डा बी आर अम्बेडकर राष्ट्रीय प्रौद्योगिकी संस्थान, जालन्धर

Dr B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY JALANDHAR

ADVERTISEMENT OF NON-FACULTY POSTS

(01/2025 to 12/2025)

Applications are invited through Online mode for the recruitment to various non-faculty positions at Dr. B. R. Ambedkar National Institute of Technology Jalandhar as per details given hereunder: -

Sr. No.	Name of the post & Pay Level	No. of Vacancies					Total	Advertisement Number
		UR	OBC-NCL	SC	ST	EWS		
1.	**TECHNICAL ASSISTANT** (Level – 6, Rs.35400-112400)							01/2025
	Civil Engineering	1	-	-	-	-	1	
	Computer Science & Engineering	1	-	-	-	-	1	
	Information Technology	1	1	-	-	-	2	
	Mathematics & Computing	1	-	-	-	1	2	
	Chemical Engineering	1	-	-	-	-	1	
	Total:	**5**	**1**	-	**-**	**1**	**7**	
2.	**JUNIOR ENGINEER (Civil)** (Level – 6, Rs.35400-112400)	1	-	-	-	-	**1**	**02/2025**
3.	**SAS ASSISTANT** (Level – 6, Rs.35400-112400)	2	-	-	-	-	**2**	**03/2025**
4.	**LIBRARY & INFORMATION ASSISTANT** (Level – 6, Rs.35400-112400)	2	-	-	-	-	**2**	**04/2025**
5.	**SUPERINTENDENT** (Level – 6, Rs.35400-112400)	5	2	1	-	-	**8**	**05/2025**
6.	**SENIOR STENOGRAPHER** (Level – 5, Rs.29200-92300)	1	1	-	-	-	**2**	**06/2025**
7.	**PHARMACIST** (Level – 5, Rs.29200-92300)	1	-	-	-	-	**1**	**07/2025**
8.	**STENOGRAPHER** (Level – 4, Rs.25500-81100)	2	-	-	-	-	**2**	**08/2025**
9.	**SENIOR ASSISTANT** (Level – 4, Rs.25500-81100)	2	1	1	-	-	**4**	**09/2025**
10.	**SENIOR TECHNICIAN** (Level – 4, Rs.25500-81100)							10/2025
	Civil Engineering	-	1	-		-	1	
	Computer Science & Engineering	-	1	-	-	-	1	
	Electrical Engineering	-	1	-	-	-	1	
	Electronics & Comm. Engg.	-	1	-	-	-	1	
	Information Technology	1	-	-	-	-	1	
	Mathematics & Computing	1	-	-	1	-	2	
	Total	**2**	**4**	**-**	**1**	**-**	**7**	

Sr. No.	Name of the post & Pay Level	No. of Vacancies					Total	Advertisement Number
		UR	OBC-NCL	SC	ST	EWS		
11.	**TECHNICIAN (Level – 3, Rs.21700-69100)**							**11/2025**
	Civil Engineering	-	-	1	-	-	**1**	
	Computer Science & Engineering	1	1	-	-	-	**2**	
	Electronics & Comm. Engg.	-	-	-	1	-	**1**	
	Industrial & Production Engg.	1	1	-	-	-	**2**	
	Information Technology	1	1	-	-	1	**3**	
	Instrumentation & Control Engg.	1	1	-	-	-	**2**	
	Mathematics & Computing	1		-	-	-	**1**	
	Mechanical Engineering	-	1	-	-	-	**1**	
	Physics	-	-	-	-	1	**1**	
	Textile Technology	-	-	1	-	-	**1**	
	Central Workshop	1	-	-	-	-	**1**	
	Total	**6**	**5**	**2**	**1**	**2**	**16**	
12.	**JUNIOR ASSISTANT (Level – 3, Rs.21700-69100)**	4	1	1	-	-	**6**	**12/2025**
	Grand Total	**33**	**15**	**05**	**02**	**03**	**58**	

***Abbreviation used: UR**: Un-reserved, **SC**: Scheduled Castes, **ST**: Scheduled Tribes, **OBC-NCL**: Other Backward Class-Non Creamy Layer, **EWS**: Economically Weaker Section, **PwBD**: Persons with Benchmark Disability (Divyang)*

NOTE:

Out of 58 advertised posts, 04 posts shall be reserved (horizontal basis) for PwBD candidates as per the details mentioned below:

Sr. No.	Name of Post	Number of post reserved for PwBD candidate	Benchmark Disability
1.	Technical Assistant	01	PwBD – a (B, LV)
2.	Technician	01	PwBD – b (D, HH)
3.	Senior Technician	01	PwBD – c (OA, OL, OAL, CP, LC, Dw, AAV)
4.	Junior Assistant	01	PwBD – d & e{ASD (M, MoD), ID, SLD, MI & MD involving (a) to (d)}

***Abbreviation used:** B=Blind, LV=Low Vision, D=Deaf, HH=Hard of Hearing, OA=One Arm, OL=One Leg, OAL=One Arm and One Leg, CP=Cerebral Palsy, LC=Leprosy Cured, Dw= Dwarfism, AAV=Acid Attack Victim, MI=Mental Illness, MD= Multiple Disabilities, ASD (M, MoD) =Autism Spectrum Disorder (M=Mild, MoD= Moderate), SLD=Specific Learning Disability, ID=Intellectual Disability.*

The Essential Educational Qualification, Experience and Other Eligibility criteria for selection to the above mentioned non-faculty positions shall be as per Recruitment Rules for the Non-Teaching posts in National Institutes of Technology - 2019 issued by Ministry of Education. The candidates

are advised to carefully go through the details of advertisement before applying. The trade/field/discipline mentioned specifically for particular department in this advertisement shall only be considered for the respective department.

The copy of Recruitment Rules along with appropriate trade in ITI/ relevant field in diploma / relevant discipline in B.E/B.Tech. etc. for technical posts, Standard Operating Procedure for recruitment to the aforesaid vacant posts and Syllabi for different stages of recruitment is enclosed as Annexure-A to Annexure-L as per details mentioned below:

Sr. No.	**Name of Post**	**Details of Annexure**
1.	Technical Assistant	Annexure-A
2.	Junior Engineer (Civil)	Annexure-B
3.	SAS Assistant	Annexure-C
4.	Library & Information Assistant	Annexure-D
5.	Superintendent	Annexure-E
6.	Senior Stenographer	Annexure-F
7.	Pharmacist	Annexure-G
8.	Stenographer	Annexure-H
9.	Senior Assistant	Annexure-I
10.	Senior Technician	Annexure-J
11.	Technician	Annexure-K
12.	Junior Assistant	Annexure-L

AGE RELAXATIONS:

1. The age limit mentioned in the Recruitment Rules-2019 is the age limit for Unreserved Category. However, the age relaxation shall be provided to SC/ST/OBC-NCL/PwBD/Ex-servicemen as per Government of India, DoPT Office Memorandum No.15012/2/2010-Estt(D) dated 27th March, 2012. The candidates are advised to check & apply as per applicable age relaxation mentioned in the above referred Office Memorandum.

2. The regular employees of NIT Jalandhar drawing regular Pay scale/Pay level shall be considered as Departmental candidates as mentioned in the Recruitment Rules - 2019.

3. The regular employees of NIT Jalandhar who were appointed before the date of implementation of RRs in NITs including Model RRs-2012 and are fulfilling Essential Educational Qualification and Experience, if any, for a particular post shall be eligible for applying to advertised non-faculty posts irrespective of their age and percentage of marks i.e. the age and percentage of marks shall be relaxed as per clause –B (iii) of Govt. of India, MHRD, New Delhi instructions communicated vide letter no. F -35-5/2018.TS.III, dated 20.02.2019.

4. The employees who are working on adhoc / temporary / contractual / outsourced basis as on the starting date of filling of online applications and has served for at least two years (cumulative) at NIT Jalandhar may be granted age relaxation upto attaining of 50 years for applying to the posts of **Library & Information Assistant, Superintendent & Pharmacist**

as a one-time measure as per clause –A (i) of Govt. of India, MHRD, New Delhi instructions communicated vide letter no. F -35-5/2018.TS.III, dated 20.02.2019.

APPLICATION FEES:

The application fee (non-refundable) as per below mentioned table shall be charged from the candidates of the respective categories:

Category	Online Facilitation/ processing charges	Examination/ application fee	Total Fee
UR / OBC-NCL / EWS	Rs. 1000	Rs. 500	Rs. 1500
SC / ST/ PwBD / Women candidates (all categories)	Rs. 1000	-	Rs. 1000

UR: Unreserved / **OBC-NCL**: Other Backward Class – Non Creamy Layer / **SC**: Scheduled Caste / **ST**: Scheduled Tribe / **EWS**: Economically Weaker Section / **PwBD**: Person with Benchmark Disability.

The application fee shall be paid through online mode only **(Debit/Credit Card/Net Banking)** while filling the online application form.

Applications without the prescribed fee would not be considered and summarily rejected. No representation against such rejection would be entertained.

The link for filling & submission of application(s) against the advertised non-teaching posts will be activated on the Institute website www.nitj.ac.in with effect from **28.08.2025.** The candidates have to apply online only. **No Hard copy of the application form is required to be sent to the Institute.**

In case, any candidate is willing to apply for two or more advertised posts, then, separate online application forms are required to be filled for each applied post. Applicants are advised to apply well in time before the last date of submission of online application forms as to avoid any rush at the closing date. The Institute will not entertain any request regarding non-submission of the online Application form.

The candidates are advised to fill the particulars carefully as the information furnished in the online application form shall be considered final and no request for addition/alternation shall be entertained thereafter.

LAST DATE OF SUBMISSION OF ONLINE APPLICATIONS IS 27.09.2025

Note 1: The Institute reserves the right to modify/defer or cancel the advertisement at any stage of processing without assigning any reason.

Note 2: The date of birth mentioned in the Online Recruitment Application shall be treated as final. No subsequent request for a change of date of birth will be considered or granted. The candidates must attach the relevant document as proof of age with the application.

GENERAL INSTRUCTIONS:

1. All the Essential Educational Qualification(s), Experience(s) and other eligibility criteria will be considered as on closing date of online application forms i.e. last date of submission of online application form shall be treated as cut-off date for deciding the eligibility.
2. The application form is online and will not be supplied on postal request.

3. All Certificates/diploma/degrees etc. in support of educational qualification mentioned in the application must be awarded by the Board/Institute/University recognized by the Government/other Statutory Bodies.

