important compounds in chemistry - Dyes - azo, triphenylmethane, and phthalin groups - indigo - alizarin vitamins, hormones - antibiotics - proteins. Polymers: Preparation and uses of polyethylene, poly butylenes PVC, Nylon - Ziegler - Natta catalysts –

**UNIT 10. Instrumental methods of analysis:-**

Adsorption, partition chromatography - Gas chromatography - HPLC – Solvent extraction and ion exchange methods - atomic absorption spectroscopy - Electroanalytical techniques voltammetry, cyclic voltammetry, polarography, amperometry, Coulometry and conductometry, ion - Selective electrodes- TGA, DTA, DSC and ICP-AES. Analysis of industrial products such as ores and Minerals, Coal, Water, Soaps & Detergents, Metals & Alloys, Manures & fertilizer, cement, Aggregate, Bricks, petroleum products, food & products, plastics.

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21  
PAPER -II  
**SYLLABUS FOR WRITTEN EXAMINATION**  
**Part-A**

**கட்டாய தமிழ்மொழி தகுதித் தேர்விற்கான பாடத் திட்டம்**

**(கொள்குறி வினாவிற்கான தலைப்புகள்)**

**பத்தாம் வகுப்பு தரம்**

1. பிரித்தெழுதுதல் / சேர்த்தெழுதுதல்.
2. எதிர்ச்சொல்லை எடுத்தெழுதுதல்.
3. பொருந்தாச் சொல்லைக் கண்டறிதல்.
4. பிழைதிருத்தம் (i) சந்திப்பிழையை நீக்குதல் (ii) மரபுப்பிழைகள், வழுவச் சொற்களை நீக்குதல் / பிறமொழிச் சொற்களை நீக்குதல்.
5. ஆங்கிலச் சொல்லுக்கு நேரான தமிழ்ச்சொல்லை அறிதல்.
6. ஒலி மற்றும் பொருள் வேறுபாடறிந்து சரியான பொருளையறிதல்.
7. ஒருபொருள் தரும் பலசொற்கள்.
8. வேர்ச்சொல்லைத் தேர்வு செய்தல்.
9. வேர்ச்சொல்லைக் கொடுத்து / வினைமுற்று, வினையெச்சம், வினையாலணையும் பெயர், தொழிற்பெயரை / உருவாக்கல்.
10. அகரவரிசைப்படி சொற்களை சீர்செய்தல்.
11. சொற்களை ஒழுங்குப்படுத்தி சொற்றொடராக்குதல்.
12. இருவினைகளின் பொருள்வேறுபாடு அறிதல்.  
(எ.கா.) குவிந்து-குவித்து
13. விடைக்கேற்ற வினாவைத் தேர்ந்தெடுத்தல்.
14. எவ்வகை வாக்கியம் எனக் கண்டெழுதுதல் - தன்வினை, பிறவினை, செய்வினை, செய்ப்பாட்டு வினை வாக்கியங்களைக் கண்டெழுதுதல்.
15. உவமையால் விளக்கப்பெறும் பொருத்தமான பொருளைத் தேர்ந்தெழுதுதல்
16. அலுவல் சார்ந்தசொற்கள் (கலைச்சொல்)
17. விடைவகைகள்.
18. பிறமொழிச் சொற்களுக்கு இணையான தமிழ்ச்சொற்களைக் கண்டறிதல்  
(எ.கா.) கோல்டுபிஸ்கட் - தங்கக்கட்டி.

19. ஊர்ப்பெயர்களின் மருஉவை எழுதுக (எ.கா.) தஞ்சாவூர் - தஞ்சை
20. நிறுத்தற்குறிகளை அறிதல்.
21. பேச்சுவழக்கு, எழுத்துவழக்கு (வாரான் - வருகிறான்).
22. சொற்களை இணைத்து புதியசொல் உருவாக்கல்.
23. பொருத்தமான காலம் அமைத்தல்  
(இறந்தகாலம், நிகழ்காலம், எதிர்காலம்).
24. சரியான வினாச்சொல்லைத் தேர்ந்தெடு.
25. சரியான இணைப்புச்சொல்  
(எனவே, ஏனெனில், ஆகையால், அதனால், அதுபோல).
26. அடைப்புக்குள் உள்ள சொல்லைத் தகுந்த இடத்தில் சேர்க்க.
27. இருபொருள் தருக.
28. குறில் - நெடில் மாற்றம், பொருள் வேறுபாடு.
29. கூற்று, காரணம் - சரியா? தவறா?
30. கலைச்சொற்களை அறிதல் :-  
எ.கா.- Artificial Intelligence - செயற்கை நுண்ணறிவு  
Super Computer - மீத்திறன் கணினி
31. பொருத்தமான பொருளைத் தெரிவு செய்தல்
32. சொற்களின் கூட்டுப்பெயர்கள் (எ.கா.) புல் - புற்கள்
33. சரியான தொடரைத் தேர்ந்தெடுத்தல்
34. பிழைதிருத்துதல் (ஒரு-ஓர்)
35. சொல் - பொருள் - பொருத்துக
36. ஒருமை-பன்மைபிழை
37. பத்தியிலிருந்து வினாவிற்கான சரியான விடையைத் தேர்ந்தெடு.

