

# सॉफ्टवेयर टेक्नोलॉजी पार्क्स ऑफ इंडिया

(इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी मंत्रालय, भारत सरकार, के अन्तर्गत स्वायत सोसायटी)

Software Technology Parks of India

(An Autonomous Society under Ministry of Electronics & Information Technology, Govt. of India)

# Employment Notice No. 2(1)/I/STPI-HQ/2023-24

Software Technology Parks of India (STPI) is providing Statutory Services to the exporters under STP/EHTP scheme and also extending infrastructural facilities including High Speed Internet and IPLC links. STPI at present has 63 centers at different locations in the country.

Applications are invited from the eligible candidates for filling up Group 'A' S&T and non-S&T and below Group 'A' S&T and non-S&T vacancies given below. The vacancies are proposed to be filled-up by Absorption and/or Direct Recruitment basis. Appointments made on Absorption and/or Direct Recruitment basis shall be on probation for a period of two years from the date of joining in the post.

(1)

<u>-</u> )			
Post Code	:	E – 4 (S&T)	
Name of the post	:	Member Technical Staff- E-IV (Scientist 'E')	
Pay Band and Grade Pay	:	Level 13 (Rs. 123100-215900)	
Age Limit (Max.)	:	For appointment on Absorption basis	56 years
		For appointment on direct recruitment basis	46 years (Relaxation as per Govt. of India rules)
No. of post	:	01 (OBC)	
Mode of recruitment	:	Absorption/Direct Recruitment failing which Deputation.	

# **Essential Qualifications and Experience:**

# For Direct Recruit:

(a) Bachelors degree in Engineering/ Technology with 1<sup>st</sup> class in Electronics/ Electricals/ Electronics & Communications/ Telecommunications/ Computer Science/ Information Technology or Masters in Computer Applications with 1<sup>st</sup> class or M. Sc. with 1<sup>st</sup> class in Physics/ Mathematics/ Statistics/ Computer Science/ Electronics/ Applied Electronics/ Information Technology with 14 years experience.

OR

- (b) Master Degree in Tech./ Engineering with 1st class in Electronics/ Electricals/ Electronics & Communications/ Telecommunications/ Computer Science with 12 years experience.
  - OR
- (c) Ph.D. in Science/ Engineering in any of the above mentioned disciplines /inter-disciplines alongwith qualification mentioned at (a) or (b) above with 09 years of experience.
- (d) Candidate possessing qualification as at (a) or (b) above followed by MBA/ Degree in Law would be eligible for two (2) years relaxation in experience.

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#### For Absorption/Deputation:

In case of Absorption/ Deputation, officers of the Central / State Government / PSUs / Autonomous Bodies:

(i) holding analogous post on regular basis

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having 5 years regular service in Level 12 (Rs. 78800-209200).

(ii) Possessing qualifications as prescribed for Direct Recruitment.

(2) *		* * * * * *		
Post Code	:	E-1 (S&T)		
Name of the post	:	Member Technical Staff - E-I (Scientist 'B')		
Pay Matrix Level	:	Level 10 (Rs.56100-177500)		
Age Limit (Max.)	:	For appointment on direct	30 years (Relaxation as per	
		recruitment basis	Govt. of India rules)	
No. of post	:	07 (UR-03, OBC-02, SC-02)		
Mode of recruitment	:	Direct Recruitment basis.		

# Essential Qualifications and Experience:

# For Direct Recruit:

(a) Bachelors degree in Engineering/ Technology with 1<sup>st</sup> class in Electronics/ Electricals/ Electronics & Communications/ Telecommunications/ Computer Science/ Information Technology or Masters in Computer Applications with 1<sup>st</sup> class or M. Sc. with 1<sup>st</sup> class in Physics/ Mathematics/ Statistics/ Computer Science/ Electronics/ Applied Electronics/ Information Technology.

OR

(b) Master Degree in Tech./ Engineering with 1<sup>st</sup> class in Electronics/ Electricals/ Electronics & Communications/ Telecommunications/ Computer Science.

OR

(c) Ph.D. in Science/ Engineering in any of the above-mentioned disciplines /inter-disciplines alongwith qualification with 2<sup>nd</sup> class mentioned at (a) or (b) above or having any of the above qualification with 2<sup>nd</sup> class mentioned at (a) or (b) above followed by MBA/ Degree in Law. (3)

OR

:	F-7 (Non-S&T)	
:	Sr. Finance Officer (A-VII)	
:	Level 11 (Rs. 67700-208700)	
:	For appointment on Absorption basis	56 years
	For appointment on Direct Recruitment	45 years (Relaxation as per Govt. of India
	basis	norms)
:	01 (UR)	
:	Absorption/Direct Recruitment failing whic	h Deputation.
	:	:       Sr. Finance Officer (A-VII)         :       Level 11 (Rs. 67700-208700)         :       For appointment on Absorption basis         For appointment on Direct Recruitment basis         :       01 (UR)

## **Essential Qualifications and Experience:**

## For Direct Recruits:

Graduate in Commerce from recognized University with eleven years' experience in the field of commerce/finance/accounts. OR Post Graduate in Commerce from a recognized University with nine years' experience in the field commerce/finance/accounts. OR CA/ ICWA/ SAS(IAAD/ICAD)/ MBA with specialization in Finance from recognized Institution/ University followed by B.Com with six years' experience in the field of commerce/finance/accounts.

# For Absorption/Deputation:

In case of Absorption/ Deputation, officers of the Central/State Govt./PSUs/ Autonomous Bodies.

(i) holding analogous post on regular basis.

having Five (5) years regular service in Level 10 (Rs. 56100-177500)/ Level 9 (Rs. 53100-167800) and having experience in the area of commerce, finance and accounts.

(ii) possessing qualification as prescribed for Direct Recruitment.