4. The applicant has to upload self-attested copies of certificates in support of their essential qualification(s), experience, pay drawn details, documentary proof for Date of Birth, Disability Certificate, Caste Certificate, Latest OBC (non-creamy layer) certificate, EWS Certificate etc., as applicable. Original certificates shall be produced at the time of the selection process as well as while joining.

5. Persons serving in Government / Semi Government / Autonomous Bodies / Public Sector Undertakings / Universities / Educational Institutions are required to produce No Objection Certificate issued from the parent and/or present employer at the time of document verification failing which his/her candidature will be straightaway rejected.

6. All candidates applying for the particular category of posts may ensure their eligibility as per the educational qualification and other criteria as mentioned in the advertisement. At any stage of recruitment process, if it is found that the candidate is not fulfilling the essential qualification and other criteria as required for particular category of post, he/she shall not be considered for further participation in the recruitment process. Further, his/her candidature will be rejected straightway.

7. The Institute also reserves the right to defer or cancel the selection process without assigning any reason thereof. The decision of the Institute in this regard will be final and binding on all the applicants who respond to this advertisement. No interim communication on the status of the application will be entertained.

8. Canvassing in any manner would entail disqualification of the candidature.

9. All information regarding the recruitment process will be provided through the Institute website only. The Institute will not be responsible in any manner if a candidate fails to visit/access the website in time. The applicants are advised to regularly visit the Institute website i.e. www.nitj.ac.in for updated information.

10. The Institute shall retain online applications data of non-shortlisted or non-selected candidates only for three months after completion of recruitment process.

11. If a candidate wishes to apply for more than one post within a department, he/she needs to apply separately for each advertised post.

12. The applicant will be responsible for the authenticity of submitted information, other documents and photograph. Furnishing of any false information and/or suppression / concealment of facts shall lead to rejection/cancellation of selection/appointment.

13. All candidates, irrespective of their category may be considered against Unreserved positions, subject to fulfillment of parameters / conditions for Unreserved candidates. However, against the vacancies earmarked for specific categories (SC/ST/OBC-NCL/EWS), only candidates belonging to respective categories shall be considered.

14. **For SC/ST (Schedule Caste/Schedule Tribes) Candidates:**
Candidates belonging to SC/ST category shall have to submit the attested copy of Caste certificate **(Annexure-I)** issued by the Competent Authority at the time of document verification.

15. **For OBC-NCL (Other Backward Class – Non Creamy Layer) candidates:**
Other Backward Classes (OBC-NCL) candidates in particular shall ensure that they possess the OBC-NCL certificate in the prescribed format **(issued on or after 1st April, 2025)** as given in **Annexure-II**.

16. **For EWS (Economically Weaker Section) Candidates:**
EWS (Economically Weaker Section) candidates in particular shall ensure that they possess the EWS certificate in the prescribed format **(issued on or after 1st April, 2025)** as given in **Annexure-III**.

The applicants who are not covered under the scheme of reservation for SC/ST/OBC-NCL and whose family gross annual income is below Rs. 8.00 Lakh (Rupees Eight Lakhs only) are to be identified as EWS for benefit of reservation for EWS. The income shall also include income from all sources i.e. salary, agriculture, business, profession etc. for the financial year prior to the year of application. **The income of the financial year 2024-2025 will only be considered for identification of EWS candidate.** Also, candidates whose family owns or possesses any of the following assets shall be excluded from being identified as EWS, irrespective of family income:

a. 5 acres of agricultural land and above;
b. Residential flat of 1000 sq. ft. and above;
c. Residential plot of 100 sq. yards and above in notified municipalities;
d. Residential plot of 200 sq. yards and above in areas other than the notified municipalities.

The applicant applying against the vacancies reserved for EWS must produce valid Income and Asset Certificate issued by Competent Authority. In case of non-compliance to these stipulations, his/her claim for reserved status under EWS will not be entertained and the candidature/application of such candidate, if fulfilling all the eligibility conditions for Unreserved (UR) Category, will be considered under Unreserved (UR) vacancies only.

17. **For PwBD (Persons with benchmark disability) Candidates:**
The Persons with Benchmark Disability (PwBD) shall be required to submit the medical certificate in the prescribed form issued by the competent medical authorities for the purpose of employment as per Government of India norms along with their applications. Persons suffering from not less than 40% of the disability shall only be eligible for the benefit of reservation.

A person, who wants to avail the benefit of relaxation will have to submit a Disability Certificate issued by a Competent Authority as per the form V, VI and VII of rule 18(1) under Chapter 7 of Rights of Persons with Disabilities Rules, 2017 dated 15th June, 2017. The candidates may refer **Annexure-IV(A), IV(B) and IV(C)** for the revised formats. The existing certificates of disability issued under the Persons with Disabilities Act 1995 (since repealed) shall continue to be valid for the period specified therein. The candidate of PwBD category will be considered to be eligible for appointment only if he/she (after such Medical Examination as the Government or appointing authority, as the case may be, may prescribe) are found to satisfy the requirements of physical and medical standards of the post.

18. The decision of the competent authority in all matters relating to the eligibility of the candidate, screening/skill/written test and selection would be final and binding on all the candidates.

19. Any resultant dispute arising out of this advertisement shall be subject to the sole jurisdiction of the Courts situated at Jalandhar, Punjab only.

REGISTRAR

ANNEXURE-A

DETAILS OF RECRUIMENT PROCESS FOR THE POST OF TECHNICAL ASSISTANT

Recruitment Rules (2019) for the post of TECHNICAL ASSISTANT in NITs

Sl.No.	Particular	Criteria
1.	Name of the Post	**Technical Assistant**
2.	Number of Post(s)	As per sanctioned strength.
3.	Classification	Group - B
4.	Scale of Pay (Grade Pay, Band Pay)	PB -2 (Rs.9,300 - 34,800/-) with Grade Pay of Rs.4200/-
5.	Whether Selection Post or non-Selection Posts	Not Applicable
6.	Age limit for direct recruits	30 years. Note:- Relaxable for Departmental Candidates up to five years in accordance with the instructions or orders issued by the Central Government
7.	Educational and other qualifications required for direct recruits	**Essential:** First Class or equivalent Grade in B.E. / B.Tech. / MCA in relevant subject from a recognized University / Institute. Or First Class Diploma in Engineering in relevant Field with excellent academic record Or First Class Bachelor's Degree in Science from a recognized University or Institute Or Master's Degree in Science from a recognized University or Institute with at least 50% marks or equivalent grade
8.	Whether age and educational qualifications prescribed for direct recruits will apply in the case of promotees	**Age bar**: Not applicable **Educational Qualification:** No. However must possess any of the qualifications mentioned in Row 7 without insisting on percentage of marks/class.
9.	Period of probation, if any	1 Year for direct recruits as per NIT Statutes.
10.	Method of Recruitment whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	75% by direct Recruitment 25% by Promotion, failing which by deputation (including short term contract).

ANNEXURE-A

Sl.No.	Particular	Criteria
11.	In case of recruitment by promotion / deputation / transfer, grades from which promotion / deputation / transfer to be made	**Promotion:** At least 2 Years regular service with Grade Pay of Rs.4200/- as Technician (Selection Grade-I) through DPC and working performance record (APAR), through prescribed test and interview. **Deputation (including short term Contract):** Officers of the Central/State Govt. or similar organized services/semi-Govt./PSU/ autonomous organization/ University/ Institute of national importance: a i) holding analogous post; or ii) 6 years regular service with Grade Pay of Rs.2800/- as Technician (SG-II) or its equivalent post. b) Possessing educational qualification as prescribed in Row 7.
12.	If DPC exists, what is its composition	As per the provisions contained in the NITSER Act, 2007, First Statutes and the subsequent Statutes.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

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ANNEXURE-A

DETAILS OF ESSENTIAL EDUCATIONAL QUALIFICATION ALONG WITH TRADE/SPECIALIZATION FOR RECRUIMENT TO THE POST OF TECHNICAL ASSISTANT

Name of Department	Essential Educational Qualification with Trade/Specialization
Department of Civil Engineering	First Class or Equivalent Grade in B.E. / B.Tech. in **Civil Engineering** from a recognized University / Institute. **OR** First Class Diploma in **Civil Engineering** with excellent academic record.
Department of Computer Science and Engineering; **Department of Mathematics & Computing;** **Department of Information Technology**	First Class or Equivalent Grade in B.E/ B.Tech./ MCA in **Computer Science & Engineering / Computer Science/ Computer Science & Information Technology / Computer Engineering / Computer Application/ Information Technology / Computer Networks** from a recognized University/ Institute. **OR** First Class Diploma in **Computer Science Engineering / Computer Science / Computer Science & Information Technology / Computer Engineering / Computer Application / Information Technology** with excellent academic record. **OR** First Class Bachelor's Degree in **Computer Science** / **Information Technology** from a recognized University or Institute. **OR** Master's Degree in **Computer Science** / **Information Technology** from a recognized University or Institute with at least 50% marks or equivalent grade.
Department of Chemical Engineering	First Class or Equivalent Grade in B.E. / B.Tech. in **Chemical Engineering** from a recognized University / Institute **OR** First Class Diploma in **Chemical Engineering** with excellent academic record**.** **OR** First Class Bachelor's Degree in **Chemical Science or Chemistry** from a recognized University or Institute**.** **OR** Master's Degree in **Chemical Science or Chemistry** from a recognized University or Institute with at least 50% marks or equivalent grade.

ANNEXURE-A

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF TECHNICAL ASSISTANT

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-A1** of the advertisement notice.
- The Screening Test shall consist of two Parts i.e. Part-A & Part-B. Part-A will consist of 30 questions pertaining to English, Reasoning, Numerical Aptitude & General Science etc. while Part-B will consist of 30 questions which will be post specific.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) against each post in order of merit of Screening Test in respective category, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be based on experimental, practical & theoretical knowledge of Laboratory Experiments of the concerned trade/specialization.
- The **syllabus of the Skill Test is mentioned in the Annexure-A2** of the advertisement notice.
- Minimum Qualifying marks for the Skill Test shall be 30% of total marks.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-A3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Technical Assistant.

Annexure-A1

SYLLABUS FOR STAGE-I OF TECHNICAL ASSISTANT

The Screening Test shall consist of two Parts i.e. Part-A & Part-B. Part-A will consist of 30 Multiple Choice Questions pertaining to English, Reasoning, Numerical Aptitude, General Science etc. while Part-B will consist of 30 Multiple Choice Questions which will be post specific.

