



TAMIL NADU PUBLIC SERVICE COMMISSION

Advertisement No.659
Notification No.10/2023

DATED: 27.04.2023

Applications are invited from eligible candidates only through online mode up to 26.05.2023 for direct recruitment to the post of **Junior Scientific Officer in Tamil Nadu Forensic Sciences Subordinate Service.**

Examination for this post shall be conducted in Computer Based Test (CBT) Method.

WARNING

- All recruitments by the Tamil Nadu Public Service Commission are purely merit based.
- The 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 along with required documents (see Annexure III) before finally submitting the same.
- ***The applicants shall mandatorily upload the certificates / documents (in support of all the claims made / details furnished in the online application) at the time of submission of online application itself. It shall be ensured by the applicants that the online application shall not be submitted without uploading the required certificates.***
- **Applicants are directed to read all the information / instructions / guidelines given in this notification and the Commission's "Instructions to applicants" before applying for this recruitment. Clarification if any required, may be obtained over phone and email well ahead of the last date for submission of online application. Candidates should follow the instructions given in the online application also.**

1. ONE TIME REGISTRATION:

It is mandatory for 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.** For further details refer para 2 of the "Commission's Instructions to Applicants".

2. DETAILS OF VACANCIES:

Name of the Post	Name of the Service	No. of vacancies	Scale of pay
Junior Scientific Officer in Forensic Sciences Department (Post Code:1767)	Tamil Nadu Forensic Sciences Subordinate Service (Code No:033)	31 [2019-2020 to 2022-2023]	Rs. 36,900-1,35,100/- (Level-18) (Revised scale)

The Group wise details of the vacancies for the said post are as follows:-

S.No	Group	No. of vacancies
1.	Chemistry	20
2.	Biology	04
3.	Physics	03
4.	Physics and Chemistry (Division: Computer Forensic Science)	04
Total		31

Note:

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'.

3. DISTRIBUTION OF VACANCIES:

The rule of reservation of appointments is applicable for this recruitment.

GT (G)	GT(G)(PSTM)	GT(W)	GT(W)(PSTM)	BC(OBCM)(G)	BC(OBCM)(G)(PSTM)	BC(OBCM) (W)	BC(M)(G)	MBC/ DC(G)	MBC/ DC (G)(PSTM)	MBC/ DC (W)	SC(A)(G)	SC(G)	SC(G)(PSTM)	SC(W)	ST(G)	TOTAL
5	2	1	1	5	1	2	1	3	1	2	1	3	1	1	1	31

Abbreviation:- GT-General Turn; BC (OBCM)- Backward Classes (other than Backward Class Muslim); BC(M) - Backward Classes (Muslim); MBC/DC - Most Backward Classes/Denotified Communities; SC(A) - Scheduled Castes (Arunthathiar); SC - Scheduled Castes; ST - Scheduled Tribes; G-General; W-Women; PSTM- Persons Studied in Tamil Medium.

4. IMPORTANT DATES AND TIME:

Date of Notification	27.04.2023
Last date for submission of online application	26.05.2023
Application Correction Window Period	From 02.06.2023 - 12.01 AM To 04.06.2023 - 11.59 PM

DATE OF EXAMINATION (COMPUTER BASED TEST)	
PAPER – I: (Subject Paper)(PG Degree Standard)	23.07.2023 09.30 A.M. to 12.30 P.M.
PAPER – II: PART A: Tamil Eligibility Test (SSLC Standard) and PART B : General Studies (Degree Standard)	23.07.2023 02.30 P.M. to 05.30 P.M.

Note:

Refer [Annexure-VI](#) of this Notification regarding tentative timeline for the recruitment process.

5. QUALIFICATIONS:**(A) AGE LIMIT (as on 01.07.2023):**

Sl. No.	Category of Applicants	Minimum Age	Maximum Age
1.	SCs, SC(A)s, STs, MBCs/DCs, BC(OBCM)s, BCMs and Destitute Widows of All Categories	18 Years	No maximum Age limit
2.	'OTHERS' [i.e. candidates not belonging to SCs, SC(A)s, STs, MBCs/DCs, BC(OBCM)s and BCMs]	18 Years	Should not have completed or will complete the age of 32 years.®

Note: @ In G.O (Ms).No.91, Human Resources Management (S) Department, dated 13.09.2021, the Maximum Age Limit prescribed for appointment by direct recruitment is enhanced by 2 year.[i.e., 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.

Note

"Others" [i.e., Applicants not belonging to SCs, SC(A)s, STs, MBCs/DCs, BC(OBCM)s, BCMs] who have put in five years and more of service in the State/Central Government are not eligible even if they are within the age limit. (For further details refer to [para 3\(F\) of "Instructions to Applicants"](#), Section 3(r) of Tamil Nadu Government Servants (Conditions of Service) Act, 2016)

AGE CONCESSION:**For Ex-servicemen (Others)**

- a) The maximum age limit for Ex-servicemen is 50 years.

(Section 63 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016 and as per G.O.(Ms)No.91, Human Resources Management (S) Department, dated 13.09.2021)

- b) The above mentioned age concession **will not apply** to the Ex-servicemen 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)

(B) EDUCATIONAL QUALIFICATION (as on 27.04.2023)

Applicants should possess the following or its equivalent qualification awarded by any University or Institution recognized by the University Grants Commission:

M.Sc., (Forensic Science) Degree and a Degree in the Subject, for the Group as shown in the Explanation below to which he/ she is appointed.

(OR)

M.Sc., Degree in the Subject for the Group as shown in the Explanation below to which he/ she is appointed.

Provided that other things being equal, preference shall be given to person who holds a degree in M.Sc., (Forensic Science).

Explanation: The Group, Division and subjects are specified below:-

S.No.	Group	Division/ Unit belonging to the Group	Subject
(1)	(2)	(3)	(4)
1.	Biology	(i) Anthropology	Zoology / Physical Anthropology
		(ii) Biology	Botany / Zoology / Bio-Chemistry / Micro-Biology / Bio-Technology/ Genetics
		(iii) Serology	
		(iv) DNA	
2.	Chemistry	(i) Chemistry	Chemistry(Organic/Inorganic/Physical/Analytical/ Polymer/Applied) / Environmental Toxicology
		(ii) Explosives	
		(iii) Narcotics	
		(iv) Toxicology	Chemistry(Organic/Inorganic/Physical/Analytical/ Polymer/Applied) / Bio-Chemistry / Environmental Toxicology
		(v) Prohibition	
		(vi) Excise	
3.	Physics	Physics	Physics
4.	Physics and Chemistry	Computer Forensic Science	Chemistry / Computer Science / Physics

Note: 1

- (i) The individuals who possess M.Sc degree in Computer Science must have acquired a basic degree in Physics or Chemistry as major subject;
- (ii) The individuals who possess M.Sc degree in Environmental Toxicology must have acquired a basic degree with Chemistry as major subject for appointment in Chemistry or Prohibition or Excise or Explosives or Narcotics Divisions/ Units;
- (iii) The individuals who possess M.Sc degree in Physics or Chemistry or Forensic Science with basic degree in Physics or Chemistry as major subject must have acquired a Diploma or Post-graduate Diploma in Computer Application or any subject related to Computer Science for appointment in Computer Forensic Science Division/Unit.

Note: 2

- i. The Post Graduate Degree qualification prescribed for this post should have been obtained by passing the required qualification in the order of studies, viz., SSLC+ HSC or its equivalent + UG Degree + PG Degree from the recognised Institutions as required under Section 25 of 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 Tamil Nadu Government Servants (Conditions of Service) Act, 2016)

- ii. Candidates claiming Equivalence of qualification to the prescribed qualification should submit evidence for Equivalence of qualification in the form of Government Order issued on or before the date of this Notification, failing which their application **will be summarily rejected after due process**. The Government Orders issued declaring Equivalence of prescribed qualification after the date of this Notification will not be accepted. (Refer also to the Disclaimer annexed of this Notification). The qualifications considered equivalent are indicated in **Annexure-I** to this notification.

[For further details regarding Equivalence of Qualification refer para 14(G) of the "[Instructions to Applicants](#)"]

(C) KNOWLEDGE IN TAMIL:-

Applicants should possess adequate knowledge in Tamil. [For further details refer para 10 of 'Instructions to Applicants']

(D) 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.

Standard of Vision	Form of Certificate of Physical Fitness
Standard I or Better Colour Blindness is considered as a disqualification for appointment to this post.	Form prescribed for 'Otherthan Executive and Ministerial posts'

6. (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) Note: Applicants who have already registered in One Time Online Registration System and within the validity period of 5 years are exempted.	Rs.150/-
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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 concession noted below at 6(B) of the Notification.	Rs.150/-
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Note:

- (i) Linking Aadhaar number with One Time Registration (OTR) is mandatory for applicants. [For further details refer para 2B 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. An applicant should make an online application separately for each and every examination for which he intends to appear. [Refer para 2C of 'Instructions to Applicants']

(B) EXAMINATION FEE CONCESSIONS:

	Category	Concession
(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:

- (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 will 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 candidature shall be rejected after due process and he 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.
- (v) Applicants are advised in their own interest, to keep an account of the number of times fee concession 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 in time along with the online application, will result in the rejection of application after due process. (For further details regarding examination fee concessions refer to Para 6 of 'Instructions to Applicants')

7. MODE OF PAYMENT OF EXAMINATION FEE:

- CBT Examination fee of Rs.150/- (Rupees One hundred and fifty only), is payable by online mode 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.
- Applicants have to pay the service charges also 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 of candidates with such modes of payment will be summarily rejected after due process.**
(For further details regarding the Examination fee, refer para. 2(J) of "Instructions to Applicants").