**PAPER-II**  
**Part-B**

**GENERAL STUDIES (DEGREE STANDARD)**  
**(Objective Type)**

Subject Code: 003

**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, ThanthaiPeriyar, 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.

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**ANNEXURE-IV****CERTIFICATE OF PHYSICAL FITNESS BY A SINGLE MEDICAL OFFICER  
THE CIVIL MEDICAL BOARD**

Signature of Candidate \_\_\_\_\_

I/We hereby certify that I/We have examined (full name) Thiru/Thirumathi  
/Selvan/Selvi \_\_\_\_\_

a Candidate \_\_\_\_\_ for employment under the Government as \_\_\_\_\_ in the

\_\_\_\_\_ Office in the \_\_\_\_\_

\_\_\_\_\_ department and whose signature is given above and cannot discover  
that he/she has any disease, communicable or otherwise constitutional affliction or  
bodily infirmity/except that his/her weight is in excess of/below the standard  
prescribed or except.

I/We do not consider this a disqualification for the employment he/she seeks.

His/Her age is according to his/her own statement \_\_\_\_\_ Years and by  
appearance about \_\_\_\_\_ Years

I/We also certify that he/she has marks of smallpox/vaccination.

Chest measurement in On full inspiration  
On full expiration  
Difference expansion

Weight in Kg.

Cardio - Vascular System

Respiratory system

His/Her vision is normal

Hypermetropic/ \_\_\_\_\_ Myopic/ \_\_\_\_\_ Astigmatic/ \_\_\_\_\_

(Here enter the degree of defect and the strength of correction glasses)

Hearing is normal/defective (much or slight)

Urine - Does chemical examination show-

(I) Albumen

(II) Sugar

State Specific gravity

Personal marks (at least two should be mentioned)

For Identification

1.

2.

Signature:

Rank:

Designation:

President

Members (i)

(ii)

Station:

Station:

Date:

Date:

The candidate must make the statement required below prior to his/her medical examination and must sign the declaration appended thereto. His attention is specially directed to the warning contained in the note below:-

1. State your name in full
2. State your age and date of Birth
3. (a) Have you ever had small-pox intermittent or any other fever, enlargement or suppuration of glands, spitting of blood, asthma, inflammation of lungs, heart disease fainting attacks, rheumatism, appendicitis?

OR

- (b) Any other disease or accident requiring confinement to bed and medical or surgical treatment?
4. When were you last vaccinated
5. Have you or any of your near relation been afflicted with consumption, serofula gout, asthma, fits, epilepsy or insanity?
6. Have you suffered from any form of nervousness due to over work or any other cause?
7. Furnish the following details concerning your family

Father's age, if living and state of health

Father's age, if living and state of health (1)	Father's age at death and cause of death (2)	Number of brothers living, their ages and state of health. (3)	Number of brothers dead, their ages at and cause of death (4)

Mother's age, if living and state of health (1)	Mother's age at death and cause of death (2)	Number of sisters living, their ages and state of health. (3)	Number of sisters dead, their ages at and cause of death (4)

I declared all the above answers to be, to the best of my belief, true and correct,

Candidate's Signature

Note:- The candidate will be held responsible for the accuracy of the above statement. by wilfully suppressing any information he will incur the risk of losing the appointment and if appointed, of forfeiting all claim to superannuation allowance or gratuity

**Annexure-V****Tentative Timeline for Recruitment Process for the post of Chemist included  
in the Tamil Nadu Industries Subordinate Service**

<b>Sl. No.</b>	<b>Process</b>	<b>Timeline</b>
1.	Publication of Written Examination results	May 2022
2.	Uploading of Certificates for Certificate Verification	May 2022
3.	Certificate Verification	May 2022
4.	Oral Test/ Interview	June 2022
5.	Counselling	June 2022

**Secretary**