Syllabus of Part-A of the Screening Test:

1. **General English** - Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic** - Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation** - Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science upto Secondary Level**

Syllabus of Part-B of the Screening Test:

Technical Assistant (Civil):

1. Strength of Materials
2. Design of Concrete and Steel Structures
3. Theory of Structures
4. Construction Materials and Construction Practice
5. Soil Mechanics and Foundation Engineering
6. Surveying
7. Transportation Engineering
8. Estimating and Costing
9. Water Resources Engineering
10. Environmental Engineering

Technical Assistant (Computer Science & Engineering / Information Technology / Mathematics & Computing):

1. **Hardware:**
   - Assembling of PC
   - Installation of Systems and troubleshooting, BIOS settings
   - Installation and testing of a printer, Printer Maintenance, Scanner Installation, Webcam Installation, Making various types of cables for networking
   - Installation and Maintenance of UPS Systems
   - Installation and maintenance of various networking devices like Router, Switches, Laying out Structured cabling
   - Installation of Firewalls and Connectivity of LAN & WAN
   - Installation of Wireless network devices

2. **Software:**
   - Debugging C/ C++ Programs,
   - Installation & Administration of SQL & Oracle Installation of various variants of operating systems like Windows and Linux
   - Installation of Software like Visual Studio, UML, Cisco Packet tracer
   - Working of MS-Office components like Word, Excel & PowerPoint

- Configuring and sharing internet in PCs and other devices
- Configuring firewalls &Usage of access lists
- Working with Wireless Networks (Installation & Configuration), Designing webpages using HTML, CSS, Java Script

Technical Assistant (Chemical Engineering)

1. Mechanical Operations
2. Chemical Process Industries
3. Industrial Safety and Environmental Engineering
4. Plant Utility and Energy Engineering
5. Heat Transfer
6. Fluid Flow Operation
7. Process Calculations
8. Mass Transfer
9. Instrumentation
10. Thermodynamics and Reaction Engineering

Annexure-A2

SYLLABUS FOR STAGE-II OF TECHNICAL ASSISTANT

Technical Assistant (Civil):

- The Skill test will be a test to check the knowledge of an applicant pertaining to various instruments / equipment in different laboratories of Civil Engineering as mentioned below:
  - Structures Testing
  - Concrete Technology
  - Transportation Engineering
  - Geotechnical Engineering
  - Environmental Engineering
  - Fluid Mechanics & Hydraulics.
- The skill test includes introduction of instruments/equipment of the above stated laboratories of Civil Engineering, Methodology of operation of instruments/equipment, Knowledge of the conduction of experiments/practical/tests etc. in the laboratory.

Technical Assistant (Computer Science & Engineering / Information Technology / Mathematics & Computing):

1. **Hardware:** Assembling of PC, Installation of Systems and troubleshooting, BIOS settings, Installation and testing of a printer, Printer Maintenance, Scanner Installation, Webcam Installation, Making various types of cables for networking, Installation and Maintenance of UPS Systems, Installation and maintenance of various networking devices like Router, Switches, Laying out Structured cabling, Installation of Firewalls and Connectivity of LAN & WAN, Installation of Wireless network devices

2. **Software:** Debugging C/ C++ Programs, Installation & Administration of SQL & Oracle Installation of various variants of operating systems like Windows and Linux, Installation of Software like Visual Studio, UML, Cisco Packet tracer, Working of MS-Office components like Word, Excel & PowerPoint, Configuring and sharing internet in PCs and other devices, Configuring firewalls &Usage of access lists, Working with Wireless Networks (Installation & Configuration), Designing webpages using HTML, CSS, Java Script

Technical Assistant (Chemical Engineering):

The candidate should be able to perform experiments/tasks and he/she should present the theory/results/conclusions in the form of a brief report. The candidate is expected to have thorough knowledge of the following topics:

1. Determination/Measurement of Reynold's number, volumetric and mass flow rates by Venturi-meter, Orifice-meter and Rotameter, friction factor.
2. Determination/Measurement of pH, viscosity, molecular weight, acid value, saponification value, total solids, dissolved solids, hardness.
3. Determination/Measurement of thermal conductivity, heat transfer coefficient, mass diffusivity, mass transfer coefficient, rate constant of a first order reaction, response of a first-order system for a step input.
4. Determination/Measurement of fire point, flash point, smoke point, calorific value, proximate and ultimate analysis of a fuel sample.
5. Basic knowledge of computers: hardware and software, proficiency in Microsoft office (word, excel, power-point), common file formats and their processing (doc, pdf, jpg, ppt, xls, tiff, etc).

Annexure-A3

SYLLABUS FOR STAGE-III OF TECHNICAL ASSISTANT

Technical Assistant (Civil)

1. **Strength of Materials:** Systems of forces, Centroids & moment of inertia, Mechanical properties of engineering materials - elastic constants, Different types of stresses and strains, Shear force & bending moments in beams, flexural & shear stresses in beams.

2. **Design of Concrete and Steel Structures**: Basics of working stress and limit state method, Analysis & design of simple RCC elements using working stress method, Analysis & design of RCC elements like singly / doubly reinforced rectangular beams - singly reinforced T-beams (Cantilevers, Simply supported/ Continuous beams, Lintels etc.) for shear and flexure by limit state method, Design of One way/ Two way slabs and Staircases by limit state method, Design axially loaded Columns and Footings by limit state method, Design simple Steel members like laterally supported Beams, Tension members, Compression members and Welded connections by limit state method.

3. **Theory of Structures**: Slope and deflection of determinate beams by double integration, Macaulay's method, conjugate beam method, moment area method and unit load method, Analysis of propped cantilevers and fixed beams by Area - Moment method and draw SFD & BMD, Analysis of Continuous beams by Theorem of Three moments, Analysis of continuous beams and Portal frames by Moment Distribution Method and Slope Deflection Method, BMD and SFD for such structures.

4. **Construction Materials and Construction Practice**: Different construction materials and their properties, different types of cement, grades of cements, tests on cement and other construction materials, Types of modern building materials such as ceramic products – glass - metals and plastics, Preparation of mortar and cement concrete, Different types of concretes, Types of foundations, Classification of stone masonry - brick masonry, Types of doors – windows - lintels – stairs, Types of floors – roofs, Different methods of pointing, plastering and termite proofing, Scaffolding - shoring - underpinning - form work, Procedure of colour washing - white washing - painting – varnishing**.**

5. **Soil Mechanics and Foundation Engineering**: Development of Soil Mechanics - Soil formation - three Phase System - Index and Engineering properties. Compaction and consolidation. Permeability - Darcy's law. Shear strength of soil - Mohr's stress circle - Mohr-Coulomb failure theory - Shear strength test - Unconfined compression test - Optimum moisture content - Proctor's Compaction test. Soil exploration - Direct, Semi-direct and Indirect methods - Spacing and depth of test borings - Sub-Soil Sampling - Disturbed and Undisturbed samples - Seepage analysis - Head, Gradient and Potential - Hydraulic gradient - Seepage pressure. Methods of determining bearing capacity - Types of failure in soil; Rankine's analysis - Terzaghi's analysis - Effect of water table. Settlement of foundation - Plate load test.

6. **Surveying**: Levelling. Types of Theodolites - Transit and non-transit Theodolite, Vernier and Micrometer Theodolites, Measurement of vertical angle and deflection angle – Bearing of a line – Theodolite traversing. Stadia and Tangential tacheometry –Fixed hair method of tacheometry – Measurement of distance and elevation. Total Station. Countouring**.**

7. **Transportation Engineering**: Development of Roads in India - Modes of transportation - Nagpur Plan, Classifications of Highways, Highway materials and its evaluation. Types of Pavement - Flexible and Rigid Pavements - Parking - Methods of parking - Road junctions (Grade intersections and Grade separators) - Traffic signals - Types of road signs. Classifications of roads - Earthen road, Gravel road,

Water Bound Macadam roads, Types of Bituminous roads - Surface dressing, Methods of construction of cement concrete roads. Rehabilitation and maintenance of roads.

8. **Estimating and Costing**: Types of Estimates - Approximate and Detailed Estimates- Main and Sub Estimates- Revised Estimates-Supplementary Estimates – Maintenance/Repair Estimates. Taking off Quantities. Approximate Estimates – Service Unit method- Plinth Area method- Carpet Area method- Cubical Content method. Computation of Areas and volumes of Irregular and irregular Sections - End Ordinate rule, Mid Ordinate rule, Average Ordinate rule, Trapezoidal rule, Simpson's rule. Determination of Volume of Earth work in Embankment / Cutting with level sections of varying heights/ depths. Analysis of Rates - Cement/Lime mortars; Plain Cement Concrete in Foundation/Leveling Course; Flooring with cement concrete, plastered with cement mortar; Flooring with PCC finished with cement concrete surface; Flooring with Cuddapa slabs.

9. **Water Resources Engineering**: Pressure of liquid at a point - Static pressure, Atmospheric pressure, Gauge pressure, Vacuum pressure and Absolute pressure – Measurement of pressure - Simple mercury barometer - Pressure measuring devices and problems - Piezometer tube - Simple U-tube manometer - Differential manometer – Micrometer. Hydrostatic pressure - Pressure on plane surfaces - Horizontal, vertical and inclined Surfaces-Total Pressure-Centre of pressure - Depth of centre of pressure. Various types of flows including Laminar and turbulent flow - Steady and unsteady flow – Uniform and Non-uniform flow - Bernoulli's theorem –Venturimeter – Orificemeter. Large orifice – Discharge formula –Types of mouthpieces - Losses of head in pipes - Types of notches and problems – Classification of weirs - Discharge over a rectangular weir and trapezoidal weir, End contractions of a weir. Rectangular and Trapezoidal channels – Discharge – Chezy's formula, Bazin's formula and Manning's formula - Methods of measurement of velocity. Flow through pipes.

   Methods of Irrigation- Advantages and disadvantages of irrigation, water requirements of crops, factors affecting water requirement, consumptive use of water, water depth or delta and crop relation, Duty of water, relation between delta, duty and base period, Soil crop relationship and soil fertility, sprinkler Irrigation – advantages & limitations, Planning and design of sprinkler irrigation, Drip irrigation – advantages & limitations, suitability.

   Canal Irrigation: Classifications of canals, canal alignment, Inundation canals, Bandhara irrigation, advantages and disadvantages. Silt theories – Kennedy's theory, Lacey's theory, Drawbacks in Kennedy's & Lacey's theories, comparison of Lacey's and Kennedy's theories, Design of unlined canals based on Kennedy & Lacey's theories, suspended and bed loads.

