

TAMIL NADU PUBLIC SERVICE COMMISSION

DATED: 20.10.2021

Advertisement No. 596 Notification No. 16/2021

Applications are invited from eligible candidates, only through online mode upto 19.11.2021 for direct recruitment to the posts included in the **Combined Statistical Subordinate Service Examination.**

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 வாக்குறுதிகளைச் சொல்லி, தவறான வழியில் வேலை வாங்கித் தருவதாகக் கூறும் இடைத்தரகர்களிடம் விண்ணப்பதாரர் மிகவும் கவனமாக இருக்குமாறு எச்சரிக்கப்படுகின்றனர்.
- இதுபோன்ற தவறான மற்றும் நேர்மையற்றவர்களால் விண்ணப்பதாரருக்கு ஏற்படும் எவ்வித இழப்புக்கும் தேர்வாணையம் எந்தவிதத்திலும் பொறுப்பாகாது.
- இணையவழி விண்ணப்பத்தில் குறிப்பிடப்படும் அனைத்துத் தகவல்களுக்கும் விண்ணப்பதாரரே முழுப் பொறுப்பாவார். விண்ணப்பதாரர், தேர்விற்கு இணையவழியில் விண்ணப்பிக்கும்பொழுது, ஏதேனும் தவறு ஏற்படின், தாங்கள் விண்ணப்பித்த இணையச் சேவைமையங்களையோ/ பொதுச்சேவை மையங்களையோ (Browsing centre /Internet cafe) குற்றம் சாட்டக் கூடாது. விண்ணப்பதாரர் பூர்த்திசெய்யப்பட்ட 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
(i)	Computor-cum- vaccine store keeper in Public Health and Preventive Medicine Department (Post code No.3201)	Tamil Nadu Public Health Subordinate Service (Code No.053)	30	Rs.19,500-62,000/- (Level-8) (Revised Scale)
(ii)	Block Health Statistician in Family Welfare Department (Post code No.2010)	Tamil Nadu Medical Subordinate Service (Code No.049)	159**+2 c/f	Rs.20,600-65,500/- (Level-10) (Revised Scale)
(iii	Statistical Assistant in Food Safety&Drug Administration Department (Post code No.3125)	Tamil Nadu Food Safety Subordinate Service (Code No.110)	2	Rs.35,900-1,13,500/- (Level13) (Revised Scale)

** Vacancies shown for the post in the serial No.2 are the vacancies after deducting 3% of vacancies for the reservation for meritorious sports persons as per G.O.Ms.No.6 Youth Welfare and Sports Developments (S1) Departments Dated 20.2.2019.

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.

3. IMPORTANT DATES AND TIME:-

Date of Notification	20.10.2021				
Last date for submission of online application	19.11.2021				
	Date of Written Examination				
Paper – I (Subject Paper) 09.01.2022 10.00 A.M. to 1.00 P.M					
Paper – II (General Studies)	09.01.2022	3.00 P.M. to 5.00 P.M			

Note

The above paragraph in the notification will be modified subject to Government Orders received if any from the Government.

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

4. QUALIFICATIONS:-

(A) AGE LIMIT (as on 01.07.2021)

		Maximum Age		
SI. No	Name of the Post	Others' [i.e., Applicants not belonging to SCs, SC(A)s, STs, MBC(V)s, MBC and DNCs, MBCs, BCs and BCMs]	SCs, SC(A)s, STs, MBC(V)s, MBC and DNCs, MBCs, BCs, BCMs and Destitute Widows of all castes	
1.	Computor-cum-vaccine store keeper in Public Health and Preventive Medicine Department			
2.	Block Health Statistician in Family Welfare Department	30 years* (Should not have	No maximum age limit	
3.	Statistical Assistant in Food Safety & Drug Administration Department	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.

Explanation: 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.

Age Concession

(i) For Persons with Benchmark Disability:

Persons with Benchmark Disability are eligible for age concession upto 10 years over and above the maximum age limit prescribed above.

(Section 64 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016.)

(ii) For Ex-servicemen:

- (a) The maximum age limit is 50 years.
 (Section 63 (1) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016.)
- (b) The above mentioned age concession is not applicable 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 "Others" (i.e., Applicants not belonging to SCs, SC(A)s, STs, MBC(V)s, MBCs and DNCs, MBCs, BCs(OBCMs), 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.]

(B) EDUCATIONAL QUALIFICATION: (as on 20.10.2021)

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

Name of the Post	Educational Qualification		
Computor-cum-	A degree in Statistics or a Degree in Mathematics with		
vaccine store keeper in Public Health and	Statistics as a special subject or having qualified in any one of the following subjects namely:		
Preventive Medicine Department	 i. Fundamental Statistics, Applied Statistics Probability and Applied Statistics and Basic Statistics for actuarial Science. ii. Fundamental Statistics and Applied Statistics. iii. Applied Statistics only iv. Probability and Applied Statistics. v. Practical Statistics and Statistics interference. 		
Block Health Statistician in Family Welfare Department	A Degree in Statistics or Mathematics or Economics from any University or Institution recognized by the University Grants Commission.		
Statistical Assistant in Food Safety & Drug Administration Department	A Masters degree in Mathematics or Statistics with working knowledge of computer statistical tools. (Refer Annexure-III of this notification)		

Note:

- (i) The Educational qualification prescribed for these posts should have been obtained by passing the required qualification in the following order of studies viz.10th + 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. Results of the examination should have been declared on or before the date of this notification. (Section 20(4)(iv) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016)
- (ii) The qualifications considered as equivalent are indicated in **Annexure-I** to this Notification.
- (iii) 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 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 equivalent 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 <u>Annexure IV</u> 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 Posts	Standard of Vision Prescribed	Form of Certificate of Physical Fitness
Computor – cum - vaccine store keeper in Public Health and Preventive Medicine Department	Standard III or Better Colour blindness will be a disqualification	Form prescribed Executive posts
Block Health Statistician in Family Welfare Department	Standard III or Better	Form prescribed for other than Executive and Ministerial posts
Statistical Assistant in Food Safety & Drug Administration Department	Standard I	Form prescribed for other than Executive and Ministerial 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 <u>para 14(I) of the Commission's 'Instructions to Applicants'</u>).

