



TAMIL NADU PUBLIC SERVICE COMMISSION

NOTIFICATION NO. 09 / 2018

DATED: 03.05.2018

Applications are invited only through online mode upto **02.06.2018** for direct recruitment to the post of **Agricultural Officer (Extension)** included in Tamil Nadu Agricultural Extension Service.

It is mandatory for the applicants to register their basic particulars through One - Time online Registration system on payment of Rs. 150/- (Rupees One Hundred and Fifty only) towards registration fee and then 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.]

Name of the post	Name of the service	No. of vacancies	Scale of pay
Agricultural Officer (Extension) (2015-2016, 2016-2017 and 2017-2018) (Code No.1678)	Tamil Nadu Agricultural Extension Service (Code No.015)	183+7*+2**ST (*Carried forward vacancies) GT(Deaf)-3, BC(OBCM)(Deaf)-1, BCM(Deaf)-1 MBC/DC(Deaf)-1, SC(Deaf)-1	Rs.37700- 119500(Level 20) as per Tamil Nadu Revised Pay Rules 2017

(**Shortfall vacancies)

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

2. DISTRIBUTION OF VACANCIES

The rule of reservation of appointments is applicable for this recruitment, except to the shortfall vacancies. The distribution of vacancies will be announced later after the receipt of orders from the Government regarding identification of suitable categories of Differently Abled Persons towards 4% reservation for the post.

3. IMPORTANT DATES AND TIME

Date of notification	03.05.2018	
Last date for submission of application	02.06.2018	
Last date for payment of fee through Bank (State Bank of India or Indian Bank)	04.06.2018	
Date of Written Examination		
Paper-I (Agriculture)	14.07.2018 F.N.	10.00 A.M. to 01.00 P.M.
Paper-II (General Studies)	14.07.2018 A.N.	02.30 P.M. to 04.30 P.M.

4. QUALIFICATIONS

(A) AGE LIMIT (as on 01.07.2018)

Sl. No.	Category of Applicants	Maximum Age
1.	SCs, SC(A)s, STs, MBCs/DCs, BC(OBCM)s, BCMs and Destitute Widows of all castes.	No age limit
2.	'Others'	i. Should not have completed 30 Years [For persons holding B.Sc(Agriculture)] ii. 32 Years [For persons holding a post graduate or higher degree in Agriculture such as M.Sc (Agriculture) or Ph.D in Agriculture]

Note

Applicants not belonging to SC, SC(A), ST, MBC/DC, BC(OBCM), BCM 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.

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

(For further details, refer [para. 5 of "Instructions to Applicants"](#) and Section 3(r) of Tamil Nadu Government Servants (Conditions of Service) Act, 2016)

Age Concessions

(i) For Differently Abled Persons

Differently Abled Persons are eligible for age concession upto 10 years over and above the maximum age limit prescribed.

(ii) For Ex-servicemen

(a) The maximum age limit for ex-servicemen is 48 years.

(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.

(B) EDUCATIONAL QUALIFICATION (as on 03.05.2018)

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

(i) Bachelor's degree in Agriculture (B.Sc., Agriculture)
AND
(ii) Adequate knowledge in Tamil

Explanation:

Adequate knowledge in Tamil means one must have passed the S.S.L.C. Examination or its equivalent examination with Tamil as one of the languages or Studied the High School Course in Tamil Medium and passed the S.S.L.C Examination or its equivalent examination in Tamil Medium or passed the Second Class Language Test (Full Test) in Tamil conducted by the Tamil Nadu Public Service Commission [Explanation (i) under Section 21(1) of Tamil Nadu Government Servants (Conditions of Service) Act 2016.]

(Note (i) under paragraph 11 of the Commission’s ‘Instruction to Applicants’ will not apply to recruitment to this post)

Note :

- (i) The qualification prescribed for the post should have been obtained by passing the required qualification in the order of studies, viz., 10th + HSC or its equivalent + Bachelor’s degree + PG degree as required under Section 25 of Tamil Nadu Government Servants (Conditions of Service) Act, 2016.
- (ii) Applicants claiming equivalence of qualification should upload and submit evidence for equivalence of qualification, in the form of government order issued prior to the date of this notification, when called for, failing which, their application **will be summarily rejected**. The government orders regarding equivalence of prescribed qualification issued after the date of this notification will not be accepted.
(Results of the examination should have been declared on or before the date of notification)

(For further details regarding equivalence of qualification refer to [para.10 of the “Instructions to Applicants”](#)).