10. **Environmental Engineering**: Water supply - Public water supply system and demand - types of demand - per capita demand - prediction of population. Intakes - types of intakes-description of intakes-infiltration galleries and infiltration wells in river beds - necessity of pumps - types of pumps - pipes for conveyance of water. Water treatment - sedimentation –types of sedimentation - coagulation - coagulants and their choice - types of sedimentation tanks – filtration - R.O process. Distribution system - gravity, pumping and combined system. Sanitary Engineering - estimation of storm water – minimum size and shape of sewer - materials used for sewer - joints - laying and testing - manhole - lamp hole - catch basin - street inlet - grease and oil trap -flushing tanks – drainage arrangements in buildings - sanitary fittings - sewage pumps. Sewage treatment - primary and secondary treatments - screens - skimming tanks - grit chambers - sedimentation tanks – filters - types and description of filters - activated sludge process - septic tanks - construction and working of septic tanks. methods of solid waste disposal - incineration, dumping, sanitary landfill, composting - energy from waste.

Technical Assistant (Computer Science & Engineering / Information Technology / Mathematics & Computing):

1. **Hardware:** Hardware Devices and Troubleshooting • Components, tools and safety measures • Assembling a PC • Firmware upgrade, Dual BIOS & BIOS settings • Diagnose & Resolve issues related to a PC • Laptop features, Components, tools and safety measures • Diagnose & Resolve issues related to a Laptop • Upgrading a PC or Laptop • Smartphone features and Tools & Safety • Types of printers • Installing and testing a printer • Printer Maintenance • Scanner Installation • Webcam Installation.

2. **Programming and Data Structure:** C Language • Object oriented Programming •functions • data type • Recursion •Arrays •Stacks • Queues • Binary Search Trees • Sorting.

3. **Web Designing:** HTML and CSS • SQL • JavaScript

4. **Operating system:** Application & Troubleshooting • Different OS and Compatibility • Windows and Linux installation • Upgrading OS • Software Installation • Working on MS Word, Excel & PowerPoint • MS Office troubleshooting • Different Browser setup • Backup, format & restore OS.

5. **Networking and Security:** Basics of computer network • OSI Model • Transmission Media • Networking devices Network Topology • LAN Basics • IP Addressing • TCP/IP • Ethernet Advanced • Structured Cabling • Wireless Networking• Connecting a PC/Laptop to Internet • Installing a printer and sharing it in network • Joining a workgroup/domain • File sharing and troubleshooting • Remote Access • Basics of Wi-Fi •Internet security

6. **DBMS:** DDl • DML • ER-Model & normalization • Relational data model • Transaction processing concepts • Crash recovery • Oracle • Ms-Access • My SQL • Concurrency Control techniques Client-Server Concepts

7. **Network Vulnerabilities:** TCP/IP layer threats • UDP threats • ICMP threat • ARP threat • DDOS/DOS • Firewall & its architectures • Packet filtering firewall • Proxy firewall • IDS • Malware & types • Virus • Worms • Use of access lists.

Technical Assistant (Chemical Engineering)

1. **Mechanical Operations:** Introduction and concepts of Mechanical Operations, particulate solids, Screen Analysis, Size Reduction, Sedimentation, Filtration, Agitation and Mixing.

2. **Chemical Process Industries:** Chlor-Alkali Industry, Cement Industries, Fertilizers,Marine chemicals, Oil & Fats Industries, Carbohydrate and polymer Industries, Pulp and Paper Industries, Pharmaceuticals, Pesticides, Dyes & Intermediates, Electrochemical Industries, petroleum refining and petrochemical technology, Fuels.

3. **Industrial Safety and Environmental Engineering:** General Introduction & Concept of Safety, Chemical & Fire Hazards & their Control, Other hazards & occupational diseases, Personal Protective Devices, Introduction to pollution, Air Pollution, Water pollution, Solid waste of disposal.

4. **Plant Utilities and Energy Engineering:** Introduction, Conventional fuels, Non-conventional sources of energy, Water & Steam, Air & Refrigeration

5. **Heat Transfer:** Fundamentals of Heat Transfer, Steady State Heat Transfer by conduction, Heat Transfer by Convection, Heat Transfer by Phase Change, Thermal Radiation, Heat Exchangers, Evaporation.

6. **Fluid Flow Operation:** Fluid Statics, Fluid dynamics, Behavior of different types of fluids, Transportation of fluids, Conveying, Fluidization, Flow and Level measurement.

7. **Process Calculations:** Introduction, Basic Chemical Calculations, Material Balance with and without chemical reaction, Energy Balance, Combustion, ideal gas law.

8. **Mass Transfer:** Introduction, Molecular Diffusion of Fluids, Interphase Mass Transfer, Gas Absorption, Liquid-Liquid Extraction, Leaching, Equipment for Gas-Liquid Operation Distillation, Humidification, Drying, Adsorption and Ion Exchange, Crystallization.

9. **Instrumentation:** Introduction to Instrumentation, Temperature Measuring Devices, Measurement of Pressure & Vacuum, Measurement of Head & Level, Process Recording Instruments, Distributed Control Systems.

10. **Thermodynamics and Reaction Engineering:** Introduction and First law of thermodynamics, Second law of thermodynamics, Introduction to refrigeration and liquefaction, Introduction to reaction engineering, Kinetics of homogeneous reaction, Interpretation of batch reactor data, Introduction to reactor.

ANNEXURE-B

DETAILS OF RECRUIMENT PROCESS FOR THE POST OF JUNIOR ENGINEER (CIVIL)

Recruitment Rules (2019) for the post of JUNIOR ENGINEER / SAS ASSISTANT / LIBRARY AND INFORMATION ASSISTANT in NITs

Sl.No.	Particular	Criteria
1.	Name of the Post	**Jr. Engineer / SAS Assistant / Library and Information Assistant**
2.	Number of Post(s)	As per sanctioned strength.
3.	Classification	Group - B
4.	Scale of Pay (Grade Pay, Band Pay)	PB -2 (Rs.9,300 - 34,800/-) with Grade Pay of Rs.4200/-
5.	Whether Selection Post or non-Selection Posts	Not Applicable
6.	Age limit for direct recruits	30 years.
7.	Educational and other qualifications required for direct recruits	**Essential:** **A. Junior Engineer** First Class B.E. / B.Tech. in Civil/Electrical Engineering from a recognized University or Institute. OR First Class Diploma in Civil/Electrical Engineering with excellent academic record **B. SAS Assistant** (i) First Class Bachelor's Degree in Physical Education from a recognized University or Institution. (ii) Strong record of participation in sports and drama / music / films / painting / Photography / journalism event management or other student/ event management activities during college / University studies. **C. Library & Information Assistant** First Class Bachelors Degree in Science /Arts/ Commerce from recognized University /Institute and Bachelor's Degree in Library and Information Science. **Desirable (for C only):** Post Graduate Diploma in Library Automation and Networking, PGDCA or equivalent from a recognized Institution.
8.	Whether age and educational qualifications prescribed for direct	Not Applicable

ANNEXURE-B

Sl.No.	Particular	Criteria
	recruits will apply in the case of promotees	
9.	Period of probation, if any	1 Year for direct recruits as per NIT Statutes.
10.	Method of Recruitment whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	100% direct recruitment
11.	In case of recruitment by promotion / deputation / transfer, grades from which promotion / deputation / transfer to be made	Not Applicable
12.	If DPC exists, what is its composition	Not Applicable.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

K. Rajan

ANNEXURE-B

DETAILS OF ESSENTIAL EDUCATIONAL QUALIFICATION ALONG WITH TRADE/SPECIALIZATION FOR RECRUIMENT TO THE POST OF JUNIOR ENGINEER (CIVIL)

Name of Post	Essential Educational Qualification with Trade/Specialization
Junior Engineer (Civil)	First Class B.E. / B.Tech. in **Civil Engineering** from a recognized University or Institute **OR** First Class Diploma in **Civil Engineering** with excellent academic record

ANNEXURE-B

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF JUNIOR ENGINEER (CIVIL)

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-B1** of the advertisement notice.
- The Screening Test shall consist of two Parts i.e. Part-A & Part-B. Part-A will consist of 30 questions pertaining to English, Reasoning, Numerical Aptitude, General Science etc. while Part-B will consist of 30 questions which will be post specific.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) in order of merit of Screening Test, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be based on experimental, practical & theoretical knowledge of Laboratory Experiments of the concerned trade/specialization.
- The **syllabus of the Skill Test is mentioned in the Annexure-B2** of the advertisement notice.
- Minimum Qualifying marks for the Skill Test shall be 30% of total marks.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-B3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Junior Engineer (Civil)

Annexure-B1

SYLLABUS FOR STAGE-I OF JUNIOR ENGINEER (CIVIL)

The Screening Test shall consist of two Parts i.e. Part-A & Part-B. Part-A will consist of 30 Multiple Choice Questions pertaining to English, Reasoning, Numerical Aptitude, General Science etc. while Part-B will consist of 30 Multiple Choice Questions which will be post specific.

Syllabus of Part-A of the Screening Test:

1. **General English** - Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic** - Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation** - Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science upto Secondary Level**

Syllabus of Part-B of the Screening Test:

1. Strength of Materials
2. Design of Concrete and Steel Structures
3. Theory of Structures
4. Construction Materials and Construction Practice
5. Soil Mechanics and Foundation Engineering
6. Surveying
7. Transportation Engineering
8. Estimating and Costing
9. Water Resources Engineering
10. Environmental Engineering

Annexure-B2

SYLLABUS FOR STAGE-II OF JUNIOR ENGINEER (CIVIL)

- The Skill test will be a test to check the knowledge of an applicant pertaining to various instruments / equipment in different laboratories of Civil Engineering as mentioned below:
  - Structures Testing
  - Concrete Technology
  - Transportation Engineering
  - Geotechnical Engineering
  - Environmental Engineering
  - Fluid Mechanics & Hydraulics

- The skill test includes introduction of instruments/equipment of the above stated laboratories of Civil Engineering, Methodology of operation of instruments/equipment, Knowledge of the conduction of experiments/practical/tests etc. in the laboratory.