8. CONCESSIONS:

- (i) Concessions in the matter of age and / or examination fees allowed to SCs, SC(A)s, STs, MBCs/DCs, BCs(OBCM), BCMs, Destitute Widows and Ex-Servicemen are given in [para's 3D, 5 and 6 of the 'Instructions to Applicants'](#).
- (ii) Persons claiming concessions referred to above have to produce evidence for such claims 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 the Tamil Nadu Government Servants \(Conditions of Service\) Act, 2016](#)].

9. SCHEME OF EXAMINATION: OBJECTIVE TYPE (CBT METHOD) AND ORAL TEST:

Subject	Duration	Maximum marks	Minimum qualifying marks for selection	
			SCs, SC(A)s, STs, MBCs/DCs BC(OBCM)s & BCMs	Others
Paper – I:- (PG Degree Standard) (200 Questions) 1) Forensic Science (Code No.226) 2) Biology (Code No.227) 3) Chemistry (Code No.228) 4) Physics (Code No.229) 5) Computer Science (Code No.287)	3 Hours	300	153	204
Paper – II:- Part-A Tamil Eligibility Test (SSLC Standard) (100 questions/150 marks)		150 Note: <i>Minimum qualifying marks – 60 marks (40% of 150) Marks secured in Part-A of Paper-II will not be taken into account for ranking.</i>		
Part-B (General Studies) (Code No:003) (100 questions) (150 marks) General Studies (Degree Standard) – 75 questions and Aptitude and Mental Ability Test (SSLC Standard) - 25 questions iii. Interview and Records		150		
Total		510		

Note:-

- Answer sheets of Paper-I and Part B of Paper II of the candidates will be evaluated, only if the candidates secure minimum qualifying marks in Part-A of Paper-II.
- Marks secured in Paper-I and Part-B of Paper-II will only be considered for ranking.
- The Candidates who have obtained PG degree in Forensic science should appear in the subject Forensic Science in Paper-I.

- d) The candidates who have obtained their PG degree in the subject as shown in column (4) of the **Explanation** in the para 5(b) of the Notification should appear only in the subject under which it is grouped as shown in column (2), except P.G. Degree in Computer Science who should appear only in the subject Computer Science in Paper-I.
- e) **The questions for the subjects Forensic Science, Biology and Computer Science in Paper - I will be set in English only** and questions for the subjects Physics and Chemistry in Paper - I will be set both in English and Tamil. The questions for Part – B of Paper-II will be set both in English and Tamil.
- f) The candidate should appear for all the papers in the CBT Method examination for his / her answers to be evaluated and in case the candidate absents himself / herself for any of the papers, the papers attended will not be evaluated.
- g) If answers of a candidate for one paper is declared deemed not fit for valuation, the answers of the candidate for the remaining papers will not be evaluated.
- h) The syllabus is available in **Annexure-II** to this Notification and also available in the Commission's website www.tnpsc.gov.in
- i) Refer para 17 of "Instructions to Applicants" with regard to instructions to be followed while appearing for Competitive Examinations (CBT method) conducted by the Commission.
- j) **Instructions to candidates appearing for Computer Based Test (CBT)**

The candidate has to appear for the examination where he has been allotted to the examination. Change of centre or venue is not permitted. He has to carry the Hall Ticket (Admission Card) and same has to be produced at the examination venue. Each candidate will be assigned a Computer to take up the examination. Candidates will be provided with a user name and password to login the system. Necessary instructions will be displayed on screen. Kindly read all the instructions carefully.

- Candidates are not permitted to carry any electronic and / or communication device into the examination hall. They are advised not to bring the electronic gadgets with them.
- Computer Based online Test (CBT) is similar to paper pen shading test.
- In Computer Based online Test, questions with five options each will be displayed in the computer screen.
- Candidate can use only the mouse to select the correct answers and proceed with answering the questions.
- Candidates will be provided with a paper for doing rough work. After closure of the examination, rough sheet will be collected.

- Candidates have to click the best answer to the question. Candidates can proceed to the next question by clicking next button. Or previous question by clicking previous button.
- Candidates can review any question and the answers, and the answers can be changed at any time before the closure of examination. They can skip the questions also, if they desire so.
- The Question and optional answers will be shuffled randomly and displayed to the candidate.
- Candidate can submit their answers at any time during the examination.
- Once the answers are submitted, the candidates have no option to proceed further.
- If the candidate fails to submit their answers, the system will automatically submit the answers to the server, at the closure of the examination.
- No computer knowledge is required to take up the Computer Based online Test. Knowledge in Mouse operation would suffice to take up the Computer Based online Test.
- The question and answers can be zoomed to the required level for the candidates with visual impairment. Candidates have to sign the attendance sheet and affix thumb impression for verification of his/her identity. All the activities of the candidates with the mouse will be recorded in the server and a log file will be created for future reference. The Examination Hall will be under camera surveillance. To acquaint with the operation of Mouse and the CBT, the candidates can take up the mock test available in the Commissions website (www.tnpsc.gov.in) and they can practice the usage of mouse in the mock test. Mock test is similar to the CBT to be held on the day of examination. In the Mock test, all the steps are given similar to the CBT. Candidate can practice the mock test as many times as he/she likes.
- Answer sheet answered other than the subject mentioned by the candidate in the online application /specified in the Hall Ticket will be invalidated.
- Additional instruction for Computer Based Test (CBT) is provided at [Annexure V](#)

10. SELECTION PROCEDURE:

Selection will be made in two successive stages i.e., (i) Written Examination and (ii) Oral Test in the form of an interview. Based on the marks obtained by the candidates in the Written Examination and availability of vacancies for the particular **Group**, the 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 Oral Test following the rule of reservation

of appointment and availability of vacancies for the particular Group. A candidate who has not appeared in any one of the papers in Written Examination or Oral Test will not be considered for selection, even if he/she secures qualifying marks in the Written Examination or Oral Test. Final selection for appointment to this post will be done in the form of counselling 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 appointment and availability of vacancies for the particular Group.

(For further details refer to para 18(B) of the 'Instructions to Applicants').

11. CENTRES FOR EXAMINATION:

The CBT Examination will be held at 38 district centres.

Note:

1. Applicants should choose any two of the above centres for writing the examination. Applicants will be allotted a venue in one of these two centres.
2. Request for change of examination centre will not be permitted (For further details refer para 17(A)(ii) of "Instructions to Applicants")
3. The Commission reserves the right to increase or decrease the number of examination centres and to re-allot the applicants accordingly.
4. Applicants should appear for the CBT examinations / certificate verification at their own expenses.

12. (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 Organisations 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.** Candidates should produce No Objection Certificate when called for. [For further details refer para. 14 (P) of "Instructions to Applicants"]

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

- (i) Candidates who have declared pending criminal or disciplinary cases in their online application, must upload the copy of First Information Report (FIR) or memorandum of charges / show cause notice, as the case may be. Failure to upload such papers along with online application, 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 the relevant court orders and/or release orders or memorandum of proceedings, as the case may be, along with online application. Failure to upload such papers, shall result in rejection of candidature after due process.
- (iii) In case of any criminal case is filed / disciplinary action is taken against or conviction / punishment is imposed on a candidate after submission of the on-line application at any stage of the recruitment process before the completion of entire selection process such candidates should report this fact to the Commission in the next immediate stage. Failure to comply with these

instructions shall result in rejection of candidature after due process and debarment for a period of one year. [Para. 14 (S) & 2W of "Instructions to Applicants"] Any violation of instruction therein will result in rejection of application and forfeiture of his/her candidature after due process.

13. 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, PG Degree Certificate, Mark Sheets, Certificate from the Board or University or from the Institution, as the case may be, with a recording that he/she had studied **the entire duration of the respective course(s) through Tamil Medium of instruction.**
- (iii) Candidates must upload / produce documents as evidence of having studied in the Tamil Medium, all educational qualification upto the educational qualification prescribed.

Example:

If the prescribed educational qualification is Post Graduate Degree, then the candidate should have studied from the First Standard to SSLC, Higher Secondary Course, Degree and Post Graduate Degree through Tamil Medium of instruction. (Refer para 14 (R) of Instructions to Applicants).

- (iv) If no such document as evidence for 'PSTM' is available, a certificate from the Principal / Head Master / District Educational Officer / Chief Educational Officer / District Adi Dravidar Welfare Officer / Controller of Examinations / Head / Director of Educational Institution / Director / Joint Director of Technical Education / Registrar of Universities, as the case may be, in the prescribed format must be uploaded at time of submission of online application for each and every educational qualification up to the educational qualification prescribed.
- (v) Failure to upload / produce such documents at time of submission of online application as evidence for 'Persons Studied in Tamil Medium' for all educational qualification up to the educational qualification prescribed, shall result in the rejection of candidature after due process.
- (vi) **Documents uploaded at time of submission of online application 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 to para. 14 (R) of 2 (w) of the "Instructions to Applicants")

- (C) The selection for appointment to the 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 Madurai Bench of Madras High Court.
- (D) As per Sections 26 and 27(c) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016, reservation of appointment to "Destitute Widows" and "Ex- servicemen" will not apply to this recruitment.
- (E) This post is not included under the list of posts of Group-A & B category which are identified as suitable for 4% reservation to Differently Abled Persons vide G.O.(Ms).No.20, Welfare of Differently Abled (DAP 3.2) Department, dated 20.06.2018. Therefore, Differently Abled Persons are not suitable to apply for this post.
- (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, if any, should also be furnished to the Commission at the time of application. The details thereof, i.e. originals of the judgement / order / G.O. dropping further action in the departmental proceedings or any document that may prove the suitability of such applicants for appointment in such cases must be produced at the stage / time of certificate verification without fail. All such events that occur after the submission of application and till the date of his / her selection and appointment shall be reported to the Commission forthwith. Failure to report on the part of the applicant will be considered as suppression of material information and will attract suitable penal action. [For further details refer para 12 of the "Instructions to applicants"]
- (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 Classes 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 (Arunthathiyar) / Scheduled Tribe communities and possess community certificate as such, shall be considered as per their respective community.
- 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 G.O.(Ms.) No.90, Social Welfare and Nutritious Meal Programme [SW8(2)] Department, dated 22.12.2017 and 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)."

