



TAMIL NADU PUBLIC SERVICE COMMISSION

NOTIFICATION NO:14 /2014

DATED:22.08.2014

Applications are invited only through online mode upto 21.09.2014 for Direct Recruitment to the vacancies in the following posts :-

Name of the Post and Code No.	Name of the Service and Code No.	No. of vacancies	Scale of Pay	
Assistant Works Manager in the Government Press (Post Code No.2094)	Tamil Nadu Stationery and Printing Service (Service Code No.063)	8	Rs.15600-39100 + Grade Pay Rs.5400/- (PB3) per mensem	
		GT(G)-1		MBC/DC(G) -1
		GT(W)-1		MBC/DC(W) -1
		BC(G)-1		SC(G) -1
Assistant Works Manager in the Tamil Arasu Press (Post Code No.3013)	Tamil Nadu General Service (Service Code No.035)	1		
		GT(G)		

2. IMPORTANT DATES:-

Date of Notification	22-08 -2014	-
Last date for submission of applications	21-09-2014	-
Last date for payment of Fee through Bank or Post Office	23-09-2014	-
Date of Written Examination		
Paper – I (Printing Technology)	01-11-2014 FN	10.00 AM – 01.00 PM
Paper – II (General Studies)	01-11-2014 AN	02.30PM – 04.30 PM

3. QUALIFICATIONS:-

(A) AGE (as on 01.07.2014): (Common for both the posts)

Sl. No.	Category of Candidates	Minimum Age	Maximum Age
1.	SCs, SC(A)s, STs, MBCs/DCs, BCs, BCMs and Destitute Widows of all Castes.	18 Years	No Age limit
2.	'Others' [i.e. candidates not belonging to SCs, SC(A)s, STs, MBCs/DCs, BCs and BCMs].	18 Years	30 Years

Note:-

“Others” [i.e Candidates not belonging to SCs, SC(A)s, STs, MBCs/DCs, BCs, BCMs] who have put in five years of service in the State/Central Government are not eligible even if they are within the age limit. **This clause will not apply to persons who are already employed in the Tamil Nadu Stationery and Printing Department.**

(B) EDUCATIONAL QUALIFICATION :- (as on 22.08.2014) (Common for both the posts)

Candidates should possess the following or its equivalent qualification awarded by any University or Institution recognized by the University Grants Commission for the purpose of its grant:

Name of the Post	Assistant Works Manager
Educational Qualification	(i) Must possess a B.E degree in Printing Technology Or (ii) (a) Must possess minimum general educational qualification as prescribed in the Schedule to Part II of the Tamil Nadu

	<p>State and Subordinate Service Rules and a diploma in Printing Technology (letter Press or Offset)</p> <p style="text-align: center;">Or</p> <p>(b) Must possess minimum general educational qualification as prescribed in the Schedule to Part II of the Tamil Nadu State and Subordinate Service Rules and a diploma in Printing Technology with any elective subject awarded under the revised integrated pattern of course.</p> <p style="text-align: center;">and</p> <p>(c) practical experience in Letter Press or Offset printing in a reputed printing press for not less than five years, out of which two years must be in a supervisory capacity; (for clause 'a' & 'b' above)</p>
<p style="text-align: center;">Preferential Qualification</p>	<p>Provided that other things being equal, first preference will be given to a candidate who possesses all the following four qualification, second preference to a candidate who possesses any three of the four qualifications, third preference to a candidate who possesses any two of the four qualifications and fourth preference to a candidate who possesses any one of the four qualifications.</p> <ol style="list-style-type: none"> 1. A pass in the examination in Typography or Lithography conducted by the City and Guilds Institute, London. 2. A pass in the examination in Costing by any Institute recognised by the Government of Tamil Nadu or by the Government of India. 3. Completion of one year of Apprenticeship in the Printing Technology either under Government of India Scheme or under the government of Tamil Nadu Apprenticeship Scheme. 4. A Degree from any University recognised by the University Grants Commission for the purpose of awarding its grants. <p>Provided further that in case all the candidates possess only one of the preferential qualifications, preference will be given to those who possess the qualification in the order specified.</p>