5. A.FEES:-

a)	Registration Fee	
	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)	Rs.150/-
	Note Applicants who have already registered in One Time online Registration system and within the validity period of 5 years are exempted.	
b)	Examination Fee:- Note;- The Examination fee should be paid at the time of submitting the online application for this recruitment, if they are not eligible for the fee concession noted below.	Rs.100/-

- (i) Linking Aadhaar number with One Time Registration (OTR) is mandatory for applicants. (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.

(B) EXAMINATION FEE CONCESSIONS:

	Category	Concession
(i)	Scheduled Castes/ Scheduled Caste (Arunthathiyars)	Full Exemption
(ii)	Scheduled Tribes	Full Exemption
(iii)	Most Backward Classes (Vanniakula Kshatriya)/ Most Backward Classes and Denotified Communities/ Most Backward Classes	Three Free Chances
(iv)	Backward Classes (Other than Muslim) / Backward Classes (Muslim)	Three Free Chances
(v)	Ex-Servicemen	Two Free Chances
(vi)	Persons with Benchmark Disability	Full Exemption
(vii)	Destitute Widow	Full Exemption

Note:

- (i) The total number of free chances availed, will be calculated on the basis of claims made in previous applications.
- (ii) The number of free chances availed by the applicant may be verified by the Commission at any stage of the selection process.
- (iii) In case an applicant who makes a false claim for exemption from payment of application fee by suppressing information regarding his previous application(s), his/ her candidature shall be rejected and he/ she shall be debarred for a period of one year, from appearing for examinations and selections conducted by the Commission.
- (iv) 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.
- (v) 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.
- (vi) An application (irrespective of the post applied for) claiming fee concession will operate to exclude one chance from the number of free chances allowed.
- (vii) 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.
- (viii) Failure to pay the prescribed fee along with the online application, will result in the rejection of application. (For further details regarding examination fee concession, refer to para 6 of 'Instructions to Applicants')

6. MODE OF PAYMENT OF EXAMINATION FEE:

- (i) Written Examination fee of Rs.100/- (Rupees One hundred Only) is payable by online through Net Banking / Credit card / Debit card on or before the last date of submission of online application by choosing the option in the online application.
- (ii) Applicants have also to pay the service charges as applicable.
- (iii) Applicants can avail exemption from paying examination fee as per eligibility criteria.
- (iv) 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.
- (v) Those who have registered in the 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.
- (vi) 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

- (i) Concessions in the matter of age and/or examination fees allowed to SCs, SC(A)s, STs, MBC(V)s, MBC and DNCs, MBCs, BCs(OBCMs), BCMs, Destitute Widows, Persons with Benchmark Disability, Ex-servicemen are given in para. 3(D),5& 6 of the 'Instructions to Applicants'.
- (ii) 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 of the state 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):-

	Duration	Mariana	Minimum Qualifying Marks for selection	
Subject		Maximum Marks	SCs, SC(A)s, STs, BCs (OBCM), MBC(V), MBC and DNCs, MBCs and BCMs	Others
Paper - I(Subject Paper) (200 Questions) Degree Standard Any one of the following (i) Statistics (Code No. 274) (ii) Mathematics (Code No.276) (iii) Economics (Code No. 275)	3 hours	300		
Paper- II(General Studies) (100 Questions) (Code No.003) General Studies (Degree Standard) - 75 Questions and Aptitude and Mental Ability Test (SSLC Standard) - 25 Questions	2 hours	200	150	200
Total		500		

Note:

- (i) The above paragraph in the notification will be modified subject to Government Orders received if any from the Government.
- (ii) The questions in Paper-I & Paper-II will be set both in Tamil and English.
- (iii) Refer <u>para 17 of 'Instructions to Applicants'</u> with regard to instructions to be followed while appearing for competitive examinations conducted by the Commission.
- (iv) The Syllabus for Written Examination is available Annexure-II of this Notification and also available in the Commission's website www.tnpsc.gov.in.
- (v) Though the candidates are allowed to appear for any one of the Subject paper mentioned above, they will be considered for any of the posts mentioned in para. 4(B) of Notification, based on their qualification possessed by the candidates.

9.SELECTION PROCEDURE

Based on the marks obtained by the candidates in Written Examination and subject to the rule of reservation of appointments, a tentative list of eligible candidates for certificate verification will be announced in the Commission's website. After verification of the original certificates, the eligible candidates will be summoned for final selection through counselling method. (For details refer Para 18(C) of Commission's Instructions to Applicants').

The above paragraph in the notification will be modified subject to Government Orders received if any from the Government.

Note:

- The selection for the carried forward vacancies (i.e for the post of Block Health Statistician) will be made first.
 [Section 27 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016]
- 2) Followed by the selection for regular vacancies following the rule of reservation of appointments.

10. CENTRES FOR EXAMINATION

Examination will be held at the following centres:-

SI. No.	Name of the	Centre
	Centre	Code
1.	Chennai	0101
2.	Madurai	1001
3.	Coimbatore	0201
4.	Tiruchy	2501
5.	Tirunelveli	2601
6.	Salem	1701
7.	Thanjavur	1901
8.	Vellore	2701
9.	Uthagamandalam	1301

Note:-

- (i) Applicant should choose any two of the above centres for writing the examination. However, applicants with benchmark disability (differently abled applicants), shall be permitted to choose only one district centre. (For further details refer para 2(R) of Instructions 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 at their own expenses.

11.(A) EMPLOYMENT DETAILS:

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. (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.
- (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.
- (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.[para. 14 (S) of 'Instructions to Applicants'].

(iv) Any violation of instruction therein 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.