14. 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 fulfil 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 their satisfying the eligibility conditions. Mere admission to the written examination / certificate verification / oral test / 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) and (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 / www.tnpsc.gov.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) under Para 2(V) of "Instructions to applicants"]
- (c) **ONLINE CORRESPONDENCE :** Applicants requiring clarification, can contact the office of the Tamil Nadu Public Service Commission in person or over the Toll-Free No. **1800 419 0958** on all working days between 10.00 A.M and 5.45 P.M. Queries relating to One Time Registration/ online application may be sent to helpdesk@tnpscexams.in. Other queries may be sent to grievance.tnpsc@tn.gov.in [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 selection process, No information / clarification on the selection**

particulars / details will be furnished to any particulars / representation including petitions received under Right to Information Act, CM Cell Petitions, GRC would be furnished.

(f) MOBILE PHONES AND OTHER ARTICLES BANNED:

- (i) Except the permitted writing material (Black ball point pen), applicants are not allowed to bring cellular phones, electronic or any other type of calculators, watches and rings with inbuilt memory notes, recording devices either as a separate piece or part of something used by the applicant such as watch or ring etc., or any other electronic devices and non-electronic devices such as P&G design data book, mathematical and drawing instruments, log tables, stencils of maps, slide rules books, notes, loose sheets, rough sheets, hand bags etc., into the examination hall / room.
 - (ii) If they are found to be in possession of any such things or instruments, they will not be allowed to write the examination further, besides invalidation of answer paper and / or debarment. If it is considered necessary, they will be subjected to thorough physical search including frisking on the spot.
 - (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 to "Instructions to Applicants").
- (g) Applicants applying for the examination should ensure that they fulfil all the eligibility conditions for admission to the examination. Their admission at all the stages of examination for which they are admitted by the Commission will be purely provisional, subject to their satisfying the prescribed eligibility conditions. **If, on verification at any time before or after the CBT 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 summarily rejected after due process.**
- (h) If any of their claims is found to be incorrect, it will lead to rejection of their candidature after due process 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 to "Instructions to Applicants"](#) or as deemed fit by the Commission.
- (l) Tentative answer keys will be hosted in the Commission's website within 6 working 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 in 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 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 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, relevant particulars of all candidates who had applied for recruitment to the post shall be made available on the Commission's website. [Refer Para 17(D) (iv) to (xii) of "Instructions to Applicants"]

15. HOW TO APPLY:

- (1) Applicants should apply only through online mode in the Commission's websites www.tnpsc.gov.in or www.tnpscexams.in
- (2) "One Time Registration" 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 five years from the date of registration. All the applications should be submitted using the One Time Registration ID and password registered by the applicant.
- (3) To apply under One Time Registration System, 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.
- (4) No applicant is permitted to create more than one registration ID under One Time Registration System.
- (5) Applicants should enter the Unique ID and Password to view the already available information and update them. They shall not share the ID / PASSWORD 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 provides a separate dashboard to each applicant to facilitate maintenance of their own profile. Applicants who wish to apply for this recruitment shall click "Apply" against the recruitment notified in the Commission's website using the same USER ID and PASSWORD given for ONE TIME REGISTRATION.

- (7) Applicants should select the name of the post for which the applicant wishes to apply.
- (8) Online applications uploaded without the photograph, signature and the documents specified in the Annexure-III will be rejected after due process.

(9) **Online Application Correction Window:**

After the last date for submission of online application, the candidates are allowed to edit their online application during the Online Application Correction Window period as mentioned in Para 4 of the Notification (Important Date and Time). After the last date of Correction Window period, no modification is allowed in the online applications. The applications will be processed as per the details finally furnished by the candidates. It is the responsibility of the candidates and the Commission has no liability for subsequent rejection of application caused due to editing the details already submitted in online application. Request / representation addressed to the Commission for modification of claims in the online application, in any mode, will not be entertained.

(10) **PRINT OPTION:**

- a) After submitting the application, applicants can save / print their application in PDF format.
- b) On entering user ID and password, applicants can download their application and print, if required.
- c) Applicants need not send the printout of the online application or any other supporting documents to the Commission.

[For further details refer para 2 of "Instructions to Applicants"]

16. UPLOAD OF DOCUMENTS:

- I. In respect of recruitment to this post, the applicants shall mandatorily upload the certificates / documents (in support of all the claims made / details furnished in the online application) at the time of submission of online application itself. It shall be ensured that the online application shall not be submitted by the applicants without mandatorily uploading the required certificates.**

The applicants shall have the option of verifying the uploaded certificates through their OTR. If any of the credentials have wrongly been uploaded or not uploaded or if any modifications are to be done in the uploading of documents, the applicants shall be permitted to upload / re-upload the documents till two days prior to the date of hosting of hall tickets for this post (i.e. twelve days prior to the date of examination (CBT Method))

Refer Annexure III for the list of documents to be uploaded by the Applicants. For further details refer para 2W of "Instructions to Applicants"

- II. Intimation to the Candidates: Individual Communication regarding the Date and Time of Certificate Verification (CV), Oral Test (OT) and Counselling will not be sent to the applicants by Post, the details will be made available in the Commission's website. However, the Commission provides an additional facility to the candidates by informing the above said date and time of Certificate Verification and Oral Test etc., via SMS**

and e-mail through their registered Mobile Number and email ID. Candidates are directed to watch the Commission's website periodically for all updates and intimations. Commission is not responsible for failure / delay in delivery of SMS / email to the candidates due to any reason including technical issues. Any representation from the candidates for non-receipt of SMS or e-mail will receive no attention.

17. LAST DATE FOR SUBMISSION OF APPLICATION:

Online application can be edited/ submitted upto **26.05.2023** till 11.59 p.m., after which the link will be disabled. Online application correction window period is from 02.06.2023 - 12.01 AM to 04.06.2023 - 11.59 PM. The applicants are permitted to upload / re-upload the documents upto **10.07.2023** 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 on 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 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.

Qualification considered as Equivalent to the Degree as prescribed in the Rule	G.O. in which ordered
Zoology (Degree)	
B.Sc (Animal Science and Bio-Technology) in the academic year of 2002-2003, B.Sc (Advanced Zoology and Bio-Technology) in the Academic year of 2005-2006 and B.Sc (Zoology with Biotechnology) in the academic year of 2008-2009 is equivalent to B.Sc (Zoology).	G.O.(Ms) No.104, Higher Education (H2) Department, dated 22.06.2012.
B.Sc., Environmental Zoology awarded by Bharathidasan University is equivalent to B.Sc Zoology.	G.O.(Ms) No.58, Higher Education (K2) Department, dated 15.04.2013.
B.Sc Advanced Zoology and Bio-Technology awarded by University of Madras is equivalent to B.Sc Zoology.	G.O.(Ms) No.117, Higher Education (K2) Department, dated 02.07.2013.
B.Sc Zoology Specialization in Bio-Technology offered by Holy Cross College (Autonomous), Trichy awarded by Bharathidasan University is equivalent to B.Sc Zoology, University of Madras.	G.O.(Ms) No.270, Higher Education (K2) Department, dated 31.12.2013.
B.Sc Applied Zoology semester course awarded by Madurai Kamaraj University is equivalent to B.Sc Zoology semester course.	
B.Sc (Special) Zoology (Special in Biotechnology) awarded by Lady Doak College affiliated to Madurai Kamaraj University is equivalent to B.Sc Zoology.	G.O.(Ms) No.27, Higher Education (K2) Department, dated 13.02.2014.
B.Sc Advanced Zoology and Bio-technology awarded by Manonmaniam Sundaranar University till 2009-2010 (subsequently the nomenclature of the said course has been changed as B.Sc Zoology) is equivalent to B.Sc Zoology.	
B.Sc Zoology with Biotechnology awarded by A.V.V.M. Sri Pushpam College (Autonomous), Bharathidasan University is equivalent to B.Sc Zoology.	G.O.(Ms) No.112, Higher Education (K2) Department, dated 18.07.2014
B.Sc Advanced Zoology and Biotechnology course awarded by Vivekananda College affiliated to Madurai Kamaraj University is equivalent to B.Sc Zoology.	G.O.(Ms) No.116, Higher Education (K2) Department, dated 22.07.2014.
B.Sc Zoology (Vocational) awarded by Mother Teresa Women's University is equivalent to B.Sc Zoology	G.O.(Ms) No.72, Higher Education (K2) Department, dated 20.04.2015.
B.Sc Advanced Zoology and Biotechnology (Sericulture) awarded by Manonmaniam Sundaranar University is equivalent to B.Sc Zoology.	
B.Sc Zoology (vocational Stream Sericulture) awarded by Periyar University is equivalent to B.Sc Zoology.	G.O.(Ms) No.232, Higher Education (K2) Department, dated 18.11.2016.
B.Sc Zoology (Animal Science and Animal Biotechnology) degree course offered by Seethalakshmi Ramaswami College (Autonomous) Tiruchirappalli affiliated to Bharathidasan University is equivalent to B.Sc Zoology.	G.O.(Ms) No.33, Higher Education (K2) Department, dated 12.02.2018.
M.Sc Zoology 5 year integrated courses offered by Annamalai University is equivalent to corresponding U.G degree	G.O.(Ms) No.75, Personnel and Administrative Reforms (M) Department, dated 30.06.2011.