Note

- (i) The Diploma/Degree qualification prescribed should have been obtained after passing SSLC/10th, Diploma/H.S.C.
- (ii) Minimum General Educational Qualification means "Must have passed S.S.L.C Public Examination or its equivalent with eligibility for admission to Higher Secondary Courses of Studies (or) to College Courses of studies".
- (iii) Candidates claiming equivalence of qualification should upload evidence for such claim in the form of Government Order (G.O.) issued prior to the date of this Notification. The G.O. issued after the date of Notification will not be accepted.

Explanation:

Revised integrated pattern means the restructured pattern of course introduced in the year 1986-87 with any of the elective subjects, viz., Press Work and Finishing or Printing and Packaging or Pre-press Operations integrating the basis of the Printing Technology covering both Letter Press or Offset.

4. GENERAL INFORMATION:-

- A. The Rule of reservation of appointments is applicable to the post of Assistant Works Manager in the Government Press. But rule of reservation does not apply to the post of Assistant Works Manager the Tamil Arasu Press, since the cadre strength of the post is one only.

- B. In G.O. Ms. No. 145, Personnel and Administrative Reforms (S) Department, dated 30.09.2010, the Government have issued orders to fill up 20% of all vacancies in direct recruitment on **preferential basis** to persons studied the prescribed qualification in Tamil Medium. The 20% reservation of vacancies on preferential allotment to **Persons Studied in Tamil Medium (PSTM)** will apply for this recruitment. The turns for PSTM has been ordered in G.O. Ms. No. 40, Personnel and Administrative Reforms (S) Department, dated 30.04.2014. (Candidates claiming this reservation should have studied the prescribed qualification for the post in Tamil Medium and should have the certificate for the same. Having written the examinations in Tamil language alone will not qualify for claiming this reservation). If the candidates with PSTM are not available for selection for appointment against reserved turn such turn shall be filled up by Non-PSTM candidates but belonging to the respective communal category. Regarding the PSTM reservation certificate shall be produced / uploaded by the candidate as it has been in prescribed format / proforma available in the Commission's website at 'www.tnpsc.gov.in' which may be obtained from the Head of the Institution.

(For further details refer para. 27 (19) of the 'Instructions to candidates').

- C. The number of vacancies advertised is only approximate and is liable for modification including reduction with reference to vacancy position at any time before finalisation of selection.
- D. If no qualified and suitable woman candidates are available for selection against the vacancies reserved for them, those vacancies will be filled by male candidates belonging to the respective communal categories.

E. CERTIFICATE OF PHYSICAL FITNESS:-

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

Name of the Post	Standard of Vision	Form of Certificate of Physical Fitness
Assistant Works Manager in the Government Press	Standard-III or better	Form prescribed for post other than Executive and Ministerial
Assistant Works Manager in the Tamil Arasu Press		

For appointment to the posts, colour blindness will be a disqualification. Candidates with defective vision should produce eye fitness certificate from a qualified eye specialist.

- F. In G.O.Ms.No.53 Social Welfare & Nutritious Meal Programme Department dated 11.04.2005 and further, in G.O.Ms.No.25 Welfare of Differently Abled Persons (DAP2.1) Department, dated 14.03.2013, the posts of Assistant Works Manager in the Government Press and Assistant Works Manager in the Tamil Arasu Press have not been identified as suitable for Differently Abled persons. Hence, no reservation is provided for Differently Abled persons for the said posts. However, they can apply and should upload the documents referred in para 14 (f) of the Commission's 'Instructions to candidates' when called for.
- G. The Differently Abled persons should upload a copy of certificate of physical fitness specifying the nature of physical handicap and the degree of disability based on the norms laid down, from the Medical Board to the effect that his/her handicap will not render him/her incapable of efficiently discharging the duties attached to the post to which he/she has been selected before appointment when called for by Tamil Nadu Public Service Commission.
- H. Reservation of appointments to "Destitute Widows" and Ex-Servicemen will not apply to this recruitment.
- I. Even after filling up of the posts 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 candidates, it shall be filled up by Scheduled Castes other than Arunthathiyars.
- J. Any claim relating to the selection (not related to candidature or / and claims made in the application) should be received when called for documents / uploading document is made. Any claim received thereafter will receive no attention.