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<u>(</u> 4) *				
Post Code	:	F-6 (Non-S&T)		
Name of the post	:	Finance Officer (A-VI)		
Pay Level	:	Level 10 (Rs. 56100-177500)		
Age Limit (Max.)	:	For appointment on Absorption basis 56 years		
		For appointment on Direct Recruitment 42 years (Relaxation as per Govt. of India		
		basis norms)		
No. of post	:	01 (UR)		
Mode of recruitment	:	Absorption/Direct Recruitment.		

# Essential Qualifications and Experience:

# For Direct Recruits:

Graduate in Commerce from recognized University with eight years' experience in the field of commerce/finance/accounts. OR Post Graduate in Commerce from a recognized University with six years' experience in the field commerce/finance/accounts. OR CA/ ICWA/ SAS(IAAD/ICAD)/ MBA with specialization in Finance from recognized Institution/ University followed by B.Com with four years' experience in the field of commerce/finance/accounts.

## For Absorption:

In case of Absorption, officers of the Central/State Govt./PSUs/ Autonomous Bodies.

(i) holding analogous post on regular basis.

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having Two/ Three years regular service in Level 8 (Rs. 47600-151100)/ Level-7 (Rs. 44900-142400) respectively and having experience in the area of commerce, finance and accounts.

# (ii) possessing qualification as prescribed for Direct Recruitment.

\*Note: Out of the total 08 vacancies mentioned in sl. No. 2 & 4 above, 02 posts are reserved for PH [1-OH & 01-Multiple Disability etc...]

(5) **		*****	
Post Code	:	ES-5 (S&T)	
Name of the post	:	Member Technical Support S	Staff (MTSS) ES-V
Pay Matrix Level	:	Level 6 (Rs. 35400-112400)	, , , , , , , , , , , , , , , , , , ,
Age Limit (Max.)	:	For appointment on Absorption basis	56 years
	:	For appointment on direct recruitment basis	36 years (Relaxation as per Govt. of India rules)
No. of post	:	04 (02-UR, 02-SC)	01 (UR) – STPI-Noida 01 (UR) – STPI-Gurugram 01 (SC) – STPI-Bhubaneswar 01 (SC) – STPI-Thiruvananthpuram]
Mode of recruitment	:	Absorption/ Direct Recruitment basis.	

## **Essential Qualifications and Experience:**

## For Direct Recruit:

Three years Diploma in Electronics/Computer Science/ Information Technology/ Telecommunication or Bachelor in Electronics/Computer Science/ Computer Application/ IT or possessing DOEACC 'A' level certificate with two years' experience.

## For Absorption:

In case of absorption, officers of the Central/ State Govt./ PSUs/ Autonomous Bodies:

(i) holding analogous post on regular basis.

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having 3 years regular service in Pay Matrix Level-5 (Rs. 29200-92300).

(ii) possessing qualifications as prescribed for Direct Recruitment.

Post Code	:	A-4 (Non-S&T)	
Name of the post	:	Assistant (A-IV)	
Pay Matrix Level	:	Level 6 (Rs. 35400-112400)	
Age Limit (Max.)	:	For appointment on Absorption basis	56 years
	:	For appointment on direct recruitment basis	36 years (Relaxation as per Govt. of India rules)
No. of post	:	04 (02- UR, 01-ST, 01-OBC)	01 (UR) – STPI-Noida 01 (UR) – STPI-Srinagar (Gurugram) 01 (ST) – STPI-Bengaluru 01 (OBC) – STPI-Hyderabad
Mode of recruitment	:	Absorption/ Direct Recruitment basis.	

# Essential Qualifications and Experience: For Direct Recruit:

Graduate in any discipline from a recognized University with four years' experience in the field of personnel/ administration/ finance/vigilance etc.

OR

Post Graduate in any discipline from a recognized University with two years' experience in the field of personnel/ administration/ finance/ vigilance etc.

# For Absorption:

In case of absorption, officers of the Central/ State Govt./ PSUs/ Autonomous Bodies:

(i) holding analogous post on regular basis.

OR

having Three (3) years regular service in Pay Matrix Level-5 (Rs. 29200-92300).

OR

having Six (6) years regular service in Pay Matrix Level-4 (Rs. 25500-81100).

(ii) possessing qualifications as prescribed for Direct Recruitment.

\*\***Note:** Out of the total 08 vacancies mentioned in sl. No. 5 & 6 above, 04 vacancies are reserved for PH (01-HH, 01-VH, 01-OH & 01- Multiple Disability etc....)

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<u>(7) ***</u>				
Post Code	:	ES-4 (S&T)		
Name of the post	:	Member Technical Support Sta	ff (MTSS) ES-IV	
Pay Matrix Level	:	Level 5 (Rs. 29200-92300)		
Age Limit (Max.)	:	For appointment on Absorption basis	56 years	
	:	For appointment on direct recruitment basis	34 years (Relaxation as per Govt. of India rules)	
No. of post	:	01 (ST) – STPI-Hyderabad		
Mode of recruitment	:	Absorption / Direct Recruitment basis.		

## Essential Qualifications and Experience: For Direct Recruit:

Three years Diploma in Electronics/Computer Science/ Information Technology/ Telecommunication or Bachelor in Electronics/Computer Science/ Computer Application/ IT or possessing DOEACC 'A' level certificate with one year experience.

## For Absorption:

In case of absorption, officers of the Central/ State Govt./ PSUs/ Autonomous Bodies:

(i) holding analogous post on regular basis.

OR

having 3 years regular service in Pay Matrix Level-4 (Rs. 25500-81100).

(ii) possessing qualifications as prescribed for Direct Recruitment.

(6) \*\*

Post Code	:	ES-3 (S&T)		
Name of the post	:	Member Technical Support Staff (MTSS) ES-III		
Pay Matrix Level	:	Level 4 (Rs. 25500-81100)		
Age Limit (Max.)	:	For appointment on direct recruitment basis	32 years (Relaxation as per Govt. of India rules)	
No. of post	:	01 (OBC) – STPI-Thiruvananthpuram (Lien Vacancy#)		
Mode of recruitment	:	Direct Recruitment basis.		