பாரதியார் பல்கலைக்கழகத்தால் வழங்கப்படும் நுண்ணுயிரியல் பட்டப்படிப்பு (விலங்கியல் பட்ட படிப்புக்கு (B.Sc. Zoology) இணையானது. B.Sc Micro-Biology),	அரசு ஆணை நிலை எண்.254, பணியாளர் மற்றும் நிர்வாகச் சீர்திருத்தத் (ஆர்) துறை, நாள் 22.10.1998
B.Sc (Zoology) with allied subject viz., Vocational - Industrial Micro Biology awarded by Periyar University, Salem is equivalent to B.Sc (Zoology)	G.O.(Ms) No.58, School Education (CC4(2) Department, dated 01.03.2016
Zoology (PG Degree)	
பாரதியார் பல்கலைக்கழகத்தால் வழங்கப்படும் விலங்கின அறிவியல் பட்டமேற்படிப்பு (M.Sc. Animal Science), விலங்கியல் பட்டமேற்படிப்புக்கு (M.Sc. Zoology) இணையானது.	அரசு ஆணை நிலை எண்.254, பணியாளர் மற்றும் நிர்வாகச் சீர்திருத்தத் (ஆர்) துறை, நாள் 22.10.1998
M.Sc Zoology (Specialization in Biotechnology) awarded by Lady Doak College affiliated to Madurai Kamaraj University is equivalent to M.Sc Zoology.	G.O.(Ms) No.27, Higher Education (K2) Department, dated 13.02.2014.
M.Sc Marine Biology & Oceanography (with B.Sc Zoology as major) awarded by Annamalai University is equivalent to M.Sc Zoology.	G.O.(Ms) No.116, Higher Education (K2) Department, dated 22.07.2014
M.Sc degree in Zoology (Biotechnology) awarded by Vivekananda College (Autonomous) affiliated to Madurai Kamaraj University is equivalent to M.Sc Zoology.	
Botany (Degree)	
B.Sc Plant Biology and Plant Bio-technology awarded by Bharathiar University is equivalent to B.Sc Botany.	G.O.(ID) No.268, Higher Education (H1) Department, dated 20.09.2012
B.Sc Plant Biology and Plant Bio-technology awarded by Madras University is equivalent to B.Sc Botany.	G.O.(Ms) No.117, Higher Education (K2) Department, dated 02.07.2013.
B.Sc Botany (Vocational Bio-Technology) awarded by Periyar University is equivalent to B.Sc Botany.	G.O.(Ms) No.112, Higher Education (K2) Department, dated 18.07.2014.
B.Sc (Special) in Botany (Specialisation in Industrial Microbiology) awarded by Lady Doak College, Madurai Kamaraj University is equivalent to B.Sc Botany.	
(i) B.Sc Plant Biology & Plant Biotechnology awarded by Bharathidasan University and (ii) B.Sc Plant Biology & Plant Biotechnology (offered by St.Joseph's College (Autonomous), Trichy affiliated to Bharathidasan University is equivalent to B.Sc Botany.	G.O.(Ms) No.171, Higher Education (K2) Department, dated 30.09.2014
B.Sc Plant Biology and Plant Biotechnology awarded by St.Xavier's College (Autonomous), Palayamkottai affiliated to Manonmaniam Sundaranar University is equivalent to B.Sc Botany.	G.O.(Ms) No.72, Higher Education (K2) Department, dated 20.04.2015.
பாரதியார் பல்கலைக்கழகத்தால் வழங்கப்படும் நுண்ணுயிரியல் பட்டப்படிப்பு (B.Sc Micro-Biology), தாவரவியல் பட்ட படிப்புக்கு (B.Sc. Biology) இணையானது.	அரசு ஆணை நிலை எண்.254, பணியாளர் மற்றும் நிர்வாகச் சீர்திருத்தத் (ஆர்) துறை, நாள் 22.10.1998
Botany (PG Degree)	
பாரதியார் பல்கலைக்கழகத்தால் வழங்கப்படும் தாவர அறிவியல் பட்டமேற்படிப்பு (M.Sc Micro-Biology), தாவரவியல் பட்டமேற்படிப்புக்கு (M.Sc. Biology) இணையானது.	அரசு ஆணை நிலை எண்.254, பணியாளர் மற்றும் நிர்வாகச் சீர்திருத்தத் (ஆர்) துறை, நாள் 22.10.1998
M.Sc Plant Science degree course awarded by University of Madras is equivalent to M.Sc Botany	G.O.(Ms) No.185, Higher Education (K2) Department, dated 26.09.2013.

M.Sc Applied Plant Science awarded by University of Madras is equivalent to M.Sc Botany.	G.O.(Ms) No.270, Higher Education (K2) Department, dated 31.12.2013
M.Sc Plant Biology & Plant Biotechnology awarded by St.Joseph College (Autonomous) affiliated to Bharathidasan university is equivalent to M.Sc Botany. M.Sc Plant Biotechnology awarded by Bharathidasan University is equivalent to M.Sc Botany. M.Sc Plant Science and Technology (Five year Integrated) programme of Annamalai University is equivalent to M.Sc Botany. M.Sc Botany (specialization in Microbiology) awarded by American College affiliated to Madurai Kamaraj University is equivalent to M.Sc Botany.	G.O.(Ms) No.116, Higher Education (K2) Department, dated 22.07.2014.
M.Sc Botany (Five year Integrated) awarded by Annamalai University is equivalent to M.Sc Botany.	G.O.(Ms) No.171, Higher Education (K2) Department, dated 30.09.2014
M.Sc Applied Botany awarded by Periyar University as equivalent to M.Sc Botany.	G.O.(Ms) No.72, Higher Education (K2) Department, dated 20.04.2015.
M.Sc Botany (Specialization in Plant Bio-Technology) offered by SFR (Standard Fire Works Rajaratnam) College (Autonomous), Sivakasi affiliated to Madurai Kamaraj University is equivalent to M.Sc Botany.	G.O.(Ms) No.123, Higher Education (K2) Department, dated 25.06.2018.
Bio-Technology (Degree)	
M.Sc Biotechnology, 5 year integrated course offered by Annamalai University is equivalent to corresponding U.G degree	G.O.(Ms) No.75, Personnel and Administrative Reforms (M) Department, dated 30.06.2011.
Micro-Biology (Degree)	
M.Sc Microbiology, 5 year integrated course offered by Annamalai University is equivalent to corresponding U.G degree.	G.O.(Ms) No.75, Personnel and Administrative Reforms (M) Department, dated 30.06.2011.
Micro-Biology (PG Degree)	
M.Sc Applied Micro-Biology awarded by university of Madras is equivalent to M.Sc Micro-Biology.	G.O.(Ms) No.27, Higher Education (K2) Department, dated 13.02.2014.
M.Sc Applied Microbiology awarded by Periyar University is equivalent to M.Sc Microbiology.	G.O.(Ms) No.112, Higher Education (K2) Department, dated 18.07.2014
M.Sc Industrial Microbiology awarded by University of Madras is equivalent to M.Sc Microbiology.	G.O.(Ms) No.37, Higher Education (K2) Department, dated 17.02.2016.
i) M.Sc Applied Microbiology awarded by Bharathiar University is equivalent to M.Sc Microbiology. ii) M.Sc Applied Microbiology awarded by Thiruvalluvar University is equivalent to M.Sc Microbiology. iii) M.Sc Applied Microbiology awarded by Periyar University is equivalent to M.Sc Microbiology	G.O.(Ms) No.65, Higher Education (K2) Department, dated 24.04.2019.

Chemistry (Degree)	
B.Sc (Special) Chemistry with Cheminformatics awarded by Lady Doak College affiliated to Madurai Kamaraj University is equivalent to B.Sc Chemistry.	G.O.(Ms) No.232, Higher Education (K2) Department, dated 18.11.2016.
B.Sc (Special) Chemistry degree awarded by Lady Doak College (Autonomous) affiliated to Madurai Kamaraj University is equivalent to B.Sc Chemistry. B.Sc (Special) Chemistry semester Degree course of American College (Autonomous), Madurai affiliated to Madurai Kamaraj University is equivalent to B.Sc Chemistry.	G.O.(Ms) No.323, Higher Education (K2) Department, dated 13.11.2017.
B.Sc Nanoscience degree offered by Sarah Tucker College (Autonomous), Tirunelveli affiliated to Manonmaniam Sundaranar University is equivalent to B.Sc Chemistry. B.Sc Industrial Chemistry (Vocational Stream) awarded by Periyar University is equivalent to B.Sc Chemistry.	G.O.(Ms) No.123, Higher Education (K2) Department, dated 25.06.2018.
B.Sc Applied Chemistry awarded by Annamalai University is equivalent to B.Sc Chemistry. B.Sc., B.Ed (4 year Integrated Programme) awarded by Periyar Maniammai Institute of Science and Technology (Deemed to be University) is equivalent to B.Sc Chemistry.	G.O.(Ms) No.65, Higher Education (K2) Department, dated 24.04.2019
M.Sc Chemistry 5 year integrated courses offered by Annamalai University is equivalent to corresponding U.G degree	G.O.(Ms) No.75, Personnel and Administrative Reforms (M) Department, dated 30.06.2011.
Chemistry (PG Degree)	
காந்திகிராமம் ஊரக நிலையத்தால் (நிகர் பல்கலைக் கழகம்) வழங்கப்படும் செயல்முறை வேதியியல் முதுநிலை பட்டப்படிப்பு (M.Sc. Applied Chemistry) பிற பல்கலைக் கழகங்களால் வழங்கப்படும் வேதியியல் (M.Sc Chemistry) முதுநிலை பட்டப் படிப்புக்கு இணையானது.	அரசாணை நிலை எண்.133, பணியாளர் மற்றும் நிர்வாக சீர்திருத்தத் (ஆர்) துறை, நாள் 28.07.1999
அண்ணா பல்கலைக் கழகத்தால் வழங்கப்படும் செயல்முறை சார்ந்த வேதியியல் முதுநிலைப் பட்டப்படிப்பினை (M.Sc. Applied Chemistry) வேதியியல் முதுநிலைப் பட்டப்படிப்பிற்கு (M.Sc Chemistry) இணையானது.	அரசாணை நிலை எண்.164, பணியாளர் மற்றும் நிர்வாக சீர்திருத்தத் (ஆர்) துறை, நாள் 21.08.2000
M.Sc Industrial Chemistry awarded by Bharathidasan University, Tiruchirappalli and Alagappa University, Karaikudi is equivalent to M.Sc Chemistry.	G.O.(Ms) No.24, Higher Education (K2) Department, dated 13.02.2013.
M.Sc (Chemical Sciences) Degree awarded by Pondicherry University is equivalent to M.Sc Chemistry.	G.O.(Ms) No.323, Higher Education (K2) Department, dated 13.11.2017.
M.Sc (Nanoscience and Technology Chemistry Based) awarded by Bharathiar University is equivalent to M.Sc Chemistry.	G.O.(Ms) No.55, Higher Education (K2) Department, dated 15.03.2018.
M.Sc Chemistry Specialization in Green Chemistry awarded by Manonmaniam Sundaranar University is equivalent to M.Sc Chemistry.	G.O.(Ms) No.65, Higher Education (K2) Department, dated 24.04.2019.
Physics (Degree)	
B.Sc Physics with Specialization in Electronics awarded by Bharathidasan University is equivalent to B.Sc Physics.	G.O.(Ms) No.270, Higher Education (K2) Department, dated 31.12.2013.