(C) CERTIFICATE OF PHYSICAL FITNESS

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

Standard of vision	Form of certificate of physical fitness
Standard-III	Form prescribed for executive post.

Colour blindness will be a disqualification. Applicants with defective vision should produce eye fitness certificate from a qualified eye specialist.

5. FEES

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

NOTE : Applicants who have registered under One - Time Registration system must pay the prescribed examination fee for this recruitment.(One –Time Registration is only to avail exemption from payment of registration fee for a period of five years from the date of registration and it will not be considered as prescribed examination fee for this recruitment)

EXAMINATION FEE CONCESSIONS :

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

Category	Concession	Condition(s)
(i) Scheduled Castes/ Scheduled Caste (Arunthathiyars) and Scheduled Tribes	Full Exemption	--
(ii) Differently Abled Persons, Destitute Widow of all communities	Full Exemption	(i) For Differently Abled Persons, the disability should be not less than 40%. (ii) For DWs, the DW certificate should have been obtained from the RDO / Sub Collector / Assistant Collector.

(iii) Most Backward Classes / Denotified Communities/ Backward Classes (Other than Muslims) / Backward Class (Muslim)	Those who have not availed three free chances so far in the previous recruitments may avail exemption from payment of examination fee.	Should not have availed three free chances in the previous recruitments.
(iv) Ex-Servicemen	Those who have not availed two free chances so far in the previous recruitments may avail exemption from payment of examination fee.	(i) Should not have availed two free chances in the previous recruitments. (ii) Fee concession will not apply to those who have already been recruited to any class or service or category.

Note:

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

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

6. MODE OF PAYMENT OF EXAMINATION FEE :

- Examination fee of Rs.200/- (Rupees Two hundred only) is payable online through Net Banking / Credit card / Debit card or it can be paid offline at the State Bank of India / Indian Bank within two days from the date of submission of online application by choosing the option in the online application.
- Applicants have to register their basic particulars through One -Time Registration which is mandatory on payment of Rs.150/- (Rupees One hundred and fifty only) towards registration fee and then 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. Applicants who had already registered under One Time

Registration system by paying Rs.50/- before 01.03.2017 and having validity are exempted from paying the registration fee for this recruitment.

- Applicants have also to pay the service charges applicable to the State Bank of India / Indian Bank.
- Offline mode of payment in the form of demand draft / postal order etc. **will not be accepted** and the applications forwarded with such modes of payment will be summarily rejected.

7. CONCESSIONS :

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

Note :

In all cases, an **ex-serviceman once recruited** to a post in any class or service or category, **cannot claim the concession** of being called an ex-serviceman for his further recruitment (Section 3(j) of Tamil Nadu Government Servants (Conditions of Service) Act, 2016).

8. SCHEME OF EXAMINATION (OBJECTIVE TYPE) OMR / CBT AND ORAL TEST

Subject	Duration	Maximum marks	Minimum qualifying marks for selection	
			SCs, SC(A)s, STs, MBCs/ DCs, BC(OBCM)s and BCMs	Others
(i) Paper-I: Subject (Degree Standard) (200 questions) Agriculture (Code No.284)	3 Hours	300	171	228
(ii) Paper-II: General Studies (100 questions) (Code No.003) General Studies (Degree Standard) -75 questions Aptitude and Mental Ability (SSLC Standard -25 questions)	2 Hours	200		
(iii) Interview and Records	--	70		
Total		570		

Note

- (i) The questions in Paper-I "Agriculture" will be set in English only and Paper-II "General Studies" will be set both in English and in Tamil.
- (ii) The syllabus for the subject Paper-I "Agriculture" and Paper-II "General Studies" are available in the **Annexure** to this notification.
- (iii) Refer to [para. 22 of the "Instructions to Applicants"](#) in regard to instructions to be followed while appearing for competitive examinations conducted by the Commission.

9. CENTRE FOR EXAMINATION**Examination will be held at the following centres:-**

Name of the centre	Centre code	Name of the centre	Centre code	Name of the centre	Centre code
Chennai	0100	Coimbatore	0200	Tirunelveli	2600
Madurai	1000	Tiruchirappalli	2500	Salem	1700
				Thanjavur	1900

Note

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

10. SELECTION PROCEDURE

Selection will be made in two successive stages i.e., (i) Written Examination and (ii) Oral Test in the shape of an interview. Final selection will be made on the basis of the total marks obtained by the applicants at the written examination and oral test taken together subject to the rule of reservation of appointments. Applicant's appearance in the written examination and oral test is compulsory.