# Lien vacancy: It shall be filled up on purely ad hoc basis for a period of two years. The appointment shall be automatically terminated on the expiry of the appointment or return of the regular incumbent of the post whichever is earlier. The appointment may be regularized/ extended on the existing norms depending upon the availability of the post.

#### Essential Qualifications and Experience: For Direct Recruit:

Three years Diploma in Electronics/Computer Science/ Information Technology/ Telecommunication or Bachelor in Electronics/Computer Science/ Computer Application/ IT or possessing DOEACC 'A' level certificate.

(9) ***		*****	
Post Code	:	A-3 (Non-S&T)	
Name of the post	:	Assistant (A-III)	
Pay Matrix Level	:	Level 5 (Rs. 29200-92300)	
Age Limit (Max.)	:	For appointment on Absorption basis	56 years
	:	For appointment on direct recruitment basis	34 years (Relaxation as per Govt. of India rules)
No. of post	:	02 (UR)	01 (UR) – STPI-Bhubaneswar 01 (UR) – STPI-Gurugram
Mode of recruitment	:	Absorption/ Direct Recruitment basis.	

# Essential Qualifications and Experience: For Direct Recruit:

Graduate in any discipline from a recognized University with two years' experience in the field of personnel/ administration/ finance/vigilance etc.

OR

Post Graduate in any discipline from a recognized University with one year experience in the field of personnel/ administration/ finance/ vigilance etc.

# For Absorption:

In case of absorption, officers of the Central/ State Govt./ PSUs/ Autonomous Bodies:

(i) holding analogous post on regular basis.

OR

having Three (3) years regular service in Pay Matrix Level-4 (Rs. 25500-81100).

(ii) possessing qualifications as prescribed for Direct Recruitment.\_

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<u>(10) ***</u>				
Post Code	:	A-2 (Non-S&T)		
Name of the post	:	Assistant (A-II)		
Pay Matrix Level	:	Level 4 (Rs. 25500-81100)		
Age Limit (Max.)	:	For appointment on Absorption basis	56 years	
	:	For appointment on direct recruitment basis	32 years (Relaxation as per Govt. of India rules)	
No. of post	:	06 (03-UR, 02-OBC, 01-SC)	01 (UR) – STPI-Noida 01 (UR) – STPI-Thiruvananthpuram 01 (UR) – STPI-Hyderabad 03 (02-OBC & 01-SC) – STPI-Bengaluru	
Mode of recruitment	:	Absorption/ Direct Recruitme	nt basis.	

# **Essential Qualifications and Experience:**

# For Direct Recruit:

Graduate in any discipline from a recognized University.

Desirable: Six months' certification course in Computer Operations.

## For Absorption:

In case of absorption, officers of the Central/ State Govt./ PSUs/ Autonomous Bodies:

(i) holding analogous post on regular basis.

OR

having Five (5) years regular service in Pay Matrix Level-2 (Rs. 19900-63200).

(ii) possessing qualifications as prescribed for Direct Recruitment.

<u>(11) ***</u>
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Post Code	:	S-1 (Non-S&T)		
Name of the post	:	Office Attendant (S-I)		
Pay Matrix Level	:	Level 1 (Rs. 18000-56900)		
Age Limit (Max.)	:	For appointment on direct 30 years (Relaxation as per ceruitment basis Govt. of India rules)		
No. of post	:	01(UR) – STPI-Bhubaneswar		
Mode of recruitment	:	Direct Recruitment basis.		

# Essential Qualifications and Experience: For Direct Recruit:

Matriculate or equivalent.

**Desirable:** Knowledge of typing, computer and operating photocopying/ fax machine/ Tea Coffee maker etc.

***	Note: (I)	Out of the tot	al 11 vacancies	mentioned in sl.	No. 7 to 1	1 above, (	07 posts	are reserved for	РН (01-ОН, 0	02-
		VH, 02-HH 8	δ 02- Multiple D	isability etc)						
	(II	l) Out of the to	tal 11 vacancies	mentioned in sl	. No. 7 to 1	1 above,	01 post	is reserved for E	x-servicemen	1.

# How to apply:

Candidates meeting the above eligibility requirements may apply online at website <u>www.stpi.in</u>. No other mode of application shall be accepted. Candidate may kindly assure to fill online application properly and should complete all essential steps of online application. Only completed filled online application shall be considered for further process of recruitment.

Persons working in Central/ State Government/PSUs/Autonomous organizations may submit a copy of **NOC issued from their organization** at the time of applying online.

**Application Fee**: For Group 'A' post (Level-10 & above), candidate has to pay an application fee of Rs. 1000/- (Rupees one thousand only) and for below Group 'A' post (Below Level-10), candidate has to pay an application fee of Rs. 500/- (Rupees five hundred only) per application Through NEFT/RTGS to the following Bank Account of this office directly:

Bank Name	Canara Bank, Delhi Parliament	Saving A/C	1098101101244
	Street Branch, New Delhi 110001	Number	
Beneficiary Name	Software Technology Parks of India,	IFSC code	CNRB0001098
	New Delhi		

**OR** Digital Payment through UPI (Unified Payments Interface) and BHIM (Bharat Interface for Money). UPI ID-"stpi@upi" and QR code for UPI payments to Software Technology Parks of India is available at <u>www.stpi.in</u>.

Candidates are advised to mention the Unique Transaction Reference (UTR) number/Transaction ID in the online application wherever sought. No fee is required to be paid by female candidates and candidates belonging to SC/ST/PH category. Fee once paid shall not be refunded.