(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 (PSTM) 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 para. 14 (R) (iii) of 'Instructions to Applicants')
- iii. Candidates must upload/ produce documents as evidence of having studied in Tamil medium, all educational qualification upto the educational qualification prescribed.

Example:

If the prescribed educational qualification is Degree, then the candidate should have studied the SSLC, HSC and Degree through Tamil medium of instruction. (For further details refer to para. 14 (R) (iii) 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.
- (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 & 27(c) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016, reservation of appointment to "Destitute Widows" and "Ex-servicemen" will be applicable to this recruitment except for the post of Statistical Assistant in Food Safety & Drug Administration Department [Refer Para 14 (N) and 14 (O) of 'Instructions to Applicants' for prescribed format for Ex-Servicemen respectively]
- (E) PERSONS WITH BENCHMARK DISABILITY(DAP):

As per G.O. (Ms.) No. 21, Welfare of Differently Abled Persons (DAP.3.2) Department, dated 30.05.2017 and G.O. (Ms.) No. 51, Welfare of Differently Abled Persons (DAP.3.2) Department, dated 26.12.2017, the said posts are classified under Group C categories except for the post of Statistical Assistant in Food Safety and Drug Administration Department and 4% reservation of vacancies earmarked for the differently abled persons (Persons with Bench Mark Disability) shall be applicable.

As per G.O. (Ms.) No. 20, Welfare of Differently Abled Persons (DAP.3.2) Department, dated 20.06.2018, the following post has been identified with suitable for differently Abled Categories as detailed below:

Name of the Post	Category of Bench Mark Disability
Statistical Assistant in Food	LV, HI, HH, LD, CP, LC, DF, AC, Mud,
Safety&Drug Administration	MD.
Department.	

[LV- Low vision, HI- Hearing Impaired, HH- Hard of Hearing, LD- Locomotor disability, CP-Cerebral Palsy, LC- Leprosy cured, DF-Dwarfism, AC-Acid Attack Victims ,Mud- Muscular Dystrophy and MD- Multiple Disabilities].

- (F) Persons with Benchmark Disability should submit / upload a copy of Disability Certificate obtained from the competent authority [in the format as prescribed in Forms V, VI & VII, in the Government of India Rights of Persons with Disabilities Rules, 2017 as specified in G.O. Ms No.28, Welfare of Differently Abled Persons (DAP 3.1) Department, dated 27.07.2018]. (For Further details refer Para 14 (M) of "Instructions to Applicants")
- (G) 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].
- (H) 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].
- (I) 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.

- (J) 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.
- (K) 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 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.
- (L) 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 summarily rejected after due process.
- (M) 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.

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

- a) 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'.
- b) The Transgender 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.
- c) The Transgender candidates who belong to the communities other than Scheduled Caste/ Scheduled Caste (Arunthathiyar) / 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 Time Registration itself. Once the individual opts to be considered as 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)

(O) Reservation in Employment for Transgender:-

- a) 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).
- b) The Transgender candidates, who identify themselves as 'Male' or Transgender, shall be considered against the 70 % reservation for General category (both Men & Women).
- c) 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) Applicants should ensure their eligibility for the examination. Before applying for/ appearing for the examination, the Applicants should ensure their eligibility for such examination and that they fulfill all the conditions in regard to age, educational qualifications, number of chances for fee 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, 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.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**: In case of any guidance / information / clarification regarding applications, candidature, etc., applicants 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. Other queries may be sent to 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, 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 selection process, no information under Right to Information Act, CM special cell petitions and GRCC 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 subject 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 Examination should ensure that they fulfil all the eligibility conditions for admission to the Examination. 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, it is found that they do not fulfil any of the eligibility conditions, their candidature for the Examination will be rejected summarily by the Commission.
- 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 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.

I) Tentative answer keys will be hosted in the Commission's website within 3 (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/ offline 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 keys 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 keys 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:

- (i) Applicants should apply only through online mode in the Commission's Websites www.tnpsc.gov.in or www.tnpscexams.in.
- (ii) 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.
- (iii) To apply under One-Time Registration system, the applicants should have a scanned image of their photograph, certificates specified if any 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')
- (iv) No applicant is permitted to create more than one registration ID in One Time Registration System.

- (v) 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.
- (vi) One Time Registration is not an application for any post. It is just a collection of information from the applicants and provides a separate dashboard to each applicant to facilitate maintenance of their own profile. Applicant who wishes to apply for this examination shall click "Apply" against the examination notified in the Commission's Website and using the same USER ID and PASSWORD given for ONE TIME REGISTRATION.
- (vii) Applicants should select the name of the post or service for which they wish to apply.
- (viii) Applicants are required to upload their photograph and signature as per the specifications given in the Guidelines for Scanning and Upload of Photograph and Signature. (For further details refer para. 2 (N) (O) (P) of the "Instructions to Applicants".
 - (ix) Online application submitted without the photograph, specified documents and signature will be rejected.
 - (x) All the particulars mentioned in the online application including name of the Candidate, Post applied, educational qualifications, Communal Category, Date of Birth, Address, Gender and Email ID, Centre of Examination etc. will be considered as final and no modifications will be allowed after the last date specified for applying online. Since certain fields are firm and fixed and cannot be edited, applicants are requested to fill in the online application form with the utmost care and caution as no correspondence regarding change of details will be entertained.

(xi) **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 OF DOCUMENTS:

The applicants must upload / submit the documents whenever called for specifically. If the required certificates are not uploaded by the applicant, within the stipulated time, his/ her application will be rejected. (For further details refer para 13 of "Instructions to Applicants")

16. LAST DATE FOR SUBMISSION OF APPLICATION:

Online application can be submitted upto 19.11.2021 till 11.59 p.m., after which the link will be disabled.

(For detailed information, applicants may refer to the "Instructions to Applicants" at the Commission's website www.tnpsc.gov.in).