B.Sc., (Special) Physics with Computer Application awarded by Madurai Kamaraj University is equivalent to B.Sc Physics. B.Sc Physics with Computer Applications awarded by Bharathiar University is equivalent to B.Sc Physics.	G.O.(Ms) No.27, Higher Education (K2) Department, dated 13.02.2014.
B.Sc Physics (Electronics Communication and Computer Applications) awarded by Vivekanada College (Autonomous), Madurai Kamaraj University is equivalent to B.Sc Physics.	G.O.(Ms) No.27, Higher Education (K2) Department, dated 13.02.2014.
B.Sc (Spl) Physics awarded by Lady Doak College (Autonomous) affiliated to Madurai Kamaraj University is equivalent to B.Sc Physics. (i) B.Sc Physics with Specialization in PC Hardware and Networking awarded by Lady Doak College affiliated to Madurai Kamaraj University, (ii) B.Sc (Special) Physics with Computer Applications awarded by Madurai Kamaraj University are equivalent to B.Sc Physics.	G.O.(Ms) No.116, Higher Education (K2) Department, dated 22.07.2014
B.Sc (Hons) Physics Degree course of Hansraj College affiliated to University of Delhi is equivalent to B.Sc Physics Degree course.	G.O.(Ms) No.323, Higher Education (K2) Department, dated 13.11.2017.
B.Sc Physics (Computer Application) (Vocational Stream) awarded by Periyar University is equivalent to B.Sc Physics major course of different universities in Tamil Nadu.	G.O.(Ms) No.123, Higher Education (K2) Department, dated 25.06.2018.
M.Sc Physics 5 year integrated courses offered by Annamalai University is equivalent to corresponding U.G degree	G.O.(Ms) No.75, Personnel and Administrative Reforms (M) Department, dated 30.06.2011.
Physics (PG Degree)	
காந்திகிராமம் ஊரக நிலையத்தால் (நிகர் பல்கலைக் கழகம்) வழங்கப்படும் செயல்முறை இயற்பியல் முதுநிலை பட்டப்படிப்பு (M.Sc. Applied Physics) பிற பல்கலைக் கழகங்களால் வழங்கப்படும் வேதியியல் (M.Sc Physics) முதுநிலை பட்டப் படிப்புக்கு இணையானது.	அரசாணை நிலை எண்.133, பணியாளர் மற்றும் நிர்வாக சீர்திருத்தத் (ஆர்) துறை, நாள் 28.07.1999
அண்ணா பல்கலைக் கழகத்தால் வழங்கும் எம்.எஸ்.சி மெட்டிரியல் சயின்ஸ் என்ற முதுநிலை பட்டத்தை எம்.எஸ்.சி (இயற்பியல்) தகுதி படைத்த கல்வி என நிர்ணயிக்கப்பட்டுள்ள பதவிகளுக்கான நியமனத்தில் சமமாக கருதுதல்.	G.O.(Ms.)No.244, Higher Education (J1) Department, dated 05.12.2016
M.Sc (Applied Physics) Degree awarded by National Institute of Technology, Trichy is equivalent to M.Sc Physics.	G.O.(Ms) No.37, Higher Education (J1) Department, dated 28.02.2019.
M.Sc Physics (Five years Integrated) awarded by Bharathidasan University is equivalent to M.Sc Physics (two years programme) M.Sc Physics (Five years Integrated) awarded by Annamalai University is equivalent to M.Sc Physics (two years programme)	G.O.(Ms) No.65, Higher Education (K2) Department, dated 24.04.2019.
Computer Science (PG Degree)	
i) M.Sc (Software Science) (5 years Integrated) awarded by Periyar University is equivalent to M.Sc Computer Science with B.Sc in Computer Science. ii) M.Sc Applied Science (Computer Technology) (5 years Integrated) awarded by Periyar University is equivalent to M.Sc (Computer Science) with B.Sc Computer Science.	G.O.(Ms) No.55, Higher Education (K2) Department, dated 15.03.2018.
M.SC Software Engineering awarded by Manonmaniam Sundaranar University is equivalent to M.Sc Computer Science.	G.O.(Ms) No.194, Higher Education (K2) Department, dated 14.08.2018.

ANNEXURE-II
PAPER-I
SYLLABUS
FORENSIC SCIENCE (PG DEGREE STANDARD)

Code No. 226

UNIT- I:

Forensic Science - Definition - Development of Forensic science in India - Organization and functions of Forensic laboratory

UNIT- II:

Physical evidences - their classification and significance - Locard's Principle of exchange- class and individual characteristics.

Crime Scene examinations - documentation of crime scene- recognition, collection, preservation and transportation of physical evidence for laboratory examinations.

Fundamentals of photography - crime scene photography

UNIT - III:

Foot and tyre impressions - Walking pattern - Recording and examination of foot prints and tyreprints.

Finger prints - Fundamental principles - Finger print patterns - classification of finger prints - methods of developments of latent finger prints.

UNIT- IV :

Tool marks - identification - restoration of filed off/erased marks - Detection of counterfeit coins and currency.

Fire arms, Bullet and cartridge case identification - pellets and wads - Range of firing.

UNIT- V :

Fire and arson - Natural fires - Arson - Accelerants - Combustible properties of flammable substances.

Explosives - Classification of explosive substances - Combustion, detonation and explosion - Effect of explosion - Military and industrial explosives - Improvised explosive devices - Explosive residues -Residues examination.

UNIT- VI :

Questioned documents, identification of hand writing, type writer and forged signatures - Erasures and alterations on documents and their detection

UNIT - VII :

Broken glass - glass fractures - direction of force - backward fragmentation - comparison of glass fragments.

Forensic examination of soil and paints, Theory and practice of polygraph and voice identification

UNIT- VIII:

Toxicology - classification and mode of action of poisons - narcotic drugs - alcoholic beverages - isolation and identification of poisons, drugs and alcohol

UNIT- IX :

Examination of biological fluids - blood, seminal and saliva stains - forensic characterization of the above stains - stain patterns of the blood, Examination of fibres, hair, bones, teeth and skull - Fundamental of DNA typing.

UNIT- X :

Instrumental methods of organic analysis - principles of chromatography, spectrophotometry, and mass spectrometry.

Instrumental methods of inorganic analysis - Principles of emission and atomic absorption spectra - X-ray diffraction - Neutron activation analysis.

PAPER-I
SYLLABUS
BIOLOGY (PG DEGREE STANDARD)

Code No.227

UNIT-I :

General classification and salient features of Invertebrata and vertebrata – Metamorphosis and regeneration in lower forms of animal – Economic importance of oyster, honey bee, Silkworm – Agricultural pests and their control – Larval forms of crustacean and Echinodermata - Classification and identification of poisonous and nonpoisonous snakes and types of snake venom. Evolution: Theories, types and factors influencing evolution Evidences of human evolution – Human genetics: Pedigree analysis, lod score for linkage testing, Karyotyping, Significance of human genome project.

UNIT- II :

Structural organization and importance of animal cells - Muscle cells – Cardiac, Striated and non- striated muscle cells– HepatocytesNeurons, Nephrons, Karatocytes, immune and endocrine cells. Functions of hormones and their receptors – Impact of sex hormones in human behavior. Chronobiology: importance of circadian rhythm and human biological clock – DNA analysis in paternity testing – Cell counting of WBC and RBC.Functions and disorders of Digestive, Respiratory, Cardiovascular Nervous, Muscular, Excretory, Reproductive and Integumentary systems. Developmental biology: production of sperm and egg, Fertilization – Zygote, Cleavage. Blastulation, gastrulation and formation of germ layers in animals and organogenesis –determination of sex by Amniocentosis. Entomology: Insect classification – Beneficial and harmful insects – Role of insects in decomposition of decayed materials – Exploiting insect olfaction in forensic studies – Importance of ants, blowflies and beetles in forensic investigation.

UNIT – III :

Fundamentals of Anthropology

Meaning – Scope and branches of Anthropology – Basic concepts / principles of Physical orBiological Anthropology – Anthropology and its relation with other Social, Biological and Medical Sciences – Analysis of kinship – Health and Ethno medicine – Population dynamics with special reference to Tamil Nadu – Applied and developmental Anthropology – Tribal, Rural and Urban Communities

Research Methodology- Anthropological research – Fieldwork Tradition, Methods and Techniques, Qualitative and Quantitative research Methods, Observation, Case study, Ethnography, Life histories and Personal documents, Visual Anthropology, Genealogical Methods.

UNIT – IV :

Physical / Biological Anthropology

Position of human being in the animal kingdom – Human Evolution - Theories of human evaluation, Human growth and development – Factors affecting for growth, Demographic growth variation, Sex and Gender – Bio-cultural dimensions, Race and Ethnicity - Major racial groups of India, Ethnicity and contemporary relevance – Applied physical anthropology - Anthropometry and its uses, DNA Technology, genetic diseases, Forensic Anthropology and criminal investigations.