Annexure-B3

SYLLABUS FOR STAGE-III OF JUNIOR ENGINEER (CIVIL)

1. **Strength of Materials:** Systems of forces, Centroids & moment of inertia, Mechanical properties of engineering materials - elastic constants, Different types of stresses and strains, Shear force & bending moments in beams, flexural & shear stresses in beams.
2. **Design of Concrete and Steel Structures**: Basics of working stress and limit state method, Analysis & design of simple RCC elements using working stress method, Analysis & design of RCC elements like singly / doubly reinforced rectangular beams - singly reinforced T-beams (Cantilevers, Simply supported/ Continuous beams, Lintels etc.) for shear and flexure by limit state method, Design of One way/ Two way slabs and Staircases by limit state method, Design axially loaded Columns and Footings by limit state method, Design simple Steel members like laterally supported Beams, Tension members, Compression members and Welded connections by limit state method.
3. **Theory of Structures**: Slope and deflection of determinate beams by double integration, Macaulay's method, conjugate beam method, moment area method and unit load method, Analysis of propped cantilevers and fixed beams by Area - Moment method and draw SFD & BMD, Analysis of Continuous beams by Theorem of Three moments, Analysis of continuous beams and Portal frames by Moment Distribution Method and Slope Deflection Method, BMD and SFD for such structures.
4. **Construction Materials and Construction Practice**: Different construction materials and their properties, different types of cement, grades of cements, tests on cement and other construction materials, Types of modern building materials such as ceramic products – glass - metals and plastics, Preparation of mortar and cement concrete, Different types of concretes, Types of foundations, Classification of stone masonry - brick masonry, Types of doors – windows - lintels – stairs, Types of floors – roofs, Different methods of pointing, plastering and termite proofing, Scaffolding - shoring - underpinning - form work, Procedure of colour washing - white washing - painting - varnishing.
5. **Soil Mechanics and Foundation Engineering**: Development of Soil Mechanics - Soil formation - three Phase System - Index and Engineering properties. Compaction and consolidation. Permeability - Darcy's law. Shear strength of soil - Mohr's stress circle - Mohr-Coulomb failure theory - Shear strength test - Unconfined compression test - Optimum moisture content - Proctor's Compaction test. Soil exploration - Direct, Semi-direct and Indirect methods - Spacing and depth of test borings - Sub-Soil Sampling - Disturbed and Undisturbed samples - Seepage analysis - Head, Gradient and Potential - Hydraulic gradient - Seepage pressure. Methods of determining bearing capacity - Types of failure in soil; Rankine's analysis - Terzaghi's analysis - Effect of water table. Settlement of foundation - Plate load test.
6. **Surveying**: Levelling. Types of Theodolites - Transit and non-transit Theodolite, Vernier and Micrometer Theodolites, Measurement of vertical angle and deflection angle – Bearing of a line – Theodolite traversing. Stadia and Tangential tacheometry –Fixed hair method of tacheometry – Measurement of distance and elevation. Total Station. Countouring.
7. **Transportation Engineering**: Development of Roads in India - Modes of transportation - Nagpur Plan, Classifications of Highways, Highway materials and its evaluation. Types of Pavement - Flexible and Rigid Pavements - Parking - Methods of parking - Road junctions (Grade intersections and Grade separators) - Traffic signals - Types of road signs. Classifications of roads - Earthen road, Gravel road, Water Bound Macadam roads, Types of Bituminous roads - Surface dressing, Methods of construction of cement concrete roads. Rehabilitation and maintenance of roads.
8. **Estimating and Costing**: Types of Estimates - Approximate and Detailed Estimates- Main and Sub Estimates- Revised Estimates-Supplementary Estimates – Maintenance/Repair Estimates. Taking off Quantities. Approximate Estimates – Service Unit method- Plinth Area method- Carpet Area method- Cubical Content method. Computation of Areas and volumes of Irregular and irregular Sections - End Ordinate rule, Mid Ordinate rule, Average Ordinate rule, Trapezoidal rule, Simpson's rule. Determination of Volume of Earth work in Embankment / Cutting with level sections of varying heights/ depths. Analysis of Rates - Cement/Lime mortars; Plain Cement Concrete in Foundation/Leveling Course; Flooring with cement concrete, plastered with cement mortar; Flooring

with PCC finished with cement concrete surface; Flooring with Cuddapa slabs.

9. **Water Resources Engineering**: Pressure of liquid at a point - Static pressure, Atmospheric pressure, Gauge pressure, Vacuum pressure and Absolute pressure – Measurement of pressure - Simple mercury barometer - Pressure measuring devices and problems - Piezometer tube - Simple U-tube manometer - Differential manometer – Micrometer. Hydrostatic pressure - Pressure on plane surfaces - Horizontal, vertical and inclined Surfaces-Total Pressure-Centre of pressure - Depth of centre of pressure. Various types of flows including Laminar and turbulent flow - Steady and unsteady flow – Uniform and Non-uniform flow - Bernoulli's theorem –Venturimeter – Orificemeter. Large orifice – Discharge formula –Types of mouthpieces - Losses of head in pipes - Types of notches and problems – Classification of weirs - Discharge over a rectangular weir and trapezoidal weir, End contractions of a weir. Rectangular and Trapezoidal channels – Discharge – Chezy's formula, Bazin's formula and Manning's formula - Methods of measurement of velocity. Flow through pipes.

   Methods of Irrigation- Advantages and disadvantages of irrigation, water requirements of crops, factors affecting water requirement, consumptive use of water, water depth or delta and crop relation, Duty of water, relation between delta, duty and base period, Soil crop relationship and soil fertility, sprinkler Irrigation – advantages & limitations, Planning and design of sprinkler irrigation, Drip irrigation – advantages & limitations, suitability.

   Canal Irrigation: Classifications of canals, canal alignment, Inundation canals, Bandhara irrigation, advantages and disadvantages. Silt theories – Kennedy's theory, Lacey's theory, Drawbacks in Kennedy's & Lacey's theories, comparison of Lacey's and Kennedy's theories, Design of unlined canals based on Kennedy & Lacey's theories, suspended and bed loads.

10. **Environmental Engineering**: Water supply - Public water supply system and demand - types of demand - per capita demand - prediction of population. Intakes - types of intakes-description of intakes-infiltration galleries and infiltration wells in river beds - necessity of pumps - types of pumps - pipes for conveyance of water. Water treatment - sedimentation –types of sedimentation - coagulation - coagulants and their choice - types of sedimentation tanks – filtration - R.O process. Distribution system - gravity, pumping and combined system. Sanitary Engineering - estimation of storm water – minimum size and shape of sewer - materials used for sewer - joints - laying and testing - manhole - lamp hole - catch basin - street inlet - grease and oil trap -flushing tanks – drainage arrangements in buildings - sanitary fittings - sewage pumps. Sewage treatment - primary and secondary treatments - screens - skimming tanks - grit chambers - sedimentation tanks – filters - types and description of filters - activated sludge process - septic tanks - construction and working of septic tanks. methods of solid waste disposal - incineration, dumping, sanitary landfill, composting - energy from waste.

ANNEXURE-C

DETAILS OF RECRUIMENT PROCESS TO THE POST OF SAS ASSISTANT

Recruitment Rules (2019) for the post of JUNIOR ENGINEER / SAS ASSISTANT / LIBRARY AND INFORMATION ASSISTANT in NITs

Sl.No.	Particular	Criteria
1.	Name of the Post	**Jr. Engineer / SAS Assistant / Library and Information Assistant**
2.	Number of Post(s)	As per sanctioned strength.
3.	Classification	Group - B
4.	Scale of Pay (Grade Pay, Band Pay)	PB -2 (Rs.9,300 - 34,800/-) with Grade Pay of Rs.4200/-
5.	Whether Selection Post or non-Selection Posts	Not Applicable
6.	Age limit for direct recruits	30 years.
7.	Educational and other qualifications required for direct recruits	**Essential:** **A. Junior Engineer** First Class B.E. / B.Tech. in Civil/Electrical Engineering from a recognized University or Institute. OR First Class Diploma in Civil/Electrical Engineering with excellent academic record **B. SAS Assistant** (i) First Class Bachelor's Degree in Physical Education from a recognized University or Institution. (ii) Strong record of participation in sports and drama / music / films / painting / Photography / journalism event management or other student/ event management activities during college / University studies. **C. Library & Information Assistant** First Class Bachelors Degree in Science /Arts/ Commerce from recognized University /Institute and Bachelor's Degree in Library and Information Science. **Desirable (for C only):** Post Graduate Diploma in Library Automation and Networking, PGDCA or equivalent from a recognized Institution.
8.	Whether age and educational qualifications prescribed for direct	Not Applicable

ANNEXURE-C

Sl.No.	Particular	Criteria
	recruits will apply in the case of promotees	
9.	Period of probation, if any	1 Year for direct recruits as per NIT Statutes.
10.	Method of Recruitment whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	100% direct recruitment
11.	In case of recruitment by promotion / deputation / transfer, grades from which promotion / deputation / transfer to be made	Not Applicable
12.	If DPC exists, what is its composition	Not Applicable.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

K. Rajan

ANNEXURE-C

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF SAS ASSISTANT

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-C1** of the advertisement notice.
- The Screening Test shall consist of two Parts i.e. Part-A & Part-B. Part-A will consist of 30 questions pertaining to English, Reasoning, Numerical Aptitude, General Science etc. while Part-B will consist of 30 questions which will be post specific.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) against each post in order of merit of Screening Test, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be based on Physical Fitness Test and Skill Proficiency Test in the game/sports chosen per specialization of the candidate.
- The **syllabus of the Skill Test is mentioned in the Annexure-C2** of the advertisement notice.
- It is mandatory for the candidate to pass Physical Fitness Test while the Minimum Qualifying marks for the Skill Proficiency Test in the game/sports shall be 30% of total marks.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-C3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of SAS Assistant.

Annexure-C1

SYLLABUS FOR STAGE-I OF SAS ASSISTANT

The Screening Test shall consist of two Parts i.e. Part-A & Part-B. Part-A will consist of 30 Multiple Choice Questions pertaining to English, Reasoning, Numerical Aptitude, General Science etc. while Part-B will consist of 30 Multiple Choice Questions which will be post specific.

Syllabus of Part-A of the Screening Test:

1. **General English** - Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic** - Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation** - Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science upto Secondary Level**

Syllabus of Part-B of the Screening Test:

1. Physical Education and its objective & scope
2. Sports Kinesiology
3. Test, Measurement, & Evaluation
4. Sports Training
5. Muscular System
6. Sports Psychology
7. Officiating

Annexure-C2

SYLLABUS FOR STAGE-II OF SAS ASSISTANT

- **Physical Fitness Test Norms:**

Norms for Men			
12 Minutes Run/Walk Test			
Up to 30 Years	Up to 40 Years	Up to 45 Years	Up to 50 Years
1800 metres	1500 metres	1200 metres	800 metres

Norms for Women			
8 Minutes Run/Walk Test			
Up to 30 Years	Up to 40 Years	Up to 45 Years	Up to 50 Years
1000 metres	800 metres	600 metres	400 tres

All the candidate who are required to undertake the physical fitness test shall be produce a medical certificate issued by a Government Hospital/Dispensary certifying that he/she is medically fit. Further, the medical certificate issued by a Government Hospital/Dispensary maximum 15 days before the date of Physical Fitness Test.