DISCLAIMER

"The Government orders relating to Equivalence of qualification are available in the Tamil Nadu Public Service Commission's website. However, if the applicant possesses an equivalence of qualification other than one mentioned in the Commission's website 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. The Government orders regarding equivalence of qualification issued after the date of this notification will not be considered for this recruitment".

Secretary

ANNEXURE-I

G.Os relating to equivalence of qualification

SI. No	Degree	EquivalenceDegree	G.O.
1.	1)Degree in Economics, 2)Degree in Mathematics 3)Degree in Statistics	Consideration of the following 5 year integrated courses offered by Annamalai University as equivalent to corresponding U.G. Degree for the purpose of employment in public services Subjects: 1)M.A., (Applied Economics) 2.M.Sc., Mathematics 3.M.Sc., (Statistics with Computer Application)	G.O. (Ms.)No.75, Personnel and Administrative Reforms(M) Department, dated 30.06.2011
2.	1)A Degree in Mathematics 2)A Degree in Economics	Courses offered by the various Universities 1)B.Sc.,(Statistics) is equivalent to B.Sc.,(Mathematics) 2)B.Sc., Maths (Computer Application) is equivalent to B.Sc., Maths 3)M.Sc.,(Mathematical Economics) to M.A. (Economics)	G.O.No.72, Higher Education (K2)Department, dated 30.04.2013
3.	1)A Degree in Economics 2)A Degree in Mathematics	1)B.A., Economics with Specialization in Rural Management degree awarded by Bharathidasan University as equivalent to B.A., Economics 2)B.Sc., Mathematics with specialization in Computer Application degree awarded by Bharathidasan University as equivalent to B.Sc., Mathematics	G.O. (Ms.) No.270,Higher Education(K2) Department, dated 31.12.2013
4.	Degree in Economics	B.A., Economics with Specialization in Corporate Economics awarded by Lady doak College (Autonomous), affiliated to Madurai Kamaraj University is equivalent to B.A., Economics	G.O. (Ms.) No.112,Higher Education(K2) Department, dated 18.07.2014
5.	M.Sc., Mathematics	M.Sc., Applied Mathematics (Operation Research) awarded by Bharathidasan University is equivalent to M.Sc., Mathematics	
6.	M.Sc., Mathematics	M.Sc., Mathematics (Applicable Mathematics) awarded by Periyar University is equivalent to M.Sc., Mathematics	G.O.Ms.No.212, Higher Education Department, dated17.12.2014
7.	B.Sc., Mathematics	B.Sc., (Special) Mathematics offered by Lady Doak College, Madurai Kamaraj University is equivalent to B.Sc., Mathematics	

SI. No.	Qualification prescribed	Qualification considered as Equivalent to the Degree as prescribed in the Rule	G.O. in which ordered
1.	M.Sc., Statistics	M.Sc., Statistics with computer with Computer Application awarded by Manonmaniam Sundaranar University / Periyar University / Bharathiyar University is equivalent to M.Sc., Statistics M.Sc., Statistics with Computer Application (5 years Integrated	G.O.(Ms)No.116, Higher Education (K2) Department, dated 22.07.2014
		Programme) awarded by Annamalai University is equivalent to 3 year UG in Statistics and 2 years PG in Statistics.	
2.	M.Sc., Mathematics		G.O.(Ms.)No.86, Higher Education (K2) Department, dated 27.04.2015.
3.	M.Sc., Statistics	M.Stat Degree offered by Periyar EVR College (Autonomous), Trichy affiliated to Bharathidasan University is equivalent to M.Sc., Statistics	G.O.(Ms)No.323, Higher Education (K2) Department, dated 13.11.2017
4.	B.Sc., Mathematics	Public Services – Educational Qualification – Consideration of B.Sc., Mathematics (Computer Applications) Degree awarded by Periyar University is equivalent to B.Sc., Mathematics Degree for the purpose of employment in Public Services.	G.O.No.33, Higher Education (K2) Department, dated 12.02.2018
5.	B.Sc., Mathematics	B.Sc., Mathematics with Computer Applications awarded by Manonmaniam Sundaranar University/ Madurai Kamaraj University/ Annamalai University is equivalent to B.Sc., Mathematics Degree for the purpose of employment in Public Services.	
	B.Sc., Mathematics B.Sc., (Special) in Maths with specialization in Computer Applications offered by Lady Doak College (Autonomous) affiliated to Madurai Kamaraj University is equivalent to B.Sc., Mathematics for the purpose of employment in Public Services.		G.O.Ms.No.194, Higher Education (K2) Department, dated
	B.Sc., Mathematics	B.Sc., Mathematics and B.Sc., Computer Science (Dual degree system) four years course awarded by Annamalai University is equivalent to B.Sc., Mathematics for the purpose of employment in Public Services.	14.08.2018
	B.Sc., Mathematics	M.Sc., Mathematics with Computer Applications (5 years integrated) awarded by Annamalai University is equivalent to B.Sc., Mathematics for the purpose of employment in Public Services.	