UNIT-V :

Chemistry of Biomolecules

Carbohydrates – Structure and functions [Mono,Di &Polysaccharides] – Disorders of CarbohydrateMetabolism and its laboratory diagnosis.

Proteins and Amino acids – Types, structure and function.

Lipids – Types structure and functions. Sterols –Cholesterol.Disorders of lipid metabolism and itslaboratory diagnosis.

Nucleic acid – DNA – Types, structure and functionsRNA – Types, structure and functions

Enzymes – Classification and properties of enzymes, Coenzymes, Marker enzymes

Hormones- Classes and functions of hormones

UNIT-VI :**Biochemical and Molecular Techniques**

Blood and its composition – WBC, RBC and Platelets. Blood clotting, Blood grouping, Crossmatching and compatibility tests, Blood smear analysis, HLA typing.

Antigens and Immunoglobins – Classes and functions. Collection and Preservation of Biological fluids [Blood, Urine, CSF, Amniotic fluid, Semen, Sputum and Saliva]. Normal and Abnormal constituents of Biological fluids.

Isolation of DNA from blood sample, Agarose gel Electrophoresis, PCR, DNA Sequencing, RAPD, RFLP, DNA Finger printing -STR Typing.

Isolation of Proteins from blood sample, SDS PAGE, RIA, ELISA, FISH. Ames test, Comet Assay.

UNIT- VII :

Origin of Microbiology, Contribution of Louis Pasteur, Alexander Flemming, Waksman, Robert Koch. Microscopy; Brightfield, Phase contrast, Fluorescent, Electron Microscopy and Confocal Microscopy. Staining techniques. Cultivation of Microorganisms, Preparation of culture media, Sterilization techniques, Preservation techniques, Identification of Microorganisms; Conventional and Molecular techniques.

Host parasite interaction, Microbial diseases, Nosocomial infection, Zoonotic diseases, Food borne diseases, Microbial diseases of medical negligence. Bioterrorism and Biohazards.

UNIT- VIII :

DNA profiling, Genetic code, Mutation and DNA polymorphism, Microbial nanotechnology, Infectomics. Biodeterioration of fibres and leather, Bioremediation, Bioconversion - Biogas technology, Environmental microbiology - Microbiology of air, water and soil. Role of microbes in production of fermentation products.

Production of antibiotics, Enzymes, Pigments, Insulin, Interferon, Monoclonal antibodies and Growth Hormones. Recombinants DNA technology.

Microbial biofertilizers, Microbial biopesticides and Microbial degradation of synthetic pesticides.

UNIT – IX :

Plant Diversity, Cell Biology – Taxonomy and Paleo botany, Plant Physiology Plant biochemistry, Plant pathology

Plant Diversity – Algae, Fungi, Bryophyte, pteridophytes, Gymnosperms, lichen.

Cell Biology – Cell structure and functions

Taxonomy – Principals of Taxonomy and phylogeny of angiosperms, Nomenclature of plants, Monocotyledons and dicotyledons

Paleo botany – Fossil plants

Plant Physiology and Plant biochemistry – Ezymes, Protein, Aminoacid and photo synthesis, respiration

Plant pathology – Bacterial, Fungal and Viral Diseases of Plants.

UNIT- X :

Plant Anatomy, Embryology, Genetics, Economic Botany, Ethnobotany, Environmental Botany **Plant Anatomy** – Cell cycle, Cell division, Tissue system and secondary growth, Fruit wall and seedcoat.

Embryology – Embryogenesis, Polyembryony, Double fertilization, Somatic Embryogenesis and Pollen grains.

Genetics – Mendelism, Linkage, crossing-over, chromosome mapping, RAPD and RFLP Techniques.

Economic Botany – Wood and Wood products, Fatty Oils and Vegetable Oils. Tannins and Dyes.

Ethnobotany – Ethno Medicinal Plants, Narcotic Plants.

Environmental Botany – Plant adaptations, Hydrophytes, Xerophytes, Mesophytes, Epiphytes, Halophytes and Mangrove vegetation. Ecological Indicators, Forest and Forest Management.

PAPER-I
SYLLABUS
CHEMISTRY (PG DEGREE STANDARD)

Code No.228

Unit – I : Quantum Chemistry: Quantum mechanical postulates – Eigen value and function – the Schrodinger wave equation – elementary applications of Schrodinger's equation – the particle in a box (one, two and three dimensional cases) – particle in a ring. The harmonic oscillator – the rigid rotor – the hydrogen atom – the Schrodinger equation for hydrogen atom – angular momentum – term symbols – Approximation methods – perturbation and variation method – application to hydrogen and helium atoms – R.S. coupling and term symbols for atoms in the ground state – Slater orbital and HF – SCF methods Born open – Heimer approximation – valence bond theory for hydrogen molecule – LACO – MO theory for di and polyatomic molecules – concept of hybridization – Huckel theory for conjugated molecules (ethylene butadiene and benzene) – semi empirical methods.

Unit – II: Chemical Kinetics and Thermodynamics: Rate laws – rate constant for first, second, third and zero order reaction – Half life period Temperature dependence on rate – 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.

Partial molar properties – Chemical Potential – Partial molar volume and molar heat content – significance and determination – Thermodynamics of real gases - gas mixture – fugacity definition – determination of fugacity variation of fugacity with temperature and pressure – concept of thermodynamic probability – distribution of distinguishable and non – distinguishable particles. Maxwell – Boltzmann, Fermi-Dirac and Bose Einstein statistics – modes of contribution to energy – partition function – translational, vibrational and rotational partition functions for mono, diatomic and polyatomic ideal gases.

Unit – III : Nuclear Chemistry : Nuclear properties – nuclear spin and moments, origin of nuclear forces, salient features of liquid drop and shell models. Types of radioactive decay: Orbital electron capture, nuclear isomerism, internal conversion, detection and determination of activity by cloud chamber, nuclear emulsion, bubble chamber, G.M., Scintillation and Cherenkov counters; Accelerators – Linear and Cyclotron. Nuclear reaction: Types, reaction cross section, Q-value, threshold energy, compound nucleus theory: nuclear fission and fusion reactions as energy sources: photonuclear and thermo nuclear reactions. Components of nuclear reactor – the fast breeder reactor – nuclear reactors in India. Radioactive tracer – principles of tracer technique – application of tracers in the study of reaction mechanism and in analytical chemistry – neutron activation analysis, isotope dilution analysis – radio chemical determination of age of geological specimen. Tracers as applied to industry and agriculture – radioactive tracer in the diagnosis and treatment in the field of medicine.

Unit- IV: Electrochemistry : Mean ionic activity and activity coefficient: concept of ionic strength, Debye-Huckel theory of strong electrolytes – activity coefficient of strong electrolytes-determination – Debye Huckel limiting law at appreciable concentration of electrolytes – Debye Huckel Bronsted equation – qualitative and quantitative verification. PH & PKa of acids and bases – determents and buffer actions conductometric and potentiometric titrations Mechanism of electrode reaction – polarization and overpotential. Corrosion and passivation of metals: Pourbaix and Evans diagrams – fuel cells – electrodeposition – principle, applications and anticorrosion techniques.

Unit – V : Spectroscopy Electromagnetic radiations and quantization of energy: Rotational spectra of diatomic molecules – isotopic substitution and rotational constants – vibrations spectra of linear symmetric, linear asymmetric and bent tri atomic 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 – VI : Organometallic compounds, Bio inorganic chemistry and Polymers: Metal carbonyls, Metal nitrosyls, metal alkyl, alkenes and arene compounds – organic metallic compounds in catalysis – Chemistry of porphyrins – chlorophyll hemoglobin, myoglobin, ferredoxin, rubredoxin and cytochromes. Preparation and uses of polyethylene and uses of polyethylene, poly butylenes PVC, Nylon – Ziegler – Natta catalysts – Inorganic Polymers such as silicones, Borazines and phosphonitrilic compounds.

Unit – VII : Organic reaction mechanism and Stereochemistry: General methods of reaction mechanisms (Kinetic and non kinetic) SN 1, SN 2 mechanisms – addition substitution, elimination and rearrangements – free radical mechanism – aromatic substitution – formation and stability of reactive intermediates – The arenium ion mechanism. Orientation and reactivity (ortho, meta and para directing groups). Typical reactions to be studied – nitration, halogenations, alkylation, acylation and diazonium coupling. Formylation – Gatterman, Gatterman-Koch, Vilsmeier-

Hack & Reimer-Tieman, Ziegler alkylation, Chichibabin, Aldol condensation – Claisen condensation – Perkin, Cannizzaro, Fridel Craft, Favorski, Stork enamine – Michael addition – Baeyer – villiger – Chichibabin. Pericyclic reactions – classification and examples woodward and Hoffmann rules – use of OsO₄, diborane, NaBH₄, LiAlH₄ in organic synthesis. Photo Chemistry of ketones, photo oxygenation, photo reduction, photocycloaddition, Paterno - Buchi reaction, Di-pi-methane rearrangement. Cis-trans isomerisation, Barton reaction and photo-Fries reaction.

Elements of symmetry – optical and geometric isomerism E.Z and R.S notation's – Conformational analysis simple cyclic and acyclic systems – Effects of conformation on reactivity in acyclic compounds and cyclohexanes. Relative stabilities of cis – trans isomers.

Unit – VIII: Natural Products and Drugs : Carbohydrates - Classification – configuration and general reactions of monosaccharide's – Chemistry of glucose, fructose, sucrose and maltose, important compounds in Chemistry – Dyes – azo triphenylmethane and phthalein groups – indigo – alizarin vitamins, hormones, proteins – structural determination –Terpenoids – classification, isolation, general properties of citral, α -Terpineol, menthol, champhor. Alkaloids and Flavonoids – Nomenclature and classification general properties – colour reactions, structure for Nicotine, atropine, cocaine, quinine, morphine and Heroin.