- K. Information regarding arrest, convictions/debarment/disqualification by any recruiting agency, criminal or any disciplinary proceedings initiated or finalised, participation in agitation or any Political Organization, candidature in election for Parliament/State Legislature/Local Bodies etc., if any, should also be furnished to the Commission.
- L. The selection for appointment to the above said post is purely provisional subject to final Orders on pending Writ Petitions, if any, filed in Madras High Court and Madurai Bench of Madras High court.
- M. **Applications containing wrong claims relating to category of reservation / age / educational qualification / Practical Experience will be liable for rejection.**

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

Subject	Duration	Maximum Marks	Minimum Qualifying Marks for selection	
			SC, ST, MBC/DC BC(M) & BC	Others
<u>Computer Based Test Format Objective Type</u>				
(i) Paper I Printing Technology (Diploma Standard) (200 questions)	3 hours	300	171	228
(ii) Paper II General Studies (HSC Standard) (100 items) (General Studies -75 and Aptitude and Mental Ability -25 questions)	2 hours	200		
(iii) Interview		70		
TOTAL		570		

Note:-

- The Question paper in "General Studies" will be set both in English and in Tamil and the question paper in the subject "Printing Technology" will be set in English only.
- The candidates who have not appeared for any of the subjects in the written examination will not be considered for selection even if they secure the minimum qualifying marks for selection.
- The syllabus for the subjects **Printing Technology** (Diploma Standard) and **General Studies** (HSC Standard) are available in the Commission's website www.tnpsc.gov.in and also furnished in Annexure-I to this Notification.

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 Test (CBT) is similar to paper pen shading test.
- In CBT, questions with four options each will be displayed in the computer screen.
- Candidate has 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.
- Candidate can use only the mouse to select the correct answers and proceed with answering the questions.
- 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 CBT. Knowledge in Mouse operation is suffice to take up the CBT.
- The question and answers can be zoomed to the required level for the candidates with visual impairment.

Candidates will be admitted to the examination till 30 minutes from the commencement of the examination. Candidates have to sign the attendance sheet and affix thumb impression for verification of his 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.

6. CENTRES FOR EXAMINATION:-

Examination will be held at **Chennai** Centre only.

Note:

The Commission reserves the right to increase/decrease the number of examination centres and to re-allot the candidates.

7. EXERCISING OPTION AND ORDER OF PREFERENCE OF POSTS :-

Candidates, who wish to apply for the recruitment, should specify the name of the post/posts in the online application as per the preferential order. While finalising the selection, the option exercised by the candidates in regard to order of preference of posts in the application will be taken into account. If a candidate has not opted for any of the posts, he/she will be considered for the post in the order as specified in para - 1 of the Notification subject to his/her eligibility to the posts. A candidate once selected for a post will not be considered for the other posts.

8. PROCEDURE OF SELECTION:-

Selection will be made in two successive stages i.e.,

- (i) Main Examination in Computer Based Test (CBT) Format and
- (ii) Oral Test.

(For further details refer paragraph 21 (b) of the 'Instructions to the candidates').