6.	M.Sc., Statistics	PG Degree in Bio Statistics (M.Sc., Bio	
6.	W.Oc., Otalistics	Statistics) awarded by University of	
		Madras is equivalent to PG Degree in	
		Statistics (M.Sc., Statistics) for the purpose	
		of employment in Public Services.	
	M.Sc., Statistics	M.Sc., Statistics with Computer	
		Applications (5 years integrated) and	
		M.Sc., Statistics with Computer	G.O.Ms.No.65, Higher
		Applications (CBCS) awarded by	Education (K2)
		Annamalai University is equivalent to	Department, dated
		M.Sc., Statistics for the purpose of	24.04.2019
	B.A. Economics	employment in Public Services.	
	B.A. Economics B.B.E awarded by Alagappa Univer equivalent to B.A. Economics for the		
		purpose of employment in Public Services.	
	B.A. Economics		
	B.A. Economics	B.A. Economics (Vocational) awarded by Bharathidasan University is equivalent to	
		B.A. Economics for the purpose of	
		employment in Public Services.	
7.	B.A.Economics	B.A., Tourism Management and B.A.	
		Economics Vocational (Tourism and	G.O.Ms.No.266, Higher
		Management) Degree offered by Alagappa	Education (K2)
		University is equivalent to B.A. Economics	Department, dated
		for the purpose of employment in Public	29.11.2019
		Services.	
	B.Sc., Statistics & M.Sc.,	M.Sc., Statistics (5 years integrated degree) offered by Annamalai University is equivalent	
	Statistics	to B.Sc., Statistics M.Sc., Statistics Degree for	
		the purpose of employment in Public Services.	
	M.Sc., Statistics	M.Sc., (Statistics and Information	
		Technology) Degree offered by Manonmaniam Sundaranar University is	
		equivalent to M.Sc., Statistics Degree for the	
		purpose of employment in Public Services.	
	M.Sc., Mathematics	M.Sc., Applicable Science – Mathematics	
	, , , , , , , , , , , , , , , , , , , ,	and M.Sc., Mathematics (Computer	
		Applications) Degree offered by Periyar	
		University is equivalent to M.Sc.,	
		Mathematics Degree for the purpose of	G.O.Ms.No.266, Higher
		employment in Public Services.	Education (K2)
	B.Sc., Mathematics	B.Sc., Mathematics (Actuarial Science) and	Department, dated 29.11.2019
		B.Sc., Mathematics (Computer Applications) Degree offered by Periyar University is	23.11.2019
		equivalent to B.Sc., Mathematics Degree	
		for the purpose of employment in Public	
		Services.	
	M.Sc., Mathematics	M.Sc., Mathematics (Computer Applications)	
		Degree offered by Gandhigram Rural	
		Institute (Deemed to be University) is	
		equivalent to M.Sc., Mathematics Degree	
		for the purpose of employment in Public	
	D.Co. Chohistics Q.M.C.	Services.	
	B.Sc., Statistics & M.Sc.,	M.Sc., Mathematics(5 years integrated) Degree offered by Annamalai University is equivalent	
	Statistics	to B.Sc., Statistics & M.Sc., Statistics Degree	
		for the purpose of employment in Public	
1			

Annexure-II

PAPER-I

MATHEMATICS / MATHEMATICS WITH STATISTICS

(DEGREE STANDARD)

CODE NO: 276

UNIT I

ALGEBRA AND TRIGONOMETRY:

Theory of Equations: Polynomial equations; Imaginary and irrational roots; Symmetric functions of roots in terms of coefficient; Sum of rth powers of roots; Reciprocal equations; Transformations of equations.

Descrates' rule of signs: Approximate solutions of roots of polynomials by Newton - Raphson Method - Horner's method; Cardan's method of solution of a cubic polynomial.

Summation of Series: Binomial, Exponential and Logarithmic series theorems; Summation of finite series using method of differences - simple problems.

Expansions of $\sin x$, $\cos x$, $\tan x$ in terms of x; $\sin nx$, $\cos nx$, $\tan nx$, $\sin nx$, $\cos nx$, $\tan nx$, hyperbolic and inverse hyperbolic functions - simple problems.

Symmetric; Skew Symmetric; Hermitian; Skew Hermitian; Orthogonal and Unitary Matrices; Rank of a matrix; Consistency and solutions of Linear Equations; Cayley Hamilton Theorem; Eigen values; Eigen Vectors; Similar matrices; Diagonalization of a matrix.

Equivalence relations; Groups; subgroups – cyclic groups and properties of cyclic groups - simple problems; Lagrange's theorem; Prime number; Composite number; decomposition of a composite number as a product of primes uniquely (without proof); divisors of a positive integer n; congurence modulo n; Euler function; highest power of a prime number p contained in n!; Fermat's and Wilson's theroems - simple problems.

Sums of sines and cosines of n angles which are in A.P.; Summation of trigonometric series using telescopic method, C + i S method.

UNIT II

CALCULUS, COORDINATE GEOMETRY OF 2 DIMENSIONS AND DIFFERENTIAL GEOMETRY

nth derivative; Leibnitz's theorem and its applications; Partial differentiation. Total differentials; Jacobians; Maxima and Minima of functions of 2 and 3 independent variables - necessary and sufficient conditions; Lagrange's method – simple problems on these concepts.

Methods of integration; Properties of definite integrals; Reduction formulae - Simple problems.

Conics - Parabola, ellipse, hyperbola and rectangular hyperbola - pole, polar, co-normal points, con-cyclic points, conjugate diameters, asymptotes and conjugate hyperbola.

Curvature; radius of curvature in Cartesian coordinates; polar coordinates; equation of a straight line, circle and conic; radius of curvature in polar coordinates; p-r equations; evolutes; envelopes.

Methods of finding asymptotes of rational algebraic curves with special cases. Beta and Gamma functions, properties and simple problems. Double Integrals; change of order of integration; triple integrals; applications to area, surface are volume.

UNIT III

DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS

First order but of higher degree equations – solvable for p, solvable for x, solvable for y, clairaut's form – simple problems.

Second order differential equations with constant coefficients with particular integrals for e^{ax} , x^m , e^{ax} sin mx, e^{ax} cos mx

Second order differential equations with variable coefficients

$$ax^{2}\frac{d^{2}y}{dx^{2}} + bx\frac{dy}{dx} + cy = q(x)$$

Method of variation of parameters; Total differential equations, simple problems.

Partial Differential equations: Formation of P.D.E by eliminating arbitrary constants and arbitrary functions; complete integral; Singular integral; general integral; Charpit's method and standard types f(p,q)=0, f(x,p,q)=0, f(x,q)=0, f(x

Laplace transform; inverse Laplace transform(usual types); applications of Laplace transform to solution of first and second order linear differential equations (constant coefficients) and simultaneous linear differential equations – simple problems.

UNIT IV

VECTOR CALCULUS, FOURIER SERIES AND FOURIER TRANSFORMS

Vector Differentiation: Gradient, divergence, curl, directional derivative, unit normal to a surface.