Drugs: Pharmacological actions, therapeutic uses and screening tests of the following drugs – opium alkaloids – morphine, heroin, antibiotics – synthetic analgesics – pethidine, methadone – barbiturates – tranquilizers – phenothiazines, meprobamate, diazepam – stimulants – amphetamines, imipramines – hallucinogens – cannabinoids, LSD – hyhpnosis and sedatives – antipyretics, analgesic, antiseptics and disinfectants – Alcohol - manufacture of ethyl alcohol and liquors – constituents of liquors – estimation of alcohol contents in liquors – denaturation, denaturants, industrial alcohol and power alcohol.

Unit - IX : Poisons and Pesticides : Definition of poisons – Mode of action of poisons – Extraction and purification of poisons in toxicological analysis – Volatile poisons – metallicpoisons – non- volatile organic poisons – water soluble compounds – protein precipitation methods. Estimation of the following poisons – Carbon monoxide, cyanide, formaldehyde, methanol, chloral, chloroform, phenols, cresols, phosphorus and amphetemines - Signs and symptoms of H₂SO₄, HNO₃, CO₂, H₂ S poisoning. Analytical methods for the estimation of ethyl alcohol. Metallic poison –signs, symptoms of arsenic, mercury, lead and copper – Reinch test - Marsch Berzelius and Gutzeit tests – volumetric,colorimetric and instrumental methods of analysis of the above metals. Pesticides & Insecticides – Definition – general propertics poisonous nature – detection & isolation.

Unit – X : Analytical Chemistry and Instrumental methods: Significant figures – precession & accuracy – Errors - minimizing methods – estimation of errors – rejection of observation.

Absorption, partition chromatography – Gas Chromatography – HPLC – Solvent extraction and ion exchange methods – atomic absorption spectroscopy – Electron analytical techniques voltammetry, cyclic voltammetry, polarography, amperometry, Coulometry and conductometry, ion-Selective electrodes – TGA, DTA and DSC.

PAPER-I
SYLLABUS
PHYSICS (PG DEGREE STANDARD)

Code No.229

1. UNIT-I MECHANICS – RELATIVITY AND SPACE PHYSICS:-

Impulse – Impact – Laws of Impact – Direct impact and Oblique impact between two smooth Spheres – Loss of Kinetic theory – Motion of two interacting bodies – Reduced mass – Rigid body dynamics

RELATIVITY: Postulates of Special Theory of relativity – Lorentz transformation Equations and its Consequences – Relativity of Simultaneity - Mass Energy Equivalence

SPACE PHYSICS: Escape Velocity – Orbital Velocity – Geo Stationary Orbits and Satellite Communication – Remote Sensing.

2. UNIT-II CLASSICAL MECHANICS:-

Generalised Co-ordinates – D'Alembert's Principle - Lagrangian Equations and its applications – Hamilton's Equations from Variation Principle – Principle of Least Action – Canonical Transformations and its applications – Hamilton – Jacobi Theory – Action Angle Variable – Kepler's Problem – Theory of Small Oscillations – Eulerian Angles, Eulerian Theorem – Coriolis force – Euler Equations of motion.

3. UNIT-III THERMODYNAMICS – STATISTICAL MECHANICS:-

Laws of thermodynamics – Entropy – Thermodynamic potentials – Maxwell's equations and its applications Gibbs phase rule – Phase transition – Vanderwaal's equation of State.

CLASSICAL STATISTICS: Micro and Macro States – Liouville's theorem – Micro Canonical and grand Canonical ensembles – partition function Gibbs Paradox.

QUANTUM STATISTICS: Maxwell's distribution – BE Statistics – Black body radiation – Planck's Radiation Law – FD Statistics – Applications

4. UNIT- IV OPTICS – ATOMIC AND MOLECULAR SPECTROSCOPY:-

Basic ideas of Interference, Diffraction and Polarisation – Principle of LASER and its applications – Coupling Schemes – Zeeman effect – Paschen – Back effect – Spectra Structure of atomic molecules – Rotation, Vibration and Rotation – Vibration Spectra Frank – Condon principle – Microwave, IR, RAMAN, Mossbauer, NMR, NQR and ESR Spectroscopy – Principle, technique and applications.

5. UNIT-V SOLID STATE AND NUCLEAR PHYSICS:-

Crystal Classes and Systems – 2D, 3D Lattices – Lattice heat capacity X-rays – X-ray diffraction – Uses – Band theory of Solids – Fermi level – Superconductivity – Basic concepts – application of Super Conductors. Different types of magnetic materials.

Nucleus – Properties and Structure – Nuclear forces – Binding energy – Radioactive decays – Particle detectors and accelerators – Nuclear fission and fusion – Elementary particles – Cosmic Rays.

6. UNIT-VI QUANTUM MECHANICS:-

Basic formalism – Schrodinger time dependent and time independent equations – eigen values and eigen functions – uncertainty principle – Hilbert space - Dirac notation – Schrodinger and Heisenberg interaction picture – WKB Quantisation rule – Time dependent perturbation theory – Fermi golden rule – Born and Sudden approximations – Dirac's relativistic equation – Dirac's equation for a central field – Spin angular momentum – negative energy states.

7. UNIT-VII ELECTRO MAGNETIC THEORY:-

Gauss Law – Laplace and Poisson equations – Biot and Savart Law – Ampere Law – Faraday's Laws of induction – Maxwell's Equations – Molecular Polarizability and electrical susceptibility – Lorentz force – Equation of Continuity – Propagation of EM Waves in non conducting and conducting medium – reflection and refraction at a plane interface between dielectrics – Radiation from a localised source – oscillating electric dipole.

8. UNIT-VIII ELECTRONIC DEVICES AND APPLICATIONS:-

Semi Conductor diode and Transistor – Optoelectronic devices – photo diode, photo transistor, LDR, LED, LCD, Special Semi conductor devices – JFET, MOSFET, UJT, SCR – Characteristics and applications – Operational amplifier Characteristics and applications – 555 timer – Block diagram and working.

Electrodes and transducers used in ECG and EEG techniques – ultrasound Scan – Basic ideas of CT and MRI Scan.

9. UNIT-IX DIGITAL ELECTRONICS AND MICROPROCESSOR:-

Logic gates – half and full adder and subtractors – Parallel binary adder – 8421 adder – Karnaugh map – NAND – NOR networks – flipflops – counters and shift registers - Architecture of 8085 – Addressing models – Instruction set – Programming techniques – Semiconductor memory types
– RAMS and ROMS – Interfacing of memory devices and I/o Ports.

10. UNIT- X COMMUNICATION ELECTRONICS:-

Directional high frequency antennas – Sky wave propagation – Ground wave propagation – Modulation and demodulation techniques – Principle of radio communication – AM and FM transmission – RADAR Principle and equation – Television transmission and reception – Fibre optics – Propagation of Light in an Optical fibre – Losses and dispersion – applications

PAPER-I
SYLLABUS
COMPUTER SCIENCE (PG DEGREE STANDARD)

Subject code: 287

UNIT - I: MATHEMATICAL FOUNDATIONS

AUTOMATA, LANGUAGES AND COMPUTATION Basic concepts of strings, alphabets, languages, finite automaton, regular expressions, Moore and Mealy machines, regular sets, minimization of finite automata, Chomsky hierarchy of languages, relation between classes of languages, context free grammar, pushdown automata, Linear bounded automata, Turing machines, halting problem and decidability.

DESIGN AND ANALYSIS OF ALGORITHMS Design Techniques, divide and conquer, greedy method, dynamic programming etc., graph algorithms, Strassen's matrix multiplication algorithm, geometric algorithms, NP complete problems, approximation algorithms.

UNIT - II: COMPUTER ARCHITECTURE

Review of elements of Computer organisation - Machine instructions, addressing modes, instruction pipelining, memory organization. CPU and system buses, bus standards, Von Neumann Vs Non Von Neumann architectures, language directed architectures, RISC architectures, object oriented architectures, memory and I/O subsystems - Hierarchical memory, virtual memory system memory allocation and management, cache memories, I/O subsystems, architectural classification, pipelined processors, vector processing. Array processors, multiprocessor architectures.

UNIT - III: DATA STRUCTURES IN C++

Data types, control statements, procedures, Scope rules, arrays and records, enumerated datatypes, sets, pointers, recursion. Sequential, indexed files, sorting and merging report generations. Arrays, queues, linked lists, stacks, tree traversal, evaluation of expressions using postfix notation, sorting algorithms, bubble sort, quick sort, heap sort, complexity of algorithms.

UNIT - IV: COMPILERS AND ADVANCED OPERATING SYSTEMS

Assemblers loaders, linkers, macro processor, text editors, programming languages, lexical analysis, parsing techniques, precedence grammars, symbol tables, scope rules and parameter passing mechanisms, syntax directed translation, run time environment, machine code generation, interpreter.

ADVANCED OPERATING SYSTEMS

(a) Review of uniprocessor operating system: Batch, multiprogramming and time-sharing systems, operating system concepts, memory, device and file management, process scheduling, interprocess communication, process synchronization and concurrency, deadlocks, protection.

(b) Multiprocessor operating system: Classification of multiprocessor operating systems, software and operating system requirements for multiprocessors, multiprocessor scheduling strategies. (c) Distributed Operating System: Communication in distributed systems, client server model, remote procedure call, group communication, synchronization in distributed systems, mutual exclusion and election algorithms, deadlocks in distributed systems, processor allocation algorithms, scheduling in distributed system, distributed file systems

UNIT - V: DATABASE MANAGEMENT SYSTEMS

Elements of data base systems, file organization, relational and network data models, normal forms, query languages. Design and implementation of typical database systems, Internal and external consistency, concurrency control techniques, object oriented data bases.