9. EXAMINATION FEE: -

- Rs.175/- (Rupees one hundred and Seventy five only) be paid. (i.e. Cost of Application Rs. 50/- + Examination fee Rs.125/-) Candidates claiming exemption from examination fee should pay Rs.50/- towards Application cost. (No exemption for cost of application)

- Candidates have also to pay the service charges applicable to the Bank or Post Office or Fee Processing Agency.
- Candidates can avail of the facility of one time Registration on payment of Rs.50/- towards Registration fee. The registration shall be valid for a period of Five years from the date of one time registration.
- **Offline mode of payment in the form of DD/ Postal Order etc., will not be accepted and the applications forwarded with such modes of payment will be summarily rejected.**
- Those who have registered in the **one time registration** system and paid the registration fee of Rs.50/- and received the registration ID **need not pay** the application fee i.e., Rs. 50/- and it is enough to pay the examination fee alone.
- Candidates who have made one time registration must apply for the notified post. One time registration is only to avail exemption for application fee for a period of 5 years from the date of registration.

(For further details regarding the Examination fee concessions refer paragraph 12 of the Instructions to the candidates').

10. NO OBJECTION CERTIFICATE:-

Refer to paragraph 15(g) of the 'Instructions to the candidates'.

11. CONCESSIONS:-

Concessions in the matter of age and / or fees allowed to SCs, SC(A)s, STs, MBCs/DCs, BCs, BCMs, Destitute Widows, Ex-servicemen and Differently Abled persons, other categories of persons etc. are given in paragraphs 12 to 14 of the 'Instructions to the candidates'.

12. HOW TO APPLY:

- Candidates should apply only through online in the Commission's Website www.tnpsc.gov.in or in www.tnpscexams.net
- Before applying, the candidates should have scanned image of their photograph and signature in CD/DVD/Pen drive as per their convenience.
- A valid e-mail ID or Mobile Number is mandatory for registration and e-mail ID should be kept active till the declaration of results. Candidates are cautioned to keep your e-mail ID and password confidentially. TNPSC will send Hall Tickets (Memorandum of Admission) for Main Examination, Interview Call Letters, Other Memos etc. to the registered/given e-mail ID only.
- All the particulars mentioned in the online application including Name of the Candidate, Post Applied, Communal Category, Date of birth, Address, e-mail ID, Centre of Examination etc. will be considered as final and **no modifications will be allowed after the last date specified for applying online.** Since certain fields are firm and fixed and cannot be edited, candidates are requested to fill in the online application form with the utmost care and caution as no correspondence regarding change of details will be entertained.
- The candidates who wish to receive SMS should register their mobile number in the application.

12(A) APPLYING ONLINE:

- 1) Candidates are first required to log on to the TNPSC's website www.tnpsc.gov.in or www.tnpscexams.net.
- 2) Click "Apply Online" to open up the On-Line Application Form.
- 3) Select the name of the post or service for which you wish to apply.
- 4) If you already have Unique ID, enter the Unique ID and password to view the already available information and update them, if necessary.
- 5) If you do not have valid ID, enter all the required particulars without skipping any field.

- 6) Candidates are required to upload their latest photograph and signature as per the specifications given in the Guidelines for Scanning and Upload of Photograph and Signature. **An online application uploaded without the photograph and signature will be rejected.**

Note:

Candidate who have One Time Registration ID (Unique ID) and pass word, have to apply separately for all notifications. One Time Registration will not be considered as an application for any post.

12(B) Mode of Fee Payment:-

Select the mode of payment (Online Payment/Offline Payment).

12(C) Online Payment (Net Banking, Credit card/Debit card) :-

- 1) In case candidates who wish to pay fees through the online payment gateway, i.e. Net banking, Credit card and Debit card payment, **an additional page of the application form will be displayed** wherein candidates may follow the instructions and fill in the requisite details to make payment.
- 2) After submitting your payment information in the online application form, wait for the intimation from the server, **DO NOT press Back or Refresh button in order to avoid double charge.**
- 3) If the online transaction has been successfully completed, a registration ID number and password will be generated. Candidates should note their registration ID number and password for future reference in respect of the post applied for.