Vector integration: line, surface and volume integrals; theorems of Gauss, Stokes and Green - simple problems.

Fourier Series: Expansions of periodic function of period 2π ; expansion of even and odd functions; half range series.

Fourier Transform: Infinite Fourier transform (Complex form, no derivation); sine and cosine transforms; simple properties of Fourier Transforms; Convolution theorem; Parseval's identity.

UNIT V

ALGEBRAIC STRUCTURES

Groups: Subgroups, cyclic groups and properties of cyclic groups – simple problems; Lagrange's Theorem; Normal subgroups; Homomorphism; Automorphism; Cayley's Theorem, Permutation groups.

Rings: Definition and examples, Integral domain, homomorphism of rings, Ideals and quotient Rings, Prime ideal and maximum ideal; the field and quotients of an integral domain, Euclidean Rings.

Vector Spaces: Definition and examples, linear dependence and independence, dual spaces, inner product spaces.

Linear Transformations: Algebra of linear transformations, characteristic roots, matrices, canonical forms, triangular forms.

UNIT VI

REAL ANALYSIS

Sets and Functions: Sets and elements; Operations on sets; functions; real valued functions; equivalence; countability; real numbers; least upper bounds.

Sequences of Real Numbers: Definition of a sequence and subsequence; limit of a sequence; convergent sequences; divergent sequences; bounded sequences; monotone sequences; operations on convergent sequences; operations on divergent sequences; limit superior and limit inferior; Cauchy sequences.

Series of Real Numbers: Convergence and divergence; series with non-negative numbers; alternating series; conditional convergence and absolute convergence; tests for absolute convergence; series whose terms form a non-increasing sequence; the class I^2 .

Limits and metric spaces: Limit of a function on a real line; metric spaces; limits in metric spaces.

Continuous functions on Metric Spaces: Functions continuous at a point on the real line, reformulation, functions continuous on a metric space, open sets, closed sets, discontinuous functions on the real line.

Connectedness Completeness and compactness: More about open sets, connected sets, bounded sets and totally bounded sets, complete metric spaces, compact metric spaces, continuous functions on a compact metric space, continuity of inverse functions, uniform continuity.

Calculus: Sets of measure zero, definition of the Riemann integral, existence of the Riemann integral properties of Riemann integral, derivatives, Rolle's theorem, Law of mean, Fundamental theorems of calculus, Taylor's theorem.

Sequences and Series of Functions. Pointwise convergence of sequences of functions, uniform convergence of sequences of functions.

UNIT VII

COMPLEX ANALYSIS

Complex numbers: Point at infinity, Stereographic projection

Analytic functions: Functions of a complex variable, mappings, limits, theorems of limits, continuity, derivatives, differentiation formula, Cauchy-Riemann equations, sufficient conditions Cauchy-Riemann equations in polar form, analytic functions, harmonic functions.

Mappings by elementary functions: linear functions, the function 1/z, linear fractional transformations, the functions $w=z^n$, $w=e^z$, special linear fractional transformations.

Integrals: definite integrals, contours, line integrals, Cauchy-Goursat theorem, Cauchy integral formula, derivatives of analytic functions, maximum moduli of functions.

Series: convergence of sequences and series, Taylor's series, Laurent's series, zero's of analytic functions.

Residues and poles: residues, the residue theorem, the principal part of functions, poles, evaluation of improper real integrals, improper integrals, integrals involving trigonometric functions, definite integrals of trigonometric functions

UNIT VIII

DYNAMICS AND STATICS

DYNAMICS: kinematics of a particle, velocity, acceleration, relative velocity, angular velocity, Newton's laws of motion, equation of motion, rectilinear motion under constant acceleration, simple harmonic motion.

Projectiles: Time of flight, horizontal range, range in an inclined plane. Impulse and impulsive motion, collision of two smooth spheres, direct and oblique impact-simple problems.

Central forces: Central orbit as plane curve, p-r equation of a central orbit, finding law of force and speed for a given central orbit, finding the central orbit for a given law of force.

Moment of inertia: Moment of inertia of simple bodies, theorems of parallel and perpendicular axes, moment of inertia of triangular lamina, circular ring, right circular cone, sphere (hollow and solid).

STATICS: Types of forces, Magnitude and direction of the resultant of the forces acting on a particle, Lami's Theorem, equilibrium of a particle under several coplanar forces, parallel forces, moments, couples-simple problems.

Friction: Laws of friction, angle of friction, equilibrium of a body on a rough inclined plane acted on by several forces, centre of gravity of simple uniform bodies, triangular lamina, rods forming a triangle, trapezium, centre of gravity of a circular arc, elliptic quadrant, solid and hollow hemisphere, solid and hollow cone, catenary-simple problems.

UNIT IX

OPERATIONS RESEARCH

Linear programming – formulation – graphical solution – simplex method

Big-M method – Two-phase method-duality- primal-dual relation – dual simplex method – revised simplex method – Sensitivity analysis. Transportation problem – assignment problem.

Sequencing problem – n jobs through 2 machines – n jobs through 3 machines – two jobs through m machines – n jobs through m machines

PERT and CPM: project network diagram - Critical path (crashing excluded) - PERT computations.

Queuing theory - Basic concepts - Steady state analysis of M/M/1 and M/M/systems with infinite and finite capacities.

Inventory models: Basic concepts - EOQ models: (a) Uniform demand rate infinite production rate with no shortages (b) Uniform demand rate Finite production rate with no shortages - Classical newspaper boy problem with discrete demand - purchase inventory model with one price break.

Game theory: Two-person Zero-sum game with saddle point – without saddle point – dominance – solving $2 \times n$ or $m \times 2$ game by graphical method.

Integer programming: Branch and bound method.

UNIT IX

MATHEMATICAL STATISTICS

Statistics – Definition – functions – applications – complete enumeration – sampling methods – measures of central tendency – measures of dispersion – skewness- kurtosis.