**Selection process:** Selection for the above posts shall be as follows:

<u>S1.</u> No.	<u>Name of the post(s)</u>	Pay matrix Level	Selection process		
1.	Member Technical Staff- E-IV (Scientist 'E')	Level 13 (Rs. 123100-215900)	Interview.		
2.	Member Technical Staff - E-I (Scientist 'B')	Level 10 (Rs.56100-177500)	Written test followed by interview.		
3.	Sr. Finance Officer (A-VII)	Level 11 (Rs. 67700-208700)	Interview.		
4.	Finance Officer (A-VI)	Level 10 (Rs. 56100-177500)	Interview.		
5.	Member Technical Support Staff (MTSS) ES-V	Level 6 (Rs. 35400-112400)	Written examination.		
6.	Assistant (A-IV)	Level 6 (Rs. 35400-112400)	Written examination.		
7.	Member Technical Support Staff (MTSS) ES-IV	Level 5 (Rs. 29200-92300)	Written examination.		
8.	Member Technical Support Staff (MTSS) ES-III	Level 4 (Rs. 25500-81100)	Written examination.		
9.	Assistant (A-III)	Level 5 (Rs. 29200-92300)	Written examination.		
10.	Assistant (A-II)	Level 4 (Rs. 25500-81100)	Written examination.		
11.	Office Attendant (S-I)	Level 1 (Rs. 18000-56900)	Written examination. The candidate shall be required to qualify the Trade/ Skill test for final selection.		

Only the completed online applications by the last date of receipt of online application shall be considered for screening and only shortlisted candidates (after screening) shall be called for Personal Interview/Written examination. Candidate recommended by the Selection Committee/ qualified in written examination shall be offered appointment.

Last Date of receipt of online applications: Within **45 days** of the publication of this advertisement in the Employment News on 29.07.2023. Detail for the same is as below:

<b>Opening Date for Submission of Online Application</b>	:	29.07.2023
Last/Closing Date of Receipt of Online Application	:	11.09.2023

## General Terms & Conditions:

- Persons working in Central/ State Government/PSUs/Autonomous organizations may send their applications through 1. proper channel alongwith the ACRs/APARs for the last 5 years and their latest vigilance profile [(i) penalty imposed, if any during the last 10 years (ii) details disciplinary action initiated/ being initiated if any etc.]. However, a copy of the application may send in advance for consideration. 2
  - Immediate Absorption rule shall be applicable as per Govt. extant rules.
- Candidates those who have applied on Absorption basis are requested to forward the necessary documents alongwith 3. document certifying the date of appointment in the present grade and also certificate of equivalency of IDA pay-scale with CDA pay-scale (If applicable).
- Age shall be reckoned as on last date of receipt of application. Last date of reckoning of age shall not be extended in 4. view of ex tension of extra period of 10 days for submission of application given to applicant residing in remote areas. The upper age limit in respect of candidates working in Govt./STPI on regular basis or candidates belonging to Scheduled Castes, Scheduled Tribes, Other Backward Classes and persons with disabilities shall be relaxable as per prevailing instructions. Relaxation in the upper age limit shall also be provided to the contract employee engaged by STPI on consolidated monthly remuneration equivalent to the period of their continuous service performed in STPI, which shall not exceed five years.
- The eligibility of the candidates in terms of educational qualifications, experience, age etc. will be determined on the 5. information furnished by the candidate on the closing date for receipt of applications. No adding information shall be entertained after the closing date of receipt of applications. Incomplete/unsigned applications will not be entertained and the application form without the copies of requisite certificates will be rejected.
- Number of posts may vary. STPI reserves the right not to fill up any of posts, if it so decides. STPI reserves the right to 6. operate the post(s) of higher grade in the lower grade and to offer the appointment to the candidate in lower grade, in case the Selection Committee recommends. 7.
  - Management reserves the right to fix the criteria for short listing the candidates to be called for interview.
- 8. In case any candidate found ineligible on any ground even after his appointment, his service will be terminated immediately without assigning any reason thereof. Candidates are warned that they should not furnish any false/misleading information/document or submit any document which is defective or fabricated or otherwise commit any act of misconduct in submitting the application form or during the course of recruitment. In case any such case is detected by STPI at any stage, during or after recruitment OR in case any candidate found ineligible on any ground, appropriate action shall be taken against the candidate. Any litigation will be subject to the jurisdiction of Delhi courts.
- 9. correspondence will be entertained from the candidates in connection with the of No process selection/test/interview/appointment. Canvassing in any form or bringing other influence shall make the candidature liable for rejection.
- 10. Candidates seeking reservation against the reserved category posts shall upload their caste/category certificate in the prescribed FORMAT applicable for the Central Govt. Organization. Since allocation of candidates is based on the choice of centre expressed by the candidates, a candidate choosing a centre of another State to which he does not belong will not be prevented from appointment to the State where his choice of centre is located.
- 11. Mere fulfillment of qualifications and experience requirements does not entitle candidates to be called for interview/ written test.
- Candidates willing to apply for more than one posts, should submit SEPARATE applications with requisite fee. 12.
- Candidate does not need to apply separately for each type of post for various locations against the particular 13. employment notice. However, he would able to fill his choice for locations according to his preference while filling the online application form. Since separate merit would be drawn for each location, their candidature shall be considered for the purpose of merit according to their preferences in the application form.
- 14. Selected candidate shall be liable for posted at any centre of STPI.
- Selection Process: Only the completed online applications by the last date of receipt of online application shall be 15. considered for screening and only shortlisted candidates (after screening) shall be called for Personal Interview/Written examination. Candidate recommended by the Selection Committee/ qualified in written examination shall be offered appointment.

Selection process for the Group 'A' posts is on an interview basis except for the post Member Technical Staff, E-I (Scientist B) for which, the selection process is written examination followed by interview. The Competent Authority shall decide the cut-off marks in written examination to be called for interview in accordance with the 1:10 ratio. For the finalization of the merit, weightage of marks obtained in written examination and interview shall be in the ratio of 70:30 for final merit.