- **Skill Proficiency Test of the game/sports chosen per specialization of the candidate including theoretical knowledge.**

Annexure-C3

SYLLABUS FOR STAGE-III OF SAS ASSISTANT

1. **Physical Education** - Meaning, Definition, Aims, Objectives and Scope. History of Physical Education in Ancient Greece: in Reference to Sparta and Athens. Philosophy: Meaning, functions of Philosophy, Idealism, Realism, Naturalism, Pragmatism, Arjuna Award, Dronacharya Award /MAKA Trophy, Ancient and Modern Olympic Game, Commonwealth Games.

2. **Sports Kinesiology** - Meaning of kinesiology, aims and objectives of kinesiology. Importance of kinesiology in physical education. Meaning structure and chemical composition of bones. Functions and types of bones. Common postural deformities i.e. flat foot, bow legs, knock knees, lordosis, scoliosis, kyphosis, and round shoulders, their causes and remedial measures. Motion and types of motion & Newton's law of motion.

3. **Test, Measurement, & Evaluation -** Meaning and Definition of Test, Measurement, & Evaluation. Philip's J.C.R Test, AAHPER Youth Fitness Test, Tuttle Pulse Ratio Test, Harvard Step Test) Hicks Badminton Test, Knox Basketball Test, McDonald Soccer Test, Henry- Friedel field Hockey Test, Russell-Lange Volleyball Test. Somatotyping Meaning of Somatotyping Brief Account of Kretchmer's Body Type, Brief Account of Sheldon Body Classification.

4. **Sports Training -** Meaning and Definition of Sports Training, Aims and Objectives of Sports Training. Meaning and Types, Talent Identification and its Importance. Meaning of Training Load, Principle of Training Load, Overload Causes and Symptoms of Overload. Definition and Meaning of Strength, Types of Endurance, Factor Affecting Speed, Methods of Developing Endurance Definition Meaning of Flexibility, Types of coordinative ability, Factor Affecting Flexibility, Methods of Developing Flexibility.

5. **Muscular System:** Classification of Muscles, Functions and Types of Muscles, Concept of Homeostasis and its Relevance to Physical Education and Sports, Brief Introduction of the Cardiovascular System: The Heart & its Structure and Function, Cardiac Cycle, Mechanism of Blood Circulation, Composition and Function of Blood, Brief Introduction of the Respiratory System, Structure and Functions, Mechanism of Respiration, Types of Respiration.

6. **Sports Psychology -** Nature, Scope and Importance in Physical Education Methods of Sports Psychology. Concept of Learning, Theories and Laws of Learning. Laws and principles of learning. Meaning and Types Dynamics of Motivation in Sports. Techniques of Motivation. Intelligence, Definition and Meaning of Intelligence Theories of Intelligence Role of Intelligence in Sports.

7. **Officiating** - Definition, Meaning and Importance of Officiating, Principles of Officiating, Qualities of good Officials. Duties of Officials: - Pre-game, During Game, Post Game, Measures for Improving the Standard of Officials. Rules of Different games and Dimensions of Play fields. Methods of Conditioning and Training, Continuous Training Method, Interval Training Method, Repetition Training Method.

ANNEXURE-D

DETAILS OF RECRUIMENT PROCESS TO THE POST OF LIBRARY & INFORMATION ASSISTANT

Recruitment Rules (2019) for the post of JUNIOR ENGINEER / SAS ASSISTANT / LIBRARY AND INFORMATION ASSISTANT in NITs

Sl.No.	Particular	Criteria
1.	Name of the Post	**Jr. Engineer / SAS Assistant / Library and Information Assistant**
2.	Number of Post(s)	As per sanctioned strength.
3.	Classification	Group - B
4.	Scale of Pay (Grade Pay, Band Pay)	PB -2 (Rs.9,300 - 34,800/-) with Grade Pay of Rs.4200/-
5.	Whether Selection Post or non-Selection Posts	Not Applicable
6.	Age limit for direct recruits	30 years.
7.	Educational and other qualifications required for direct recruits	**Essential:** **A. Junior Engineer** First Class B.E. / B.Tech. in Civil/Electrical Engineering from a recognized University or Institute. OR First Class Diploma in Civil/Electrical Engineering with excellent academic record **B. SAS Assistant** (i) First Class Bachelor's Degree in Physical Education from a recognized University or Institution. (ii) Strong record of participation in sports and drama / music / films / painting / Photography / journalism event management or other student/ event management activities during college / University studies. **C. Library & Information Assistant** First Class Bachelors Degree in Science /Arts/ Commerce from recognized University /Institute and Bachelor's Degree in Library and Information Science. **Desirable (for C only):** Post Graduate Diploma in Library Automation and Networking, PGDCA or equivalent from a recognized Institution.
8.	Whether age and educational qualifications prescribed for direct	Not Applicable

ANNEXURE-D

Sl.No.	Particular	Criteria
	recruits will apply in the case of promotees	
9.	Period of probation, if any	1 Year for direct recruits as per NIT Statutes.
10.	Method of Recruitment whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	100% direct recruitment
11.	In case of recruitment by promotion / deputation / transfer, grades from which promotion / deputation / transfer to be made	Not Applicable
12.	If DPC exists, what is its composition	Not Applicable.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

K. Rajan

ANNEXURE-D

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF LIBRARY & INFORMATION ASSISTANT

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-D1** of the advertisement notice.
- The Screening Test shall consist of two Parts i.e. Part-A & Part-B. Part-A will consist of 30 questions pertaining to English, Reasoning, Numerical Aptitude, General Science etc. while Part-B will consist of 30 questions which will be post specific.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) against each post in order of merit of Screening Test, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be based on Computer Proficiency Test and Library Automation & Networking.
- The **syllabus of the Skill Test is mentioned in the Annexure-D2** of the advertisement notice.
- Minimum Qualifying marks for the Skill Test shall be 30% of total marks.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-D3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Library & Information Assistant.

Annexure-D1

SYLLABUS FOR STAGE-I OF LIBRARY & INFORMATION ASSISTANT

The Screening Test shall consist of two Parts i.e. Part-A & Part-B. Part-A will consist of 30 Multiple Choice Questions pertaining to English, Reasoning, Numerical Aptitude, General Science etc. while Part-B will consist of 30 Multiple Choice Questions which will be post specific.

Syllabus of Part-A of the Screening Test:

1. **General English** - Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic** - Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation** - Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science of Secondary Level**

Syllabus of Part-B of the Screening Test:

1. Library Automation
2. Internet and its applications
3. Digital Library Initiatives- National and International level
4. Indexing
5. Content analysis - Abstract and abstracting.
6. Vocabulary control.
7. Information searching and media.
8. Information retrieval system
9. Research methods/ methodology and Statistical techniques
10. Management of Library and Information Centers
11. Information and communication.
12. Open access scholarly communication
13. IPR- Intellectual Property Rights.
14. Information analysis- consolidation and repackaging- concept process and products
15. Planning, management and marketing of an information consolidation unit.
16. Information systems- management of Academic library system, special library system and business information system.

Annexure-D2

SYLLABUS FOR STAGE-II OF LIBRARY & INFORMATION ASSISTANT

The Skill Test will be conducted to check the knowledge of the applicant about:

- Computer Proficiency Test including use of Computer Applications
- Knowledge about Library Softwares
- Automation of Library
- Library Networking
- Searching of e-resources
- Searching of Books
- Indexing
- IPR- Intellectual Property Rights
- Information retrieval system
- Content analysis

Annexure-D3

SYLLABUS FOR STAGE-III OF LIBRARY & INFORMATION ASSISTANT

Sr. No.	Topics
1.	Information Sources and Services. Knowledge organization- Classification and Cataloguing Information and Communication technology a) Library Automation b) Internet and its applications c) Digital Library Initiatives- National and International level
2.	Content Creation and Management. Information Storage and retrieval a) Indexing. b) Content analysis - Abstract and abstracting. c) Vocabulary control. d) Information searching and media. e) Information retrieval system
3.	➢ Research methods/ methodology and Statistical techniques. ➢ Management of Library and Information Centers. ➢ Information and communication. ➢ Open access scholarly communication. ➢ IPR- Intellectual Property Rights. ➢ Information analysis- consolidation and repackaging- concept process and product. ➢ Planning, management and marketing of an information consolidation unit. ➢ Information systems- management of Academic library system, special library system and business information system.
4.	Latest trends in LIS- Library and Information Science All topics related to required Managerial and communication skills

ANNEXURE-E

DETAILS OF RECRUIMENT PROCESS TO THE POST OF SUPERINTENDENT

Recruitment Rules (2019) for the post of SUPERINTENDENT in NITs

Sl.No.	Particular	Criteria
1.	Name of the Post	**Superintendent**
2.	Number of Post(s)	As per Sanctioned strength.
3.	Classification	Group B
4.	Scale of Pay (Grade Pay, Band Pay)	PB : 2 (Rs.9,300 - 34,800/-) with Grade Pay of Rs.4200/-
5.	Whether Selection Post or non-Selection Posts	Not Applicable
6.	Age limit for direct recruits	30 years. Note:- Relaxable for Departmental Candidates upto five years in accordance with the instructions or orders issued by the Central Government
7.	Educational and other qualifications required for direct recruits	**Essential:** i) First Class Bachelor's Degree or its equivalent from a recognized University or Institute in any discipline Or Master's Degree in any discipline from a recognized University or Institute with at least 50% marks or equivalent grade ii) Knowledge of Computer applications viz., Word processing, Spread Sheet.
8.	Whether age and educational qualifications prescribed for direct recruits will apply in the case of promotees	**Age bar**: Not applicable **Educational Qualification:** No, but must possess at least Bachelor's Degree or its equivalent from a recognized University or Institute in any discipline
9.	Period of probation, if any	1 year for direct recruits as per NIT Statutes
10.	Method of Recruitment whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	75% by direct Recruitment 25% by promotion, failing which by deputation (including short term contract)
11.	In case of recruitment by promotion / deputation / transfer, grades from which promotion / deputation / transfer to be made	**Promotion:** Assistant (SG-I) with 2 years regular service with Grade Pay of Rs.4200/- through DPC and working performance record (APAR), through prescribed test and interview.