Sample space – Events, Definition of probability (Classical, Statistical & Axiomatic) – Addition and multiplication laws of probability – Independence – Conditional probability

- Bayes theorem - simple problems.

Random Variables (Discrete and continuous), Distribution function – Expected values & moments – Moment generating function – probability generating function – Examples. Characteristic function – Uniqueness and inversion theorems – Cumulants, Chebychev's inequality – Simple problems.

Concepts of bivariate distribution – Correlation : Rank correlation coefficient – Concepts of partial and multiple correlation coefficients – Regression : Method of Least squares for fitting Linear, Quadratic and exponential curves - simple problems.

Standard distributions – Binomial, Hyper geometric, Poission, Normal and Uniform distributions – Geometric, Exponential, Gamma and Beta distributions, Inter-relationship among distributions.

Sampling Theory – sampling distributions – concept of standard error-sampling distribution based on Normal distribution : t, chi-square and F distribution.

Point estimation-concepts of unbiasedness, consistency, efficiency and sufficiency- Cramer Rao inequality-methods of estimation: Maximum likelihood, moments and minimum chi-square and their properties.

Test of Significance-standard error-large sample tests. Exact tests based on Normal, t, chi-square and F distributions with respect to population mean/means, proportion/proportions variances and correlation co-efficient. Theory of attributes – tests of independence of attributes based on contingency tables – goodness of fit tests based on Chi-square.

Analysis of variance: One way, two-way classification – Concepts and problems, interval estimation – confidence intervals for population mean/means, proportion/proportions and variances based on Normal, t, chi-square and F.

Tests of hypothesis: Type I and Type II errors – power of test-Neyman Pearson Lemma – Likelihood ratio tests – concepts of most powerful test –simple problems

PAPER-I STATISTICS (UG STANDARD)

CODE NO:274

<u>UNIT 1:</u> Uses, Scope and limitation of Statistics, Collection, Classification and Tabulation of data, Diagramatic and Graphical representation, Measures of location, dispersion, Skewness and Kurtosis – Correlation and regression – Curve Fitting – Linear and Quadratic equation by the method of least squares.

<u>UNIT II:</u> Probability - Addition, Multiplication and Baye's Theorems and their application. Tchebychev's inequality. Random variables - Univariate and Bivariate - Probability distributions - Marginal and conditional distributions - Expectations - Moments and cumulants generating functions.

<u>UNIT III:</u> Probability distributions – Binomial, Poisson, Geometric and Hypergeometric. Continuous distributions – Uniform, exponential and normal. Sampling distributions and standard error, student's 't', Chi-square and F statistic – distributions and their applications.

<u>UNIT IV</u>: Estimation – Point estimation – properties of estimates Neyman – Fisher Factorization theorem(without proof) Cramer – Rao inequality, Rao – Blackwell theorem – MLE and method of Moments estimation – Interval estimation – for population mean and variance based on small and large samples.

<u>UNIT V:</u> Tests of Hypothesis – Null and Alternative – Types of errors – Power of test, Neyman – Pearson lemma, UMP and Likelihood ratio tests, Test procedures for large and small samples – Independence of attributes, Chi-square test – Goodness of fit

<u>UNIT VI:</u> Simple random sample – stratified, systematic, Cluster (Single stage) Estimation of mean and variance in SKS – Sample Survey – Organisation – CSO and NSSO – Sampling and Non-Sampling errors.

Analysis of Variance – Principles of design CRD, RBD and LSD – Factorial experiments 2², 2³ and 3² (Without confounding) Missing plot techniques.

<u>UNIT VII</u>: Concept of SQC – Control Charts – X, R, p and charts Acceptance sampling plan – single and double – OC curves Attributes and Variables plan.

OR Models – Linear Programming problems – Simplex method Dual – Primal, Assignment problems, Net work – CPM and PERT

UNIT VIII: Time series – Different components – Trend and Seasonal Variations – Determination and elimination

<u>UNIT IX</u>: Index Numbers – Construction and uses – Different kinds of simple and weighted index numbers – Reversal tests – construction and use of cost of living index numbers – Birth and death rates – Crude and standard death rates, Fertility rates – Life table construction and uses.

<u>UNIT X:</u> Statistical Computing using Excel – Understanding on the usage of Statistical Packages including SPSS, MINITAB and SAS.

PAPER-I ECONOMICS / ECONOMICS WITH STATISTICS

(DEGREE STANDARD)

CODE NO.275

UNIT I

Introduction. Theory of Consumer Behaviour and Theory of Production: Definitions of Economics - Nature and Scope of Economics - Importance and Uses of Micro Economics - Deductive method and Inductive method — Nature of Economic Statics and Economic Dynamics - Economic Laws - Law of Demand - Utility Analysis

- Elasticity of Demand - Consumer's surplus - Indifference Curve Analysis. Theory of Production: Production - Factor Combination - Marginal Rate of Substitution - Laws of Returns - Returns to Scale - Producer's Equilibrium-Producer's Surplus - Internal and External Economies and Diseconomies of Scale of Production- Value - Price Determination under different Market Structures - Marginal Productivity Theory of Distribution - Theories of Rent, Wages, Interest and Profit- Causes for Wage difference - Trade Unions and Wages - Cost and Revenue Curves in the Short-run and Long-run - Welfare Economics - Meaning of Social Welfare - Different concepts of Social Welfare.

UNIT II

<u>Introduction to Macro Economics and National Income:</u> Definition of Macro Economics - Nature and Scope of Macro Economics - Difference between Micro and Macro Economics -Stock and flow variables - National Income: Definition - Methods of Measurement of National Income - Difficulties in Measurement of National income

Uses of National Income estimates - J.B.Says' Law of Market - Keynesian Theory of Employment- Consumption
 Function and Investment Function - Multiplier - Accelerator - Inflation - Deflation - Trade Cycle.