## The detailed syllabus for the post of Member Technical Staff, E-I (Scientist 'B') is attached at 'ANNEXURE-I'.

As concern to the below Group 'A' posts, the method of selection is on written examination basis. For the post of Office Attendant (S-I), a written examination followed by a trade test shall also be conducted. The written test will consist of Question from Generic area (Logical, Analytical Reasoning Capabilities, Quantitative, Qualitative abilities and Generic Awareness and Aptitude). In the case of Office Attendant (S-I), Multiple Choice Question (MCQ) would be held. The detail for the same is as below:

Name of the Post	Written Examination	Remarks
<ol> <li>Member Technical Support Staff (MTSS) ES-V, Level-6</li> <li>Member Technical Support Staff (MTSS) ES-IV, Level-5</li> <li>Member Technical Support Staff (MTSS) ES-III, Level-4</li> </ol>	<ul> <li>A. General Intelligence &amp; Reasoning -20 marks</li> <li>B. General Awareness - 20 marks</li> <li>C. Numerical Aptitude - 20 marks</li> <li>D. English Comprehension - 20 marks</li> <li>E. Technical area (specific to STPI) - 70 marks</li> </ul>	Total 150 questions will be there containing one (01) mark for each question. Time duration of the paper will be $2\frac{1}{2}$ hrs.
1. Assistant (A-IV), Level-6	<ul> <li>A. General Intelligence &amp; Reasoning -25 marks</li> <li>B. General Awareness - 25 marks</li> <li>C. Numerical Aptitude - 25 marks</li> <li>D. English Comprehension - 25 marks</li> <li>E. Knowledge of Central Government Rules and Procedures/ Instructions - 50 marks</li> </ul>	Total 150 questions will be there containing one (01) mark for each question. Time duration of the paper will be 2½ hrs.
<ol> <li>Assistant (A-III), Level-5</li> <li>Assistant (A-II), Level-4</li> </ol>	<ul> <li>A. General Intelligence &amp; Reasoning -40 marks</li> <li>B. General Awareness – 35 marks</li> <li>C. Numerical Aptitude – 35 marks</li> <li>D. English Comprehension – 40 marks</li> </ul>	Total 150 questions will be there containing one (01) mark for each question. Time duration of the paper will be $2\frac{1}{2}$ hrs.
1. Office Attendant (S-I), Level 1	Multiple Choice Questions (MCQ) paper shall containing 50 questions carrying two (02) marks for each question. Question paper shall be based upon General Intelligence & Reasoning/ General Awareness/ Numerical Aptitude/ English	Skill Test (practical) will be of qualifying nature and shall be held by a committee duly constituted by the Appointing Authority in primary skill test i.e., Typing Computer/ Operating photocopier / Fax

16. **Final Selection/ Merit:** For the below Group 'A' posts for final selection/ merit, the criteria shall be as below:

S1. No.	Category	Minimum marks for final Selection/ Merit
1	General Category	50%
2	OBC category	45%
3	SC/ ST category	40%
4	PWDs category	5% additional in the respective category

(STPI management shall reserve the right to further relaxation, if required.)

17. **Examination Centre:** As concern to the examination centre for the post of Member Technical Staff, E-I (Scientist B') and other below Group 'A' posts, the examination shall be conducted as per the below detail:

Sl. no.	STPI-Centre's post	Examination venue
1	Member Technical Staff, E-I (Scientist 'B')	In Delhi/NCR & Bengaluru
2	All the Southern region (i.e., STPI-Bengaluru, Hyderabad & T'puram) Group B' & 'C' posts	In Delhi/NCR & Bengaluru
3	All the Northern & Eastern region (i.e., STPI-Noida, Gurugram & Bhubaneswar) Group B' & C' posts	In Delhi/NCR & Bengaluru except for the post of Office Attendant (S-I), Level-1 for which examination venue shall be in Delhi/NCR.

CAO-Registrar STPI

## Software Technology Parks of India New Delhi 110023

# Ref: - Employment Notice no. 2(1)/I/STPI-HQ/2023-24 dated 11.02.2023 for the post of Member Technical Staff, E-I (Scientist 'B')]

# Modalities for conducting the written examination:

The Examination will be based on objective type questions that may test the technical knowledge and mental ability of the candidates. The question paper for written examination will consist of 50% question from Generic Area and 50% from Technical Area. The Generic Area will comprise of Logical, Analytical Reasoning Capabilities, Quantitative & Qualitative abilities and General Awareness and Aptitude. Technical Questions will be from relevant fields specific to STPI.

# (Syllabus for written examination (Technical Area)

## Section 1: Digital Circuits

Number representations: binary, integer and floating-point- numbers. Combinatorial circuits: Boolean algebra, minimization of functions using Boolean identities and Karnaugh map, logic gates and their static CMOS implementations, arithmetic circuits, code converters, multiplexers, decoders. Sequential circuits: latches and flip-flops, counters, shift-registers, finite state machines, propagation delay, setup and hold time, critical path delay. Data converters: sample and hold circuits, ADCs and DACs. Semiconductor memories: ROM, SRAM, DRAM. Computer organization: Machine instructions and addressing modes, ALU, data-path and control unit, instruction pipelining.

# Section 2: Computer Organization and Architecture

Machine instructions and addressing modes. ALU, data-path and control unit. Instruction pipelining, pipeline hazards. Memory hierarchy: cache, main memory and secondary storage; I/O interface (interrupt and DMA mode).

# Section 3: Programming and Data Structures

Programming in C. Recursion. Arrays, stacks, queues, linked lists, trees, binary search trees, binary heaps, graphs.

## Section 4: Algorithms

Searching, sorting, hashing. Asymptotic worst case time and space complexity. Algorithm design techniques: greedy, dynamic programming and divide-and-conquer. Graph traversals, minimum spanning trees, shortest paths

## **Section 5: Theory of Computation**

Regular expressions and finite automata. Context-free grammars and push-down automata. Regular and contex-free languages, pumping lemma. Turing machines and undecidability.

## Section 6: Compiler Design

Lexical analysis, parsing, syntax-directed translation. Runtime environments. Intermediate code generation. Local optimisation, Data flow analyses: constant propagation, liveness analysis, common subexpression elimination.

## Section 7: Operating System

System calls, processes, threads, inter-process communication, concurrency and synchronization. Deadlock. CPU and I/O scheduling. Memory management and virtual memory. File systems.

## Section 8: Databases

ER-model. Relational model: relational algebra, tuple calculus, SQL. Integrity constraints, normal forms. File organization, indexing (e.g., B and B+ trees). Transactions and concurrency control.