(For further details refer to [paragraph 23 \(b\) of the "Instructions to Applicants"](#))

Note:

1. First, the selection will be made for the carried forward vacancies. [Section 27 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016]
2. Secondly, the selection will be made for regular vacancies following the rule of reservation.
3. Thirdly, the selection against shortfall vacancies will be made from among ST applicants only.

3(a). The reservation for Women and Differently Abled Persons will not be applicable for the recruitment of shortfall vacancies. [Section 27(h) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016]

11. NO OBJECTION CERTIFICATE / INFORMATION TO THE EMPLOYER :

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

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

12. GENERAL INFORMATION:

- A. The rule of reservation of appointments is applicable to this recruitment except for the shortfall vacancies.
- B. In G.O.(Ms.) No.145, Personnel and Administrative Reforms (S) Department, dated 30.09.2010 and G.O.(Ms.) No.40, Personnel and Administrative Reforms(S) Department dated 30.04.2014, the government have issued orders to fill 20% of all vacancies in direct recruitment on preferential basis to persons who studied the prescribed qualification in Tamil Medium. The 20% reservation of vacancies on preferential allotment to Persons Studied in Tamil Medium (PSTM) will apply to this recruitment, if Tamil medium of studies for the qualification is available. (Applicants claiming this reservation should have joined and studied the prescribed qualification in Tamil Medium and should have the certificate for the same. Having written the university examinations in Tamil language alone will not qualify the candidate for claiming this reservation). If the applicants with PSTM certificate are not available for selection for appointment against reserved turn, such turn shall be filled by Non-PSTM applicants, but belonging to the respective communal category. The PSTM certificate shall be produced / uploaded by the applicant in prescribed format / proforma available in the Commission's website at www.tnpsc.gov.in which shall be obtained from the Head of the Institution and to be submitted when called for by the Commission.

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

- C. The selection for appointment to the said post is purely provisional subject to the final orders in the writ petitions, if any, pending on the files of the Hon'ble High Court of Madras and its Madurai Bench.
- D. As per Sections 26 and 27(c) of Tamil Nadu Government Servants (Conditions of Service) Act, 2016, reservation of appointment to "**Destitute Widows**" and "**Ex-servicemen**" **will not apply** to this recruitment.
- E. **If the post is identified as suitable for Differently Abled Persons of any category, the reservation of 4% for Differently Abled Persons as per G.O.Ms. No.21, Welfare of Differently Abled Persons (DAP 3.2) Department dated 30.05.2017 will be made applicable. Hence, the Differently Abled Persons with disability of not less than 40% may apply to this recruitment. Their application will be accepted subject to the orders to be issued by the Government.**
- F. The Differently Abled persons should submit / upload a copy of Differently Abled Certificate obtained from the competent authority specifying the nature of physical handicap and the degree of disability as per para. 14(b) of the 'Instructions to Applicants', when called for by the Commission.

- G. Wherever vacancies are reserved for women, if no qualified and suitable women applicants are available for selection against the vacancies reserved for them, those vacancies will be filled by other eligible applicants belonging to the respective communal categories.
- H. Wherever vacancies are reserved for Arunthathiyars on preferential basis, even after filling the vacancies reserved for SC (Arunthathiyars) on preferential basis, if more number of qualified Arunthathiyars are available, they shall be entitled to compete with the Scheduled Castes other than Arunthathiyars in the inter-se-merit among them and if any posts reserved for Arunthathiyars remain unfilled for want of adequate number of qualified applicants, it shall be filled by Scheduled Castes other than Arunthathiyars.
- I. Any claim made after the submission of online application will not be entertained. Evidence for all the claims made in the online application should be uploaded / submitted in time when the same are called for. Failure to upload / submit the documents within the stipulated time limit will entail rejection of application.
- J. Correct and true information regarding arrest, convictions, criminal or any disciplinary proceedings initiated / pending or finalised, debarment / disqualification by any recruiting agency, participation in agitation or any political organisation, candidature in election for Parliament / State Legislature / Local Bodies etc, if any, should also be furnished to the Commission at the time of application. The details thereof, i.e. originals of the judgement / order / G.O. dropping further action in the departmental proceedings or any document that may prove the suitability of such applicants for Government 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.
- K. In-complete applications and applications containing wrong claims or in-correct particulars relating to category of reservation / eligibility / age / communal category / educational qualification / medium of instruction / physical qualification / other basic qualifications and other basic eligibility criteria will be liable for rejection.
- 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 details / particulars furnished in the online application for this recruitment alone will be taken into consideration. The Commission will not be responsible for any consequences arising out of furnishing of in-correct and in-complete details in the application or omission to provide the required details in the application for this recruitment.