UNIT III

<u>Monetary Economics and Fiscal Economics:</u> Functions of Money - Classifications of Money - Value of Money - Quantity Theory of Money - Cambridge Version - Fisher and Friedman- Keynesian Critique - Components of Money Supply and Demand - Neutrality of Money - Functions of Commercial Bank and Central Bank - Monetary Policy-Functions of Money Market - Capital Market.

Fiscal Economics: Nature and Scope of Public Finance – Difference between Public and Private Finance – Principle of Maximum Social Advantage - Major Fiscal Functions - Principles of Taxation – Canons of Taxation - Direct and Indirect Taxes- Public Expenditure - Causes and Growth - Revenue Structure - Sources - Incidence and Shifting of Taxation - Public Debt - Sources - Methods of Repayment - Budget – Techniques - Canons – Types of Budget – Balanced, Unbalanced, PBB, Zero Based Budgeting - Fiscal Policy.

UNIT IV

International Trade: Nature of International Trade – Internal and International Trade

- Importance of International Trade - Classical Theory of International Trade - Adam Smith's Absolute Advantage
Theory - Ricardo's Comparative Cost Theory - J.S.Mill's Theory of Reciprocal Demand - Hecksher Ohlin Theory of
International Trade - Exchange Rate - Balance of Payments Difficulties - Measures - Free Trade vs Protection
Policy - International Liquidity - SDR - IMF - IBRD -WTO - UNCTAD. **UNIT V**

History of Economic Thought: Mercantilism – Physiocracy - Adamsmith - Ricardo

- Malthus - Karl Marx - Pigou's Welfare Economics - Schumpeter - Theory of Rational Expectations - Keynes - Economic ideas of Ghandhiji.

UNIT VI

Economics of Development and Economics of Planning: Meaning of Economic Development and Economic Growth - Difference between Growth and Development - Indicators of Development- Features of Indian Economy and Tamil Nadu Economy - Obstacles of Development - Economic and Non-economic Factors - Agriculture - Role and Importance -Low Productivity - Causes - Measures - Green Revolution - Land Reforms - Development in India and Tamil Nadu. Economics of Planning: Meaning and Objectives of Economic Planning - Types of Planning - Five Year Plans in India - Objectives of Indian Plans and Failures & Achievements - Population Policy

- Human Resource Development - Employment Schemes - MGNREGS - Poverty Alleviation Programme in India and Tamil Nadu - Rural Industrialisation - SIDCO - DIC - Industrial Estates - Role of Transport.

UNIT VII

<u>Industrial Economics:</u> Industry - Large scale and Small Scale Industries - Development in India and Tamil Nadu - Industrial policy - 1948, 1956, 1991 - Industrial Disputes - Measures to settle Industrial Disputes.

UNIT VIII

<u>Descriptive Statistics</u>: Different data types – Nominal, ordinal, binary and categorical data types - Diagrammatic representation of data – Standard charts, curves diagrams and plots including box plots - Statistical measures – Measures of central tendency – Measures of dispersion - Regression and Correlation coefficients

UNIT IX

<u>Official Statistics and Sampling methods</u>: Official Statistical System in India - Sampling versus Census – preparation of schedules and questionnaires - Probability and nonprobability sampling method including simple random sampling, systematic sampling, stratified sampling, cluster sampling.

UNIT X

<u>Statistical tests for:</u> single proportion, equality of two proportions (large sample) - single mean, equality of two population means (small and large samples) - single variance and equality of two variances - independence of attributes

Paper-II 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, Thanthai Periyar, Rajaji, Subash Chandra Bose and others.
- (ii) Different modes of Agitation: Growth of Satyagraha and Militant movements.
- (iii) Communalism and partition.

<u>UNIT- VIII : History, Culture, Heritage and Socio - Political Movements</u> 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

FORMAT OF EXPERIENCE CERTIFICATE FOR THE POST OF STATISTICAL ASSISTANT IN TAMIL NADU FOOD SAFETY AND DRUG ADMINISTRATION 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 the above said Institution / Organisation	:	
6.	Nature of the Work/Duty performed by the Employee (To be mentioned in brief)	:	
7.	Whether the Employee possesses working knowledge in Computer Statistical tool such as Microsoft office proficiency certificate as laid in para 4(B) of this notification.	:	Yes / No
8.	Certificate from the Institution / Organisation	:	The above said employee have experience in this Institution / Organisation as stated above. The above particulars furnished by me is correct

Office Seal	:
Date:	
Place:	

Signature.

Name & 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-IV

CERTIFICATE OF PHY	YSICAL FITNESS BY	A SINGLE MEDICAL OFFICER THE CIVIL MEDICAL BOARD
Signature of Candidate		
I/We hereby cert	ify that I/We have exam	nined (full name) Thiru/Thirumathi
a Candidate	for employment under	the Government asin the
	Office in the	
mat he/she has any dis	ease, communicable or	re is given above and cannot discove otherwise constitutional affliction on n excess of/below the standard
I/We do not consid	er this a disqualificatio	on for the employment he/she seeks
	ording to his/her own s	
appearance about	Years	
I/We also certify th	nat he/she has marks (of smallpox/vaccination.
Chest measurement in	On full inspiration On full expiration Difference expansion	
Weight in Kg.		
Cardio - Vascular System	1	
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/defect	• ,	
Urine - Does chemical ex	amination show-	
(I) Albumen	(II) Sugar	State Specific gravity
Personal marks (at least t	wo should be mentione	ed) For Identification
		1.
		2.
Signature: Rank:		
Designation:		President
		Members (i)
- · · · ·		(ii)
Station: Date:		Station: Date:

2

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, serefula 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)	Fother's age at death and cause of death (2)	Number or 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

MedI. I-68.

Annexure-V

Tentative Timeline for the Recruitment Process for the Posts included in the Combined Statistical Subordinate Service Examination

SI. No.	Process	Timeline
1.	Publication of Written Examination results	March 2022
2.	Certificate upload for Certificate Verification	March 2022
3.	Certificate Verification	April 2022
4.	Counselling	April 2022

Secretary