## **Section 9: Computer Networks**

Concept of layering: OSI and TCP/IP Protocol Stacks; Basics of packet, circuit and virtual circuit switching; Data link layer: framing, error detection, Medium Access Control, Ethernet bridging; Routing protocols: shortest path, flooding, distance vector and link state routing; Fragmentation and IP addressing, IPv4, CIDR notation, Basics of IP support protocols (ARP, DHCP, ICMP), Network Address Translation (NAT); Transport layer: flow control and congestion control, UDP, TCP, sockets; Application layer protocols: DNS, SMTP, HTTP, FTP, Email.

## Section 10: Communications

Random processes: autocorrelation and power spectral density, properties of white noise, filtering of random signals through LTI systems. Analog communications: amplitude modulation and demodulation, angle modulation and demodulation, spectra of AM and FM, superheterodyne receivers. Information theory: entropy, mutual information and channel capacity theorem. Digital communications: PCM, DPCM, digital modulation schemes (ASK, PSK, FSK, QAM), bandwidth, inter-symbol interference, MAP, ML detection, matched filter receiver, SNR and BER. Fundamentals of error correction, Hamming codes, CRC.

# Software Technology Parks of India New Delhi 110023

# Ref: - Employment Notice no. 2(1)/I/STPI-HQ/2023-24 dated 11.02.2023

# Syllabus for written examination for the below various Group 'A' S&T and Non-S&T posts of STPI

Category of Examination	Syllabus for Written Examination
General Intelligence	B It would include questions of both verbal and non-verbal type. This component may include
Reasoning:	questions on analogies, similarities and differences, space visualization, spatial orientatio
	problem solving, analysis, judgment, decision making, visual memory, discrimination
	observation, relationship concepts, arithmetical reasoning and figural classification, arithmetical
	number series, non-verbal series, coding and decoding, statement conclusion, syllogis
	reasoning etc. The topics are, Semantic Analogy, Symbolic/ Number Analogy, Figural Analog
	Semantic Classification, Symbolic/ Number Classification, Figural Classification, Seman
	Series, Number Series, Figural Series, Problem Solving, Word Building, Coding & de-codir
	Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization
	Venn Diagrams, Drawing inferences, Punched hole/ pattern-folding & un-folding, Figural Patte
	- folding and completion, Indexing, Address matching, Date & city matching, Classification centre codes/ roll numbers, Small & Capital letters/ numbers coding, decoding as
	classification, Embedded Figures, Critical thinking, Emotional Intelligence, Social Intelligence
	Other sub-topics, if any.
General Awareness:	Questions in this component will be aimed at testing the candidates general awareness of the
Jeneral Awareness.	environment around him and its application to society. Questions will also be designed to te
	knowledge of current events and of such matters of every day observations and experience
	their scientific aspect as may be expected of any educated person. The test will also inclu-
	questions relating to India and its neighboring countries especially pertaining History, Cultur
	Geography, Economic Scene, General Policy & Scientific Research.
Numerical Aptitude:	The questions will be designed to test the ability of appropriate use of numbers and numb
	sense of the candidate. The scope of the test will be computation of whole numbers, decimal
	fractions, and relationships between numbers, Percentage, Ratio & Proportion, Square root
	Averages, Interest, Profit and Loss, Discount, Partnership Business, Mixture and Allegation, Tir
	and distance, Time & Work, Basic algebraic identities of School Algebra & Elementary surd
	Graphs of Linear Equations, Triangle and its various kinds of centres, Congruence and similar
	of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, comm
	tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Pris
	Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepipe
	Regular Right Pyramid with triangular or square base, Trigonometric ratio, Degree and Radi
	Measures, Standard Identities, Complementary angles, Heights and Distances, Histogra
	Frequency polygon, Bar diagram & Pie chart.
nglish Comprehension:	Candidates' ability to understand correct English, his basic comprehension, and writing ability
	etc. would be tested.
echnical Area:	Common for Physics, Maths, Electronics, Electronics & Communication, Computer Scien
	and IT: ALGEBRA, Determinants and Matrices : Definition, Order, Expansion of 2nd & 3rd ord
	Determinants, Cramer's rule, Determinant value of a square matrix. Singular and non singul
	matrices, Adjoint of a matrix. Problems, Cayley – Hamilton's theorem, Inverse of a matrix
	Binomial Theorem : Meaning of nCr and its value. Binomial theorem for $(x + a)$ n, Expansio
	Finding constant term, co-efficient of xn, particular term and middle term(s). Logarithms
	Definition of common and natural logarithms. Laws of logarithms. Vector Algebra : Magnitude
	a vector, Types of vectors. Position vector, Addition and subtraction of vector in terms of li
	segment. Vector in a plane, Product of vectors. Scalar and vector product. Projection of a vect
	on another vector. Area of parallelogram and area of triangle. TRIGONOMETRY Definition of
	angle, radian, Relation between degree & radian, Trigonometric identities. Trigonometric ratios
	standard angles, Meaning of allied angles. Trigonometric ratios of allied angles in terms of
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power amplifier, Heat sink, Oscillators, RC phase shift oscillator, Wein bridge oscillator, tuned collector oscillator, Hartley, Colpitts, Crystal oscillator, Sweep circuits & Multivibrators, Bootstrap circuit, Miller sweep circuit, Current sweep circuit. Classification of multi vibrators, Astable, monostable and bistable multivibrators using transistors, Schmitt trigger, clippers and clampers, Operational amplifier, Timers & Phase Locked Loops, Differential amplifier. Communication Systems: Elements of communication system, TDM, FDM, Noise, Signal to noise ratio, Modulation techniques, AM & FM receivers. Transmission Lines and Wave Propagation, Electromagnetic waves, wave polarization and its types, reflection, refraction, diffraction, ground wave propagation, space wave propagation (LOS), sky wave propagation, ionosphere layers, critical frequency, MUF, virtual height, troposcatter propagation, Digital Modulation, Sampling theorem, pulse modulation, pulse code modulation, delta modulation, data compression, Data coding, asynchronous transmission, synchronous transmission, error detection and correction, Amplitude shift keying(ASK), frequency shift keying (FSK), phase shift keying (PSK), quadrature amplitude modulation (QAM), Multiplexing and multiple access techniques, Telephone