UNIT - VI: MOBILE COMMUNICATIONS

Mobile IP: Goals – Packet Delivery – Strategies – Registration – Tunneling and Reverse Tunneling – Adhoc Networks – Routing Strategies. **WIRELESS APPLICATION PROTOCOL [WAP]** – Architecture – XML – WML Script – Applications.

UNIT - VII: SOFTWARE PROJECT MANAGEMENT

Software Project Planning: Size Estimation - Cost Estimation Models - The Constructive Cost Model (COCOMO)-COCOMO II - The Putnam Resource Allocation Models -Software Risk Managements.

UNIT - VIII: MULTIMEDIA AND WEB TECHNOLOGIES

Uses of Multimedia – Introduction to making multimedia – Multimedia skills. Multimedia hardware and software – Connections – Memory and storage devices – Input devices – Output devices – Communication devices. Basic software tools – Text editing and word processing tools – Painting and drawing tools – 3-D modelling and animation tools – Image editing tools – Animation, video and digital movie tools. Making instant multimedia – Multimedia authoring tools. Multimedia Building Blocks – Text – Sound – Multimedia System Sounds – MIDI versus Digital Audio – Digital Audio – Making MIDI Audio – Audio File Formats – Production tips - Images – Animation - Video.

The world wide web: Browsing the Web - Web address - Web browser basics - Strong and managing(book marks) - Surfing the web with web browser - Searching the web directory - Search engines - Navigation tools.

Email: Sending - Reading - Replying - Deleting - Exiting - Sending Mail to more than one person sending folder - Forwarding a mail - Checking the spelling - Attachments. **HTML:** Overview of HTML - Adding structure to a page formatting text and pages - Linking page to the world - Including picture - Clearing lists - Arranging items within tables - Getting feedback from form - Splitting a page into frames.

UNIT - IX: OBJECT ORIENTED ANALYSIS AND DESIGN

Unified Modeling Language [UML] - Diagrams - Class - Use case - Naming Classes - Identifying Objects, Relationships, Attributes, Methods - Association - Super and Sub Class Relationship - Aggregation.

UNIT - X: ADVANCED TOPICS: ARTIFICIAL INTELLIGENCE, CLOUD COMPUTING,CYBER SECURITY

Artificial Intelligence: Production systems, different strategies, hill climbing, backtracking, graph search specialised production systems, minimax procedure, alphabeta pruning, resolution and refutation, control strategies, structured representation of knowledge, semantic nets, frames.

Cloud Computing: Architecture - Deployment Models - Application Virtualization - Hardware Virtualization.

Network Security: Potential Attacks to Computer System – Cryptography – Authentication – Access Control – Digital Signatures.

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 தமிழ்ச் சொல்லை அறிதல்.
6. ஒலி மற்றும் பொருள் வேறுபாடறிந்து சரியான பொருளையறிதல்.
7. ஒரு பொருள் தரும் பல சொற்கள்.
8. வேர்ச்சொல்லைத் தேர்வு செய்தல்.
9. வேர்ச்சொல்லைக் கொடுத்து / வினைமுற்று, வினையெச்சம், வினையாலணையும் பெயர், தொழிற்பெயரை / உருவாக்கல்.
10. அகரவரிசைப்படி சொற்களை சீர் செய்தல்.
11. சொற்களை ஒழுங்குப்படுத்தி சொற்றொடராக்குதல்.
12. இரு வினைகளின் பொருள் வேறுபாடு 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 சார்ந்த சொற்கள் (கலைச்சொல்)
17. விடை வகைகள்.
18. பிறமொழிச் சொற்களுக்கு இணையான தமிழ்ச் சொற்களைக் கண்டறிதல்
(எ.கா.) கோட்டு பிஸ்கட் - தங்கக்கட்டி.
19. ஊர்ப் பெயர்களின் மரபுவை எழுதுக (எ.கா.) தஞ்சாவூர் - தஞ்சை
20. நிறுத்தற் குறிகளை அறிதல்.
21. பேச்சுவழக்கு, எழுத்துவழக்கு (வாரான் - வருகிறான்).
22. சொற்களை இணைத்து புதிய சொல் உருவாக்கல்.
23. பொருத்தமான காலம் அமைத்தல்
(இறந்தகாலம், நிகழ்காலம், எதிர்காலம்).
24. சரியான வினாச்சொல்லைத் தேர்ந்தெடு.
25. சரியான இணைப்புச் சொல்
(எனவே, ஏனெனில், ஆகையால், அதனால், அதுபோல).

26. அடைப்புக்குள் உள்ள சொல்லைத் தருந்த இடத்தில் சேர்க்க .
27. இருபொருள் தருக .
28. குறில் - நெடில் மாற்றம், பொருள் வேறுபாடு.
29. கூற்று, காரணம் - சரியா? தவறா?
30. கலைச் சொற்களை அறிதல் :-
எ.கா. - Artificial Intelligence - செயற்கைநுண்ணறிவு
Super Computer - மீத்திறன் கணினி
31. பொருத்தமான பொருளைத் தெரிவு செய்தல்
32. சொற்களின் கூட்டுப் பெயர்கள் (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.

Part-B
GENERAL STUDIES (DEGREE STANDARD)

CODE NO.003

Topics for Objective Type

UNIT-I: GENERAL SCIENCE

- (i) Scientific Knowledge and Scientific Temper - Power of Reasoning - Rote Learning vs Conceptual Learning - Science as a tool to understand the past, present and future.
- (ii) Nature of Universe - General Scientific Laws – Mechanics - Properties of Matter, Force, Motion and Energy - Everyday application of the Basic Principles of Mechanics, Electricity and Magnetism, Light, Sound, Heat, Nuclear Physics, Laser, Electronics and Communications.
- (iii) Elements and Compounds, Acids, Bases, Salts, Petroleum Products, Fertilisers, 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.
- (vi) Prominent Personalities in various spheres – Arts, Science, Literature and Philosophy.

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 Lok Ayukta - 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 AbulKalam Azad, Thanthai Periyar, Rajaji, Subash Chandra Bose, Rabindranath Tagore 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 19thand 20thCentury 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**LIST OF DOCUMENTS TO BE SCANNED AND UPLOADED
ALONG WITH THE ONLINE APPLICATION****(Size of each document should be less than 200 KB
in PDF format (Single page or Multiple page))**

1.	SSLC Mark Sheet
2.	HSC Mark Sheet or its equivalent
3.	Diploma/ PG Diploma Certificate (Refer para 5(B) of this Notification)
4.	<u>Educational Qualification</u> U.G. Degree / P.G. Degree / IPG Degree/ M.Phil / Ph.d degree certificate / Consolidated Mark Sheet. (as mentioned in para 5(B) of this Notification)
5.	G.O. for Equivalence of Qualification to the prescribed qualification (if applicable)
6.	PSTM Certificate up to the prescribed entire qualification as mentioned in the para 13(B) of this Notification. (if applicable)
7.	Community Certificate
8.	Destitute Widow Certificate (if applicable)
9.	Ex-Servicemen Certificate (if applicable)
10.	Transgender ID Card with Gender (if applicable)
11.	Gazetted copy for name change (if applicable)
12.	No Objection Certificate (if applicable)
13.	Documents / Court Orders proving Acquittal / Conviction or FIR in case of pending cases for Criminal cases registered (if applicable)
14.	Other Documents (if any)

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 willfully suppressing any information he will incur the risk of losing the appointment and if appointed, of forfeiting all claim to superannuation allowance or gratuity

Medl. I-68.


ANNEXURE – V
COMPUTER BASED TEST (CBT)
IMPORTANT INSTRUCTIONS
OBJECTIVE TYPE


- a) One question will be displayed on the screen at a time.
- b) Time available for you to complete the examination will be displayed through a countdown timer in the top right-hand corner of the screen. It will display the remaining time as **Time Left**. At the beginning of exam, timer will show 180 minutes (240 minutes for Differently Abled candidates with scribe) which will reduce gradually with passage of time. When the timer reaches zero, the examination will end by itself and your examination will be submitted by the system automatically.


c) Question Number Box:


1. Question Number Box displayed on the right side of the screen will show the status of each question using one of the following symbols:

 You have not visited the question yet.

 You have not answered the question.

 You have answered the question.



 You have NOT answered the question, but have marked the question for review.

 You have answered the question and marked for review. This will be considered for evaluation.

The 'Marked for Review' status for a question simply indicates that you would like to look at that question again.

2. You can click on the ">" arrow which appears to the left of question number box to minimize the question number box. This will enable you to view the question on a bigger area of the screen. To view the question number box again, you can click on "<" arrow which appears on the right side of the screen.



You can click on  to navigate to the bottom and  to navigate to the top of the question area, without scrolling.



3. The summary of number of questions answered, not answered, not visited, marked for review and answered and marked for review will be displayed above the question number box.

d) Answering a Question

- i) The questions will appear on the screen in ascending order, which can be answered one by one.
- ii) To select your answer of a question, click on the button of one of the options.
- iii) **Click on Save and Next button after answering every question to save your answer.** Otherwise your answer will not be saved.
- iv) To deselect your chosen answer, click on the button of the chosen option again or click on the **Clear Response** button.

e) Instruction for enlarging images

To view the image provided in the question in a bigger size, click on the image and rotate the scrolling wheel on the mouse.

Any attempt of malpractice found, will render you liable to such action or penalty as Commission may decide.

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

Sl. No.	Process	Timeline
1.	Last date upto which the Online Application can be edited/ submitted/ payment of fees can be made	26.05.2023
2.	Online Application Correction Window period	From 02.06.2023 12.01 A.M to 04.06.2023 11.59 P.M
3.	Last date upto which the applicants are permitted to upload/ re-upload the documents	10.07.2023
4.	Publication of Examination Results	October 2023
5.	Certificate Verification / Oral Test	November 2023
6.	Counselling	November 2023

Secretary