12 (D) Offline Payments (Post Office or Indian Bank):-

- 1) For offline mode of payment, candidates have to select either Post Office or Indian Bank branch.
- 2) Click "SUBMIT" to submit the application form.
- 3) Candidates will be provided with application number and password. Please note down the application number and password.
- 4) On submission, system will generate the payment chalan which the candidate need to take print out and go to the nearest branch of Indian Bank or the designated Post Offices as the case may be, to make the payment.
- 5) Collect the candidate's copy of the fee payment chalan from the branch. Check that the chalan is properly signed and the details of transaction number, branch name and DP code number, deposit date have been noted in the chalan by the branch authorities.
- 6) On-line application registration will be taken as successful one, only if the payment is made either in the post office or in the Indian Bank **within two working days from the date of registration/submission of application.**

12(E) Print Option:-

- 1) After submitting the application, candidates can print / save their application in PDF format.
- 2) On entering registration number and password, candidates can download their application and print, if required.
- 3) Need not send the printout of the online application or any other supporting documents to the Commission. The certificates will be verified only when the candidates come up for next stage of selection.

Note:-

- I. Candidates are advised in their own interest to apply on-line much before the closing date and not to wait till the last date for depositing the fee/ intimation charges to avoid the possibility of disconnection/inability/failure to log on the TNPSC's website on account of heavy load on internet/website jam.
- II. TNPSC does not assume any responsibility for the candidates not being able to submit their applications within the last date on account of the aforesaid reasons or for any other reason beyond the control of the TNPSC.
- III. Under no circumstances, a candidate should share/mention e-mail ID or mobile number to any other person. In case a candidate does not have a valid personal e-mail ID, they should create a new e-mail ID before applying on-line and must maintain that e-mail account.
- IV. There is a provision to modify the submitted on-line application. Candidates are requested to make use of this facility to correct their details in the on-line application if any. This modification facility will be available up to the last date for applying online for the particular post. After this date, no modification will be permitted. Candidates should take utmost care and caution while filling in the on-line application. Please note that no modification in fee payment details will be permitted for candidates who pay fees/intimation charges through the online mode. Since certain fields are firm, fixed and cannot be edited, candidates are advised to fill in the online application form with the utmost care and caution as no correspondence regarding change of details will be entertained.
- V. Candidates should carefully fill in the details in the on-line application at the appropriate places and click on the "SUBMIT" button at the end of the on-line application format. Before pressing the "SUBMIT" button, candidates are advised to verify each and every particular column in the application. The name of the candidate or his/her father/spouse etc. should be spelt correctly in the application as it appears in the certificates/mark sheets. Any change/alteration found may disqualify the candidature.
- VI. Request for change/correction in any particulars in the application form shall not be entertained under any circumstances **after the last date for** editing/updating application details specified. TNPSC 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 form.
- VII. Commission is not responsible for the online payment failure.

13. OTHER IMPORTANT INSTRUCTIONS:-

- a. **Candidates should ensure their eligibility for examination:** The candidates applying for the examination should ensure that they fulfil all eligibility conditions for admission to examination. **Their admission to all stages of the examination will be purely provisional subject to satisfying of the eligibility conditions.** Mere issue of memo of admission to the candidate will not imply that his/her candidature has been fully cleared by the Commission.
- b. **How to apply:** Candidates are required to apply on-line by using the website www.tnpsc.gov.in or www.tnpscexams.net Detailed instructions for filling up online application are given in para 12 of this Notification.
- c. The Hall Tickets for eligible candidates will be made available in the Commission's website www.tnpsc.gov.in or www.tnpscexams.net for downloading by candidates. No Hall Tickets will be sent by post.
- d. **Grievance Redressal Cell for guidance of candidates:** In case of any guidance/information/clarification of their applications, candidature, etc. candidates can contact Tamil Nadu Public Service Commission's Office in person or over Telephone

No. 044-25300300 or the Commission's Office Toll-Free No.1800 425 1002 on all working days between 10.00 a.m. and 05.45 p.m.