modem, fax modem and data modem, cable modem, digital subscriber lines, ADSL, multiplexing and multiple access, FDM and TDM, FDMA and TDMA, spread-spectrum, code division multiple access (CDMA). Telephone System. Public switched telephone network(PSTN), manual and electronic equipment, EPABX, digital EPABX, FAX, Internet telephony. Antennas. Isotropic, half wave dipole antennas, Antenna arrays - broadside, end fire, Yagi Uda, log periodic, turnstile antennas, Parabolic reflectors, Dish antennas, VSAT and Cellular antennas. Microwave devices & Radars, Pulsed Radars, Duplexer, CW radar, radar Beacons, instrument landing system, Satellite Communication, Microwave link, classification of satellites, Geo-stationary Satellites, Fibre Optic Communication, Optical fibre, fibre optic cables, Splices, connectors, optical couplers, optical emitters (LED & LASER diode), optical detectors ( PIN diode & APD), Submarine cables, Cable television applications, Mobile Communication: Evolution of Mobile Radio Communication, Cellular systems operation, Digital cellular mobile system, GSM standard, GSM architecture, CDMA systems, EDGE technology. Networking & LAN Network topologies : bus, star, ring, circuit switching, packet switching, message switching, router, OSI Model, WLAN characteristics, Bluetooth, WAP applications, WAN and WAN Protocols, Internet, internet devices, repeaters, bridges, routers, gateways, ARPA net, www, internal architecture of ISP, high level architecture of an ISP, Ways of accessing the internet, PSTN ISDN, Leased lines, DSL, cable modems, TCP/IP, Use of IP address, IP datagrams, classes of IP addresses, ports and sockets, Web Applications Domain name system (DNS), Electronic mail, FTP, TELNET, proxy server Digital Electronics : Basics of Digital Electronics Binary, Octal. Hexadecimal number systems. Binary codes, excess-3 and gray codes. Logic gates, Boolean algebra, Demorgan's Theorems. Implementation of logic expressions, Karnaugh maps, Logic families. Combinational logic circuits, Sequential logic circuits, Flip-flops, Synchronous and asynchronous circuits, Shift Registers, Parallel in parallel out, universal shift registers, ring counter and its applications, Binary counter- ripple counter, synchronous counter, up-down counter. Memories, RAM, ROM, EEPROM, UVEPROM, static RAM, dynamic RAM, Flash ROM, NVRAM, A/D and D/A converters. Circuit Theory : Behaviour of Passive Components and Resonance in A.C. Circuits Active and passive elements, Mesh Current and Node Voltage Analysis, Kirchoff's laws, Mesh currents, Network theorems. Thevenin's theorem, Norton's theorem, superposition theorem, reciprocity theorem and Maximum power transfer theorem, Coupled circuits, Transient Analysis & Linear wave shaping circuits, Mutual inductance. Transient Analysis at RC & RL circuits, Transient analysis of series and parallel RLC circuits for over damping cases, pulse wave form, differentiating and integrating circuits. Microprocessors, Microcontrollers : Microprocessor, Basic Microprocessor instructions, Addressing modes, instruction format, RISC verses CISC, Architecture of 8086, minimum and maximum modes, flag register, interrupts, Super scalar architecture, Architecture of 8051, registers, timers, interrupts, fetch cycle, execution cycle, machine cycle, state, Instruction set of 8051, instruction format, classification of instructions, addressing modes- Groups of instructions, data transfer, arithmetic, logical, branch, Data transfer, single and multi-byte addition and subtraction, subroutines, nesting, multiple ending and common ending, use of Input output and machine related statements, debugging, time delay program. Electronic Measuring Instruments: Analog instruments, PMMC Instrument, extending the range of instruments, series and shunt type ohmmeter, FET input voltmeter, differential voltmeter, Wheatstone, Maxwell, Schering Bridge. Q meter, Distortion Factor Meter, Digital Instruments, Digital voltmeter, Digital Multimeter, Digital frequency meter, Digital LCR Meter. Digital IC tester, Logic analyser, spectrum analyser, Cathode Ray Oscilloscope, XY Plotter and Recorders. Signal Generators & Power meters, Audio and Video Systems : Audio Systems, Hi-Fi and stereo systems, disc recording and reproduction, magnetic recording and reproduction, optical recording, CD player, MP3 player, DVD player, TV Picture & Composite Video Signal Picture elements, Horizontal and vertical scanning, frame and field frequencies, Horizontal and vertical synchronisation, Horizontal and vertical blanking, T.V. Channel standards, Construction of composite Video signal, Linear scanning, standard scanning pattern. Flicker, sync Pulses, blanking signals. Monochrome and Colour Television, Additive and subtractive mixing of colours, Colour systems like NTSC, PAL, and SECAM. Colour TV Transmitter block diagram. Colour TV receiver block diagram (PAL). Colour video signal processing, operating and service controls, colour picture tube, degaussing. Satellite and Cable TV Cable TV, DTH system, DTH receiver, HD TV. Industrial Electronics :. Power Electronic Devices, SCR, Triac, Power BJT, IGBT, triggering of SCR using UJT, protection of power devices. Converters, AC Regulators & Choppers, Inverters, AC motors, DC motor control, Introduction-Speed control of DC shunt motor by using converters and choppers, speed control of induction motor by using AC voltage controllers, V/F control (Converters and invertors control). Transducers, strain gauge, variable resistance transducer, inductive, piezoelectric, LVDT. capacitive. Thermocouples, Transducer applications. accelerometers, Tachogenerators, Servomotors Computer Hardware : Motherboard, component layout, chip set, slots, serial port, parallel port, USB port, connectors, RAM, cache memory, HDD, FDD, sound card, Video grabber card, network card, Peripherals - Monitor, Keyboard, and mouse, Working of dot matrix, Laser and inkjet printers, Scanner - JPEG, MPEG - digital camera, CD writer, DVD player, Flash Drive, Windows Operating System, Power On Self Test, BIOS, Booting, autoexecutable batch file, config.sys file, windows registry, Device manager, control panel, viruses, PC assembly and Software Installation, Assembling PC, CMOS set up, Installation of OS, Installation of device drivers, system tools. Computer Science/Information Technology (Diploma Level): Digital logic design, Digital circuits, Digital ICs, Comparison of TTL, CMOS and ECL logic Families, Number System - Binary, Octal, Decimal, Hexadecimal number system, BCD code, BCD arithmetic (addition, subtraction), Logic gates, Basic laws of Boolean algebra, Duality theorem, De Morgan's theorem, Combinational Logic Design, K-map representation of logical functions and minimization, standardization of SOP & POS, Half adder and full adder, Half subtractor and full subtractor, Binary parallel adder, BCD