ANNEXURE-E

Sl.No.	Particular	Criteria
		Deputation (including short term Contract): Officers of the Central/State Govt. or similar organized services/semi-Govt./PSU/ autonomous organization/ University/ Institute of national importance: a) i) holding analogous post; or ii) 2 years regular service with Grade Pay of Rs.4200/- as Assistant (SG-I) or its equivalent post. b) Possessing educational qualification as prescribed in Row 7.
12.	If DPC exists, what is its composition	As per provisions contained in the NITSER Act, 2007, First Statutes and the subsequent Statutes.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

K. Rajin

ANNEXURE-E

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF SUPERINTENDENT

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-E1** of the advertisement notice.
- The Screening Test shall consist of two Parts i.e. Part-A & Part-B. Part-A will consist of 30 questions pertaining to English, Reasoning, Numerical Aptitude, General Science etc. while Part-B will consist of 30 questions which will be post specific.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks for UR & OBC and 15 Marks i.e. 25% of total marks for SC.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) against each post in order of merit of Screening Test in respective category, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be Computer Applications viz., Word Processing, Spread Sheet.
- The **syllabus of the Skill Test is mentioned in the Annexure-E2** of the advertisement notice.
- Minimum Qualifying marks for the Skill Test shall be 30% of total marks.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-E3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks for UR & OBC and 15 Marks i.e. 25% of total marks for SC.

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Superintendent.

Annexure-E1

SYLLABUS FOR STAGE-I OF SUPERINTENDENT

The Screening Test shall consist of two Parts i.e. Part-A & Part-B. Part-A will consist of 30 Multiple Choice Questions pertaining to English, Reasoning, Numerical Aptitude, General Science etc. while Part-B will consist of 30 Multiple Choice Questions which will be post specific.

Syllabus of Part-A of the Screening Test:

1. **General English** - Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic** - Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation** - Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science upto Secondary Level**

Syllabus of Part-B of the Screening Test:

1. NIT Acts & Statutes and their subsequent amendments
2. CCS (Leave) Rules
3. TA/DA Rules
4. LTC Rules
5. CCS (Conduct) Rules
6. CCS (CCA) Rules
7. Rules regarding allowances to Central Government employees
8. Reservation in appointment
9. Right to Information Act
10. GFR 2017 & subsequent amendments
11. Procurement of goods and services
12. Office Procedures

Annexure-E2

SYLLABUS FOR STAGE-II OF SUPERINTENDENT

The Skill Test for the post of Superintendent will be conducted in order to check the Knowledge of the Applicant regarding Computer Applications viz., Word Processing, Spread Sheet.

Annexure-E3

SYLLABUS FOR STAGE-III OF SUPERINTENDENT

1. NIT Acts & Statutes and their subsequent amendments
2. Fundamental Rules & Supplementary Rules
3. CCS (Leave) Rules
4. TA/DA Rules
5. LTC Rules
6. Medical Attendance Rules
7. CCS (Pension) Rules & NPS
8. CCS (Conduct) Rules
9. CCS (CCA) Rules
10. Rules regarding allowances to Central Government employees
11. Deputation & Foreign service
12. Technical Resignation & Lien
13. Reservation in appointment
14. Right to Information Act
15. GFR 2017 & subsequent amendments
16. Procurement of goods and services
17. Office Procedures
18. Gratuity Act
19. Recruitment Rules for Faculty and Non-faculty
20. Purchase Manual for Goods & Services
21. UG, PG & Doctoral Ordinances of NIT Jalandhar

ANNEXURE-F

DETAILS OF RECRUIMENT PROCESS TO THE POST OF SENIOR STENOGRAPHER

Recruitment Rules (2019) for the post of SENIOR STENOGRAPHER in NITs

Sl.No.	Particular	Criteria
1.	Name of the Post	**Senior Stenographer**
2.	Number of Post(s)	As per sanctioned strength
3.	Classification	Group - C
4.	Scale of Pay (Grade Pay, Band Pay)	PB:1 (Rs.5,200-20,200) with Grade Pay of Rs.2800/-.
5.	Whether Selection Post or non-Selection Posts	Not applicable
6.	Age limit for direct recruits	33 years Note:- Relaxable for Departmental Candidates upto five years in accordance with the instructions or orders issued by the Central Government
7.	Educational and other qualifications required for direct recruits	**Essential**: 10+2 or equivalent from a recognized Board or University. Minimum speed in short hand 100 w.p.m. in Stenography. **Desirable:** Bachelor's degree. Proficiency in Computer Word Processing and Spread Sheet with advance skills.
8.	Whether age and educational qualifications prescribed for direct recruits will apply in the case of promotees	Age bar: Not applicable Educational Qualifications: Yes
9.	Period of probation, if any	1 year for direct recruits only as per NIT Statutes.
10.	Method of Recruitment whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	i) 50% by Promotion, failing which by deputation (including short term contract) ii) 50% by direct recruitment.
11.	In case of recruitment by promotion / deputation / transfer, grades from which promotion / deputation / transfer to be made	**Promotion :** Stenographer with 5 years regular service with Grade Pay of Rs.2400/- through DPC and working performance record (APAR), through prescribed test and interview.

ANNEXURE-F

Sl.No.	Particular	Criteria
		Deputation (including short term Contract): Officers of the Central/State Govt. or similar organized services/semi-Govt./PSU/ autonomous organization/ University/Institute of national importance: a) i) holding analogous post; or ii) 5 years regular service with Grade Pay of Rs.2400/- as Stenographer or its equivalent post. b) Possessing educational qualifications as prescribed in Row 7
12.	If DPC exists, what is its composition	As per the provisions contained in the NITSER Act, 2007, First Statutes and the subsequent Statutes.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

ANNEXURE-F

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF SENIOR STENOGRAPHER

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-F1** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) against each post in order of merit of Screening Test in respective category, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be Stenography Test and Computer Proficiency Test.
- It is mandatory to pass the prescribed Stenography Test and the Minimum Qualifying marks for the Computer Proficiency Test shall be 30% of total marks.
- The **syllabus of the Skill Test is mentioned in the Annexure-F2** of the advertisement notice.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-F3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Senior Stenographer.

Annexure-F1

SYLLABUS FOR STAGE-I OF SENIOR STENOGRAPHER

1. **General English** - Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic** - Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation** - Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science of Secondary Level**

Annexure-F2

SYLLABUS FOR STAGE-II OF SENIOR STENOGRAPHER

1. **Stenography Test:**
   - Dictation: 10 Minutes @ 100 words per minute
   - Translation: 40 Minutes for English / 55 Minutes for Hindi

2. **Computer Proficiency Test:**
   - Computer Proficiency Test shall be conducted in order to check the Knowledge of the Applicant regarding Computer Word Processing and Spread Sheet with advance skills.

Annexure-F3

SYLLABUS FOR STAGE-III OF SENIOR STENOGRAPHER

- General Knowledge and Current Affairs
- Applications of Computer Software like MS-Word, Excel, Power Point, Tally etc. used in day-to-day office work.
- Internet, email and various online tools used in day-to-day office work.
- Questions relating to:
  - NIT Act & Statutes and their subsequent amendments
  - CCS (Leave) Rules
  - TA/DA Rules
  - LTC Rules
  - Office Procedure
  - Right to Information Act
  - CCS (Conduct) Rules
  - CCS (CCA) Rules

ANNEXURE-G

DETAILS OF RECRUIMENT PROCESS TO THE POST OF PHARMACIST

Recruitment Rules (2019) for the post of PHARMACIST in NITs

Sl.No.	Particular	Criteria
1	Name of the post	**Pharmacist**
2	Number of Post(s)	As per Sanctioned strength.
3	Classification	Group - C
4	Scale of Pay (Grade Pay, Band Pay)	PB:1 (Rs.5,200 - 20,200) with Grade Pay of Rs.2800/-
5	Whether selection post or non-selection post	Not Applicable
6	Age-limit for direct recruits	27 years
7	Educational and other qualifications required for direct recruits	**Essential:** (i) 10+2 in Science (PCB/PCM) subjects from recognized Board or University. (ii) 2 Years Diploma with First class from an Institute recognized by the Pharmacy Council of India with minimum two years experience in any recognized hospital or pharmacy. Or Bachelor's degree in Pharmacy (B.Pharma.) (iii) Registered as Pharmacist under the Pharmacy Act 1948.
8	Whether age and education qualifications prescribed for direct recruits will apply in the case of promotes	Not Applicable
9	Period of probation, if any	1 year for direct recruits as per NIT Statutes
10	Method of Recruitment Whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	100% Direct recruitment
11	In case of recruitment by promotion / deputation /absorption, grades from which promotion/ deputation/ absorption to be made	Not Applicable

K. Rajan

ANNEXURE-G

Sl.No.	Particular	Criteria
12	If Departmental Promotion Committee exists, what is its composition	Not Applicable
13	Circumstances in which Union Public Service Commission is to be consulted in making recruitment	Not Applicable

Note: After 2 Years' experience in the Grade Pay of Rs.2800/-, the incumbent will be granted Non Functional up-gradation to the next higher Grade Pay of Rs.4200/- in PB-2 and re-designated as Sr. Pharmacist (personal to the incumbent).

Sr. Pharmacist with GP of Rs.4200/- and 7 years of service, out of which at least 5 years of service in GP of Rs.4200/-, may be considered for promotion to the post of Pharmacist (SG II) with GP of Rs.4600/-.

K. Rajin

ANNEXURE-G

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF PHARMACIST

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-G1** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks i.e. Cut-off marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) in order of merit of Screening Test respective category, and who will secure equal to or more than prescribed cut-off marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be conducted to check the practical knowledge about Pharmacy & Computer Proficiency.
- Minimum Qualifying marks i.e. Cut-off marks for the Skill Test shall be 30% of total marks.
- The **syllabus of the Skill Test is mentioned in the Annexure-G2** of the advertisement notice.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-G3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks i.e. Cut-off marks for the Screening Test shall be 18 Marks i.e. 30% of total marks

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Pharmacist.