e. **Mobile phones and other articles banned:-**

- (i) Candidates are not allowed to bring Pager, Cellular phone, Calculator, memory notes and books etc. or any other Electronic device or Recording device either as separate piece or part of something used by the candidate such as Watch or Ring.
 - (ii) If they are found to be in possession of any such thing or instrument they will not be allowed to attend 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) Do not bring into the Examination Hall any article such as books, notes, loose sheets, mathematical and drawing instruments, Log Tables, stencils of maps, slide rules, Text Books, rough sheets etc. except the permitted writing material i.e. pen. No colour pen or pencil must be used.
 - (iv) Candidates are advised in their own interest not to bring any of the banned items including Mobile phones/Pagers to the venue of the examination, as arrangements for safekeeping cannot be assured.
- f. Candidates are not required to submit along with their application any certificates in support of their claims regarding age, educational qualifications, community certificates and certificates regarding their physical disability, etc.,. They should be submitted when called for by the Tamil Nadu Public Service Commission. The candidates 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 viz. Main Examination and Oral Test will be purely provisional, subject to their satisfying the prescribed eligibility conditions. If on verification at any time before or after the Main Examination and Oral Test, it is found that they do not fulfil any of the eligibility conditions, their candidature for the examination will be cancelled by the Commission.
- g. If any of their claims is found to be incorrect, they may render themselves liable to disciplinary action by the Commission.
- h. **Unfair means strictly prohibited:** No candidate shall copy from any other candidate nor permit to be copied nor give nor attempt to give nor obtain nor attempt to obtain irregular assistance of any description.
- i. **Conduct in examination hall:** No candidate 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 severely viewed & penalized.

The on-line application can be filled upto 21.09.2014 till 11.59 p.m., after which the link will be disabled.

(For any additional information the candidates may refer Commission's "Instructions to the candidates" at the Commission's website www.tnpsc.gov.in)

Secretary

ANNEXURE-I
Paper-I
PRINTING TECHNOLOGY
(Diploma Standard)

1. SCIENCE AND BASIC ENGINEERING:- Units and Measurements - Force and measurement - Properties of Matter, Thermal properties of Materials, Illumination and Electromagnetic Spectrum, Acids, Alkalies and pH, Electrical systems - Electric Motors - Electronics - Mechanical components, Hydraulics.
2. PRINTING MATERIALS:- Materials, Metals used for Image carriers for different processes - Light sensitive materials, substrates, papers, Boards and their characteristics, Printing Inks - Constituents and general characteristics, Requirements of paper and ink for various printing processes.
3. PRINT DESIGN AND PRODUCTS:- Factors involved in Print planning, Typography and Design principles, various kinds of printed products - their formats, Designing factors, colour application.
4. TYPESETTING:- Selection of Types of various jobs - Style of the House, style of the work casting off, Typesetting for various kinds of jobs, Proofing methods.
5. COMPUTERISED TYPE - SETTING:- Basic structure of Computer, Hardware - Input and Output Devices, Software - operating system; - Software used in Desktop Publishing; Digital imaging method, Scanners, Image Editing, Colour Correction, Colour Management, Laser Printer - Paper, Polymaster - Methods of Colour Proofing, Care and Maintenance of Computer Division.
6. REPRODUCTION:- Reproduction Camera, - Optical principles, Line and Half-tone Photography - contact Photography, Principles of colour Separation - Electronic colour - Scanners - (Drum and Flat Bed) - Imagesetter - Colour Correction, Colour Management Systems - Automatic Film Processor - Quality Control Aids, Proofing Systems.
7. FILM ASSEMBLY AND PLATE MAKING:- Film Assembly - Pagination, Image Registering System, - Plate making Techniques - Wipe-on process - Presensitized Plates - Plate Selection, Care and Storage, Autoplate Processor, Computer - to - plate Imaging, Quality Control Aids.
8. PRINTING:- Principles involved in different printing processes - Machines for letterpress, Offset, Gravure, Flexography and Screen Printing. Construction of Machines - Production Control - Workflow - Delivery and Drying Methods - Web Offset - Wet-onWet Printing - Printing problems - causes and remedies.
9. BINDING AND FINISHING:- Ware House Operation - Securing operation - Forwarding, Covering and Finishing Operations - Automation in Binding and Finishing, Production Control - Workflow sequence - Carton Designing and Flexible Packaging - Printing Process for Packaging - Surface Coating and Lamination.
10. MANAGEMENT:- Structure of Organisation - Office Procedures, Costing and Estimating - Classification of Accounts, Leadership - Delegation and Authority, - Human Relation - Productivity - Quality Control System(ISO) - Selection and use of ISO - Benefits of Quality Systems - Inspection and Testing.