adder, Multiplexers (4:1 and 8:1), Demultiplexer (1:4; 1:8; 1:16), Encoders and Decoder, Design of

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	different code converter, BCD segment decoder, Comparator, Parity Checker and Generator, Flip
	Flops And Sequential Logic Design, One-bit memory cell, concept of clock signal, Triggering : edge
	triggering and level triggering, Excitation table of different Flip-Flop, Asynchronous counter (3 bit, 4 bit), mod N-counter, Synchronous counter, Shift register: SISO, SIPO, PISO, PIPO (4-bit) and
	Universal Shift register (4-bit), Classification of memories RAM, ROM, PROM, EPROM, EPROM,
	Static and Dynamic RAM, A-D And D-A Converters Computer Organisation and Architecture :
	Basics of Computer system, Von Neumann Architecture and its features, Structure of CPU,
	function of Memory unit and IO unit, Concept of PC, Laptop, workstation, Server, Super
	Computer, Instruction structure and addressing modes, Execution steps of a typical instruction
	through different parts of CPU and memory, Different addressing modes, Memory and IO devices,
	Memory Hierarchy model, Cache memory, Mapping technique, Hit ratio, Replacement algorithm,
	virtual memory technique, address translation method, TLB, Programmed IO or Status check IO,
	Interrupt Mechanism, DMA data transfer, IO processor, Different types of interrupt, Priority
	interrupt, Simultaneous interrupt, DMA transfer modes, Control unit design issue, Hardwired
	Control unit design, Microprogrammed Control unit design, Horizontal and vertical
	microprogramming, RISC, CISC architecture and pipelining, instruction pipelining. Computer Networks : Network Models, Data and Signals, Bandwidth Utilization, Transmission Media,
	Switching, Error Detection and Correction, Data Link Control, Multiple Access, Wired LANs:
	Ethernet, Connecting LANs, Backbone Networks and Virtual LANs, Network Layer: Logical
	addressing, Network Layer : Internet Protocol, Network Layer :Delivery, forwarding and routing,
	Process to process Delivery : UDP, TCP, Congestion Control, Domain Name System, Remote
	Logging, Electronic Mail and File Transfer. Data Structures using C: Pointers, Dynamic Memory
	allocation, Files, data structures, The Stack, Queues, Linked lists, Trees, Sorting, Searching.
	Database Management Systems : Databases and database users, Database System Concepts and
	Architecture, Data Modeling Using the Entity-Relationship(ER) Model, Relational Data Model and
	Relational Database Constraints, The Relational Algebra, SQL: Schema Definition, constraints,
	queries and views, Functional Dependencies and normalization for relational databases, transaction processing concepts and theories, Concurrency Control Techniques, Database
	Recovery Techniques. Object Oriented Programming with C++: Object Oriented Programming, C++
	Additional features, Classes and Objects, Operator Overloading, Inheritance, Virtual functions,
	Managing Console I/O Operations, Files, Templates. Operating System: Process management,
	Synchronization, Deadlocks, Memory management, Virtual memory management, File system.
	Software Engineering: Software Process, Software Requirements Analysis and Specifications,
	Software Architecture, Planning a Software Project, Design, Coding, Testing. Programming with
	Java: Classes, Objects and Methods, Strings and String Buffer Classes, Interface: Multiple
	Inheritance, Packages: Putting Classes Together, Multithreaded Programming, Managing Errors
	and Exceptions, Applet Programming, Graphics Programming. Web Programming: JavaScript & XHTML Documents, Dynamic Documents with JavaScript, XML, PHP, Database Access through
	the Web, Ruby. Software Testing: Testing levels and types, Static testing techniques, Dynamic
	testing, Managing the testing process, Software testing tools, Code of ethics for software
	professionals. Network security and Management: Organizational Policy and Security, Security
	infrastructure, Cryptography, Hardware & Software Security, Intrusion Detection System,
	Network Security, Wireless Security, Security & law, Internet governance and electronics mail
	policy. Information Storage and Management: Information Storage and Management, Direct
	Attached Storage & Introduction to SCSI, Storage System Environment, Data Protection: RAID,
	Intelligent Storage System, Storage Area Networks, Network-Attached Storage, Content Addressed Storage, Storage Virtualization, Backup and Recovery.
Knowledge of Central	a) Maintenance of Cash Book
Government Rules and	b) Preparation of Bank Reconciliation Statement
<b>Procedures/ Instructions:</b>	c) Posting of Ledger Accounts
	d) Preparation of Trial Balance and Final Accounts
	e) Principles of Auditing
	f) Income Tax and Service Tax Rules
	g) General Financial Rules h) Fundamental Rules & Supplementary Rules.
	i) CCS (Pension) Rules and New Pension Scheme
	i) TA and LTC Rules
	k) Medical Attendance Rules
	l) Provident Fund Rules
	m) Gratuity Rules
	n) Delegation of Financial Power Rules
	o) CCS (Joining Time) Rules
	p) Right to information Act, 2005 and Right to Information (Regulation of Fee and Cost) Rules.
	q) Matters concerning Land and Building, Government Residential Quarters, Staff Cars r) Contingent expenditure.
	1) Contingent experiature.