Annexure-G1

SYLLABUS FOR STAGE-I OF PHARMACIST

1. **General English -** Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic -** Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation -** Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science upto Secondary Level**

Annexure-G2

SYLLABUS FOR STAGE-II OF PHARMACIST

The skill test for the post of Pharmacist shall be conducted to check the practical knowledge of the candidate to perform the day-to-day duties. The syllabus for Skill Test is as under:

1. Prescription reading – Identify correct prescription
2. Display and Storage of medicines & various injection/vaccine/drugs in the pharmacy
3. Emergency trey and their uses
4. CPR and First aid demonstration
5. Supply Chain & Inventory Control of Pharmaceuticals
6. Drugs distribution
7. Application of Computer in Hospital Pharmacy Practice
8. Biomedical Waste Management
9. Nutrition and Health
10. Laws related to Drugs and Pharmacy profession
11. Pharmaceutical Ethics
12. Clinical laboratory tests
13. Drugs interactions
14. Microbiology and common microorganism
15. Preventive Healthcare

Annexure-G3

SYLLABUS FOR STAGE-III OF PHARMACIST

- Applications of Computer Software like MS-Word, Excel, Power Point, Tally etc. used in day-to-day office work.
- Internet, email and various online tools used in day-to-day office work.
- Questions relating to:
  - Pharmaceutics
  - Pharmaceutical & Organic/Inorganic Chemistry
  - Pharmacognosy
  - Biochemistry & Clinical Pathology
  - Human Anatomy & Physiology
  - Health Education & community pharmacy
  - Pharmacology & Toxicology
  - Pharmaceutical Jurisprudence
  - Drug store and Business Management
  - Hospital & Clinical Pharmacy with Therapeutics
  - Pathophysiology
  - Pharmacology
  - Pharmacognosy
  - Dispensing and Hospital Pharmacy
  - Pharmaceutical Engineering & Analysis
  - Basic Principles of Biotechnology & Microbiology
  - Pharmaceutical Jurisprudence
  - Phytochemistry
  - Inventory of pharmaceuticals and stock handling

ANNEXURE-H

DETAILS OF RECRUIMENT PROCESS TO THE POST OF STENOGRAPHER

Recruitment Rules (2019) for the post of STENOGRAPHER in NITs

Sl.No.	Particular	Criteria
1.	Name of the Post	**Stenographer**
2.	Number of Post(s)	As per sanctioned strength.
3.	Classification	Group - C
4.	Scale of Pay (Grade Pay, Band Pay)	PB:1 (Rs.5,200-20,200) with Grade Pay of Rs.2400/-
5.	Whether Selection Post or non-Selection Posts	Not applicable
6.	Age limit for direct recruits	27 years
7.	Educational and other qualifications required for direct recruits	**Essential**: Senior secondary (10+2) from a recognized board with minimum speed in short hand 80 w.p.m. in Stenography. **Desirable**: Proficiency in Computer Word processing and spread sheet with advance skills.
8.	Whether age and educational qualifications prescribed for direct recruits will apply in the case of promotees	Not applicable
9.	Period of probation, if any	1 year for direct recruits as per NIT Statutes
10.	Method of Recruitment : whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	100% Direct Recruitment.
11.	In case of recruitment by promotion / deputation / transfer, grades from which promotion / deputation / transfer to be made	Not Applicable
12.	If DPC exists, what is its composition	Not applicable.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

ANNEXURE-H

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF STENOGRAPHER

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-H1** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) against each post in order of merit of Screening Test, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be Stenography Test and Computer Proficiency Test.
- It is mandatory to pass the prescribed Stenography Test and the Minimum Qualifying marks for the Computer Proficiency Test shall be 30% of total marks.
- The syllabus of the **Skill Test is mentioned in the Annexure-H2** of the advertisement notice.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per syllabus mentioned in the Annexure-H3 of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks.

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Stenographer.

Annexure-H1

SYLLABUS FOR STAGE-I OF STENOGRAPHER

1. **General English** - Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic** - Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation** - Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science upto Secondary Level**

Annexure-H2

SYLLABUS FOR STAGE-II OF STENOGRAPHER

1. **Stenography Test:**
   - Dictation: 10 Minutes @ 80 words per minute
   - Translation: 50 Minutes for English / 65 Minutes for Hindi

2. **Computer Proficiency Test:**
   - Computer Proficiency Test shall be conducted in order to check the Knowledge of the Applicant regarding Computer Word Processing and Spread Sheet with advance skills.

Annexure-H3

SYLLABUS FOR STAGE-III OF STENOGRAPHER

- General Knowledge and Current Affairs
- Applications of Computer Software like MS-Word, Excel, Power Point, Tally etc. used in day-to-day office work.
- Internet, email and various online tools used in day-to-day office work.
- Questions relating to:
  - NIT Act & Statutes and their subsequent amendments
  - CCS (Leave) Rules
  - TA/DA Rules
  - LTC Rules
  - Office Procedure
  - Right to Information Act
  - CCS (Conduct) Rules
  - CCS (CCA) Rules

ANNEXURE-I

DETAILS OF RECRUIMENT PROCESS TO THE POST OF SENIOR ASSISTANT

Recruitment Rules (2019) for the post of SENIOR ASSISTANT in NITs

Sl.No.	Particular	Criteria
1.	Name of the Post	**Senior Assistant**
2.	Number of Post(s)	As per sanctioned strength.
3.	Classification	Group - C
4.	Scale of Pay (Grade Pay, Band Pay)	PB: 1 (Rs.5,200 - 20,200/-) with Grade Pay of Rs.2400/-.
5.	Whether Selection Post or non-Selection Posts	Not applicable
6.	Age limit for direct recruits	33 years Note:- Relaxable for Departmental Candidates upto five years in accordance with the instructions or orders issued by the Central Government
7.	Educational and other qualifications required for direct recruits	Senior secondary (10+2) from a recognized board with a minimum Typing speed of 35 w.p.m. and proficiency in Computer Word Processing and Spread Sheet. **Desirable:** Proficiency in other computer skills, stenography skills, Bachelor's degree.
8.	Whether age and educational qualifications prescribed for direct recruits will apply in the case of promotees	Age bar: Not applicable Educational Qualifications: No, but must possess at least 10+2 and having proficiency in Computer Word Processing.
9.	Period of probation, if any	1 year for direct recruits as per NIT Statutes
10.	Method of Recruitment whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	50% by Promotion. 50% by Direct Recruitment
11.	In case of recruitment by promotion / deputation / transfer, grades from which promotion / deputation / transfer to be made	**Promotion** At least 5 years regular service as Junior Assistant in PB-1, GP 2000/- or at least 5 years combined service of Office Attendant (SG-II) and Junior Assistant) in PB-1, Grade Pay of Rs.2000/-through DPC and working performance record (APAR), through prescribed test and interview.

ANNEXURE-I

Sl.No.	Particular	Criteria
12.	If DPC exists, what is its composition	As per the provisions contained in the NITSER Act, 2007, First Statutes and the subsequent Statutes.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

K. Rajan

ANNEXURE-I

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF SENIOR ASSISTANT

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-I1** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks for UR & OBC and 15 Marks i.e. 25% of total marks for SC.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) against each post in order of merit of Screening Test respective category, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be Typing Test and Computer Proficiency Test.
- It is mandatory to pass the prescribed Typing Test and the Minimum Qualifying marks for the Computer Proficiency Test shall be 30% of total marks.
- The **syllabus of the Skill Test is mentioned in the Annexure-I2** of the advertisement notice.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-I3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks for UR & OBC and 15 Marks i.e. 25% of total marks for SC.

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Senior Assistant.

Annexure-I1

SYLLABUS FOR STAGE-I OF SENIOR ASSISTANT (PAY LEVEL – 04)

1. **General English** - Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic** - Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation** - Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science upto Secondary Level**

Annexure-I2

SYLLABUS FOR STAGE-II OF SENIOR ASSISTANT (PAY LEVEL – 04)

1. **Typing Test:**
   - Minimum Typing Speed of 35 Words per Minutes
   - Duration: 10 Minutes

2. **Computer Proficiency Test:**
   - Computer Proficiency Test shall be conducted in order to check the Knowledge of the Applicant regarding Computer Word Processing and Spread Sheet.

Annexure-I3

SYLLABUS FOR STAGE-III OF SENIOR ASSISTANT (PAY LEVEL – 04)

- General Knowledge and Current Affairs
- Applications of Computer Software like MS-Word, Excel, Power Point, Tally etc. used in day-to-day office work.
- Internet, email and various online tools used in day-to-day office work.
- Questions relating to:
  - NIT Act & Statutes and their subsequent amendments
  - CCS (Leave) Rules
  - TA/DA Rules
  - LTC Rules
  - Office Procedure
  - Right to Information Act
  - CCS (Conduct) Rules
  - CCS (CCA) Rules

ANNEXURE-J

DETAILS OF RECRUIMENT PROCESS TO THE POST OF SENIOR TECHNICIAN

Recruitment Rules (2019) for the post of SENIOR TECHNICIAN in NITs

Sl.No.	Particular	Criteria
1.	Name of the Post	**Senior Technician**
2.	Number of Post(s)	As per sanctioned strength.
3.	Classification	Group - C
4.	Scale of Pay (Grade Pay, Band Pay)	PB: 1 (Rs.5,200 - 20,200) with Grade Pay of Rs.2400/-
5.	Whether Selection Post or non-Selection Posts	Not Applicable
6.	Age limit for direct recruits	Not exceeding 33 years Note:- Relaxable for Departmental Candidates upto five years in accordance with the instructions or orders issued by the Central Government
7.	Educational and other qualifications required for direct recruits	**Essential:** Senior secondary (10+2) with Science from a recognized board with at least 60% marks Or Senior secondary (10+2) from a recognized board with at least 50% marks and ITI Course of one year or higher duration in appropriate trade. Or Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in appropriate trade. Or Diploma in Engineering of three year's duration in relevant field from a recognized Polytechnic / Institute. **Desirable:** Bachelor's degree
8.	Whether age and educational qualifications prescribed for direct recruits will apply in the case of promotees	Age bar: Not applicable Educational Qualifications: No. However must possess any of the qualifications mentioned in Row 7 without insisting on percentage of marks/class.
9.	Period of probation, if any	1 year for direct recruits as per NIT Statutes
10.	Method of Recruitment whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	50% by Promotion. 50% by Direct Recruitment

Sl.No.	Particular	Criteria
11.	In case of recruitment by promotion/deputation/absorption, grades from which promotion/ deputation/ absorption to be made	**Promotion :** At least 5 years regular service as Technician in PB-1, GP 2000/- or at least 5 years combined service of Lab. Attendant (SG-II) and Technician in PB-1, Grade Pay of Rs.2000/- through DPC and working performance record (APAR), through prescribed test and interview.
12.	If DPC exists, what is its composition	As per provisions contained in the NITSER Act, 2007, First Statutes and the subsequent Statutes.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

ANNEXURE-J

DETAILS OF ESSENTIAL EDUCATIONAL QUALIFICATION ALONG WITH TRADE / SPECIALIZATION FOR RECRUIMENT TO THE POST OF SENIOR TECHNICIAN

Name of Department	Essential Educational Qualification with Trade/Specialization
Department of Civil Engineering	Senior secondary (10+2) with Science from a recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a recognized board with at least 50% marks and ITI Course of one year or higher duration in **trade related to Civil Engineering.** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in **trade related to Civil Engineering.** **OR** Diploma of