13. OTHER IMPORTANT INSTRUCTIONS :

- a) Applicants should ensure their eligibility for examination. Applicants applying for the examination should go through all the instructions carefully and ensure that they fulfil all the eligibility conditions for admission to the examination. Their admission to all stages of the examination will be purely provisional subject to satisfaction of the eligibility conditions. Mere issue of memo. of admission to the applicants will not imply that their candidature has been fully cleared by the Commission.

- b) Hall Tickets for eligible applicants will be made available on the Commission's website www.tnpsc.gov.in or www.tnpscexams.net or www.tnpscexams.in for downloading by the applicants. **Hall Tickets will not be sent by post.** Hence, the applicants should watch the Commission's website before the scheduled date of examination.
- c) **Grievance Redressal Cell for guidance of applicants:** In case of any guidance / information / clarification regarding applications, candidature, etc., applicants can contact the Commission's office in person or over Telephone No. 044-25332833 / 25332855 or the Commission's Toll-Free No. 1800 425 1002 on all working days between 10.00 a.m. and 05.45 p.m. or Commission's e-mail id contacttnpsc@gmail.com.
- d) **COMMUNICATION TO APPLICANTS:**

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

- e) Mobile phones and other articles **banned** :
- i. Except the permitted writing material (i.e. pen), applicants are not allowed to bring cellular phones, electronic or any other type of calculators, watches and rings with inbuilt memory notes, recording devices either as a separate piece or part of something used by the applicant such as watch or ring etc or any other electronic devices and non - electronic devices such as P&G design data book, mathematical and drawing instruments, log tables, stencils of maps, slide rules, books, notes, loose sheets, rough sheets, hand bags etc., into the examination hall / room.
 - ii. If they are found to be in possession of any such things or instruments, they will not be allowed to write the examination further, besides invalidation of answer paper and / or debarment. If it is considered necessary, they will be subjected to thorough physical search including frisking on the spot (For further details refer to the "Instructions to Applicants").
 - iii. Applicants are advised, in their own interest, not to bring any of the banned items including mobile phones to the venue of the examination, as arrangements for safekeeping of the same cannot be assured.
- f) Unless specific instruction is given, applicants are not required to submit along with their application any certificates (in support of their claims regarding age, educational qualifications, physical qualification, community, physical disability etc.) which should be submitted when called for by the Commission. Applicants applying for the examination should ensure that they fulfil all the eligibility conditions for admission to the examination. Their admission at all the stages of examination for which they are admitted by the Commission will be purely provisional, subject to their satisfying the prescribed eligibility conditions. If, on verification at any time before or after the written examination / certificate verification / oral test, it is found that they do not fulfil any of the eligibility conditions, their candidature for the examination will be liable for rejection / cancellation by the Commission. (For further details refer to the "Instructions to Applicants")

- g) If any of their claims is found to be incorrect, it will lead to rejection of their candidature and suitable penal action including debarment.
- h) **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. (For further details refer to the “Instructions to Applicants”)
- i) **CONDUCT IN THE EXAMINATION HALL:** No applicant should misbehave in any manner or create a disorderly scene in the examination hall or harass the staff employed by the Commission for the conduct of the examination. Any such misconduct will be viewed seriously and penalised. (For further details refer to the “Instructions to Applicants”)
- j) For violation of “Instructions to Applicants” in any manner, suitable penalty will be imposed as per the “Instructions to Applicants” or as deemed fit by the Commission.