Paper-I
General Studies
(H.S.C Standard)

Unit-I General science:

Physics Nature of Universe-General Scientific laws-Inventions and discoveries-National scientific laboratories-Mechanics and properties of matter-Physical quantities, standards and units-Force, motion and energy-Magnetism, electricity and electronics- Heat, light and sound

Chemistry-Elements and Compounds-Acids, bases and salts-Fertilizers, pesticides, insecticides
Botany-Main Concepts of life science-Classification of living organism-Nutrition and dietetics-Respiration

Zoology-Blood and blood circulation-Reproductive system-Environment, ecology, health and hygiene-Human diseases, prevention and remedies-Animals, plants and human life

Unit- II. Current Events

History Latest diary of events-national -National symbols-Profile of States-Eminent persons & places in news-Sports & games-Books & authors -Awards & honors'-India and its neighbours

Political Science-Problems in conduct of public elections-Political parties and political system in India-Public awareness & General administration-Welfare oriented govt. schemes, their utility-

Geography-Geographical landmarks-

Economics :Current socio-economic problems

Science: Latest inventions on science & technology

Unit- III. Geography Earth and Universe-Solar system-Monsoon, rainfall, weather & climate-Water resources --- rivers in India-Soil, minerals & natural resources-Forest & wildlife-Agricultural pattern-Transport & communication-Social geography – population-density and distribution-Natural calamities – Disaster Management.

Unit_ IV. History and culture of India and Tamil Nadu Indus valley civilization-Guptas, Delhi Sultans, Mughals and Marathas-Age of Vijayanagaram and the bahmanis-South Indian history-Culture and Heritage of Tamil people-India since independence-Characteristics of Indian culture-Unity in diversity – race, colour, language, custom-India-as secular state-Growth of rationalist, Dravidian movement in TN-Political parties and populist schemes

Unit-V. INDIAN POLITY Constitution of India--Preamble to the constitution- Salient features of constitution- Union, state and territory- Citizenship-rights amend duties- Fundamental rights-Fundamental duties- Human rights charter- Union legislature – Parliament-. State executive-. State Legislature – assembly- Local government – panchayat raj – Tamil Nadu- Judiciary in India – Rule of law/Due process of law-. Elections-. Official language and Schedule-VIII-. Corruption in public life-. Anti-corruption measures –CVC, lokadalats, Ombudsman, CAG- Right to information-Empowerment of women- Consumer protection forms-

Unit-VI. INDIAN ECONOMY

Nature of Indian economy- Five-year plan models-an assessment-Land reforms & agriculture-Application of science in agriculture-Industrial growth-Rural welfare oriented programmers-Social sector problems – population, education, health, employment, poverty-Economic trends in Tamil Nadu

Unit-VI. INDIAN NATIONAL MOVEMENT

National renaissance--Emergence of national leaders-Gandhi, Nehru, Tagore-Different modes of agitations-Role of Tamil Nadu in freedom struggle Rajaji, VOC, periyar, Bharathiar & others

Unit VII.

APTITUDE & 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 - Logical Reasoning-Puzzles- Dice-Visual Reasoning-Alpha numeric Reasoning-Number Series.