14. HOW TO APPLY :

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

9) All the particulars mentioned in the online application including name of the applicant, post applied, educational qualifications, communal category, date of birth, address, e-mail ID, examination centre etc. will be considered as final and no modifications will be allowed after the last date specified for applying online. Since certain fields are firm and fixed and cannot be edited, applicants are requested to fill the online application form with utmost care and caution as no correspondence regarding change of details will 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. Application and all the required certificates will be verified only when the applicants come up for certificate verification.**

15. UPLOAD / SUBMISSION OF DOCUMENTS :

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

16. LAST DATE FOR SUBMISSION OF APPLICATION:

Online application can be submitted upto **02.06.2018** till 11.59 p.m., after which the link will be disabled.

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

**Controller of Examinations &
Secretary (In- charge)**

DISCLAIMER

“ Government orders relating to equivalence of qualification have been hosted on the Tamil Nadu Public Service Commission’s website. However, while applying for the examination, applicants should furnish the details of equivalence of qualification in the form of government orders issued prior to the date of this notification and produce a copy of the same when called for by the Tamil Nadu Public Service Commission, failing which their application will be **rejected**. The government orders regarding equivalence of qualification issued after the date of this notification will not be considered for this recruitment.”

**Controller of Examinations &
Secretary (In- charge)**

ANNEXURE
PAPER-I AGRICULTURE
(DEGREE STANDARD)

SUBJECT CODE: 284

UNIT- I: IMPORTANCE OF AGRICULTURE

Importance of Agriculture in Indian Economy and its sectoral relationship - Agricultural Development through five year plans in India and Tamil Nadu - Growth pattern of crops in India and Tamil Nadu in terms of area, production and productivity - Government Agricultural Policies – Agricultural development through NITI AYOOG – Import and export – Role of NSC, FCI and PDS.

UNIT - II: FUNDAMENTALS OF CROP PRODUCTION

Factors of Production - Agricultural seasons of India and Tamil Nadu - Cropping patterns in India and Tamil Nadu - Package of practices of different crops - Agro-Climatic zones of India and Tamil Nadu and their features - Weather and Climate - Weather forecasting - Climate change and its impact – Minimal tillage practices – Stress mitigating technologies including microorganisms – Nanoparticles and their applications.

UNIT - III: NATURAL RESOURCE MANAGEMENT

Soil - Soil structure - Factors influencing soil structure - Physical and Chemical properties - Effect of nutrient availability and plant growth - Problem soils and their management - Soil survey - Its objectives and scope - Soil fertility and productivity - Dry farming - Rainfed agriculture - Conservation of soil and water - Watershed and waste land development. Land use pattern and planning - Size and distribution of holdings - Types and systems of farming - Water resources development and management - Command area development - Ground water Development and Conjunctive use - Water use efficiency - Quality of irrigation water - Its effect in soil and crops - Management of poor quality water for crop growth.

UNIT - IV: CROP MANAGEMENT & ALLIED AGRICULTURAL ACTIVITIES

Cropping systems and integrated farming - Recycling of agricultural waste - Organic manures, green manures, bio fertilizers - Balanced usage - Integrated nutrient management - Physiological disorders in crop plants and their management- Irrigation management of different crops Mushroom cultivation, bee keeping, silkworm rearing etc., Energy in Agricultural production - Sources - Solar, wind, animal, biomass and biogas - Mechanization in agriculture - Tractors & tillers - Agricultural implements and Machineries and their usage - livestock and poultry rearing.

UNIT - V: CROP IMPROVEMENT

Principles of breeding - Breeding methods in self , cross and vegetatively propagated crops - Modern tools in crop improvement – Heterosis breeding and Hybrid seed production technologies - Latest varieties of major crops in Tamil Nadu - Breeding for climate resilience varieties – Variety release procedures - Application of bio technology in agriculture - Tissue culture & its significance - Transgenic Plants. Plant Genetic Resources:Collection conservation and exchange-Crop varietal protection-PPV& FR authority and its role.

UNIT- VI: SEED SCIENCE AND TECHNOLOGY

Seeds - Importance of quality seeds in agriculture – Nucleus, breeder, foundation, certified and labelled seeds - Seed certification techniques and processing in Tamil Nadu - Seed testing – Seed testing laboratories-ISTA standards for seed testing - Seed village concept Seed Act - Seed coating and priming technologies - Seed enhancement technologies.

UNIT – VII: CROP PROTECTION PRINCIPLES AND PRACTICES

Importance of pest, disease, nematodes and weed management in agriculture – categories of pests, diseases, nematodes and weeds - Pest and disease surveillance and forecasting weather on pest and disease incidence - Symptoms of damages and control measures of pest, disease and nematodes of major crops in Tamil Nadu - Integrated pest, disease and nematode management in crop production - Pesticides and their use in IPM – Mode of action - Pattern - Plant protection equipments and their use - Plant quarantine. Storage pests, disease and nematodes and their management. Importance of biological control in pest, disease and nematode management. Weeds - Major weeds and their control.

UNIT – VIII: FARM BUSINESS AND FINANCE MANAGEMENT

Farm business management - Principles of farm business management – Types and systems of farms-Classical production functions - Cost concepts - Management of resources - Farm Planning and budgeting - Investment analysis – Risk and uncertainties in agriculture - Agricultural credit system in India - Multi credit delivery system - Role of nationalized banks, NABARD and Regional Rural Banks - Lead Bank Scheme - Service area approach - Scale of finance-Credit Worthiness-3 Rs,5Cs and 7Ps of credit- Crop Insurance - Kisan Credit Cards (KCC) - Agricultural Insurance Company.

UNIT – IX: AGRICULTURAL MARKETING AND MARKET INTELLIGENCE

Marketing - Agricultural marketing - Market structure – Marketing efficiency - Price Spread-Market Integration-Market Risk-Speculation and hedging - Market Institutions- Warehouses and rural godowns - Agmark-Cooperatives - Commodity Boards – Agri business management – Principles of Management-Entrepreneurship Development - Forms of Business organizations - Agricultural Price Policy - CACP-MSP - FRP- Procurement Price-Policies for agricultural development - Economic liberalization - WTO and its impact on agricultural export - Importance of Agriculture in Indian economy - Land size and distribution of holdings and land use pattern in Tamil Nadu - Agriculture under Five year Plans (FYPs) - Food Security - Public Distribution Systems (PDS) - Buffer Stock.

UNIT - X: AGRICULTURAL EXTENSION: PRINCIPLES AND METHODS

Extension methods for transfer of technology - AV aids-Communication models - Use of ICT in transfer of technology-Diffusion and adoption- Pre and post independence rural development initiatives: key features, strength and weakness of individual programmes - Programme planning and evaluation methods- Rural sociology - Key features of Indian rural system-Value system-Social change- Rural migration. Role of women in agriculture.

PAPER-II**GENERAL STUDIES (DEGREE STANDARD)****(Code No: 003)****UNIT - I: GENERAL SCIENCE**

Physics Universe-General Scientific laws-Scientific instruments-Inventions and discoveries-National scientific laboratories-Science glossary-Mechanics and properties of matter-Physical quantities, standards and units-Force, motion and energy-Electricity and Magnetism, Electronics and Communication -Heat, light and sound-Atomic and nuclear physics-Solid State Physics – Spectroscopy- Geophysics - Astronomy and space science.

Chemistry Elements and Compounds-Acids, bases and salts-Oxidation and reduction-Chemistry of ores and metals-Carbon, nitrogen and their compounds-Fertilizers, pesticides, insecticides-Biochemistry and biotechnology-Electrochemistry-Polymers and plastics.

Botany Main concepts of life science-The cell-basic unit of life-Classification of living organism-Nutrition and dietetics-Respiration-Excretion of metabolic waste-Bio-communication.

Zoology Blood and blood circulation-Endocrine system-Reproductive system-Genetics the science of heredity-Environment, ecology, health and hygiene, Bio- diversity and its conservation-Human diseases-Communicable diseases and non- communicable diseases-prevention and remedies- Alcoholism and drug abuse-Animals, plants and human life.

UNIT - II: CURRENT EVENTS

History Latest diary of events – National symbols-Profile of States-Defence, national security and terrorism-World organizations-pacts and summits-Eminent persons & places in news-Sports & games-Books & authors -Awards & honours-Cultural panorama-Latest historical events - India and its neighbours - Latest terminology- Appointments-who is who?

Political Science 1. India's foreign policy 2. Latest court verdicts – public opinion 3. Problems in conduct of public elections 4. Political parties and political system in India 5. Public awareness & general administration 6. Role of voluntary organizations & govt., 7. Welfare oriented govt. schemes, their utility

Geography Geographical landmarks-Policy on environment and ecology.

Economics Current socio-economic problems-New economic policy & govt. sector

Science Latest inventions on science & technology-Latest discoveries in Health Science-Mass media & communication.

UNIT - III: GEOGRAPHY

Earth and Universe - Solar system-Atmosphere hydrosphere, lithosphere - Monsoon, rainfall, weather and climate - Water resources - Rivers in India-Soil, minerals & natural resources - Natural vegetation - Forest & wildlife-Agricultural pattern, livestock & fisheries -Transport including Surface transport & communication - Social geography – population -density and distribution-Natural calamities – disaster management-Climate change - Impact and consequences - Mitigation measures - Pollution Control.

UNIT - IV: HISTORY AND CULTURE OF INDIA

Pre-historic events -Indus valley civilization-Vedic, Aryan and Sangam age-Maurya dynasty-Buddhism and Jainism-Guptas, Delhi Sultans, Mughals and Marathas-Age of Vijayanagaram and the Bahmanis-South Indian history - Culture and Heritage of Tamil people-Advent of European invasion-Expansion and consolidation of British rule - Effect of British rule on socio-economic factors-Social reforms and religious movements - India since independence-Characteristics of Indian culture-Unity in diversity – race, colour, language, custom-India-as secular state-Organizations for fine arts, dance, drama, music-Growth of rationalist, Dravidian movement in TN-Political parties and populist schemes- Prominent personalities in the various spheres – Arts, Science, literature and Philosophy – Mother Teresa, Swami Vivekananda, Pandit Ravishankar, M.S.Subbulakshmi, Rukmani Arundel and J.Krishnamoorthy etc.

UNIT - V: INDIAN POLITY

Constitution of India - Preamble to the constitution- Salient features of constitution- Union, State and territory- Citizenship-Rights and duties- Fundamental rights- Fundamental duties- Human rights charter- Union legislature – Parliament- State executive- State Legislature – assembly- Status of Jammu & Kashmir- Local government – panchayat raj – Tamil Nadu- Judiciary in India – Rule of law/Due process of law- Indian federalism – center – state relations-. Emergency provisions- Civil services in India- Administrative challenges in a welfare state- Complexities of district administration- Elections - Election Commission Union and State. Official language and Schedule-VIII- Amendments to constitution- Schedules to constitution-. Administrative reforms & tribunals- Corruption in public life- Anti-corruption measures – Central Vigilance Commission, lok-adalats, Ombudsman, - Comptroller and Auditor General of India- Right to information - Central and State Commission- Empowerment of women- Voluntary organizations and public grievances redressal- Consumer protection forums.

UNIT - VI: INDIAN ECONOMY

Nature of Indian economy-Need for economic planning-Five-year plan models-an assessment-Land reforms & agriculture-Application of science in agriculture Industrial growth-Capital formation and investment-Role of public sector & disinvestment-Development of infrastructure- National income- Public finance & fiscal policy- Price policy & public distribution- Banking, money & monetary policy- Role of Foreign Direct Investment (FDI)-

WTO-globalization & privatization- Rural welfare oriented programmes- Social sector problems – population, education, health, employment, poverty-HRD – sustainable economic growth- Economic trends in Tamil Nadu -Energy - Different sources and development-Finance Commission -Planning Commission- National Development Council.

UNIT - VII: INDIAN NATIONAL MOVEMENT

National renaissance-Early uprising against British rule-1857 Revolt- Indian National Congress-Emergence of national leaders-Gandhi, Nehru, Tagore, Nethaji -Growth of militant movements -Different modes of agitations-Era of different Acts & Pacts-World war & final phase struggle-Communalism led to partition-Role of Tamil Nadu in freedom struggle - Rajaji, VOC, Periyar, Bharathiar & Others-Birth of political parties /political system in India since independence.

UNIT - VIII: APTITUDE AND MENTAL ABILITY TESTS

Conversion of information to data-Collection, compilation and presentation of data - Tables, graphs, diagrams-Parametric representation of data-Analytical interpretation of data - Simplification-Percentage-Highest Common Factor (HCF)-Lowest Common Multiple (LCM)- Ratio and Proportion-Simple interest-Compound interest-Area-Volume-Time and Work-Behavioural ability -Basic terms, Communications in information technology-Application of Information and Communication Technology (ICT)- Decision making and problem solving- Logical Reasoning-Puzzles-Dice-Visual Reasoning-Alpha numeric Reasoning-Number Series-Logical Number/Alphabetical/Diagrammatic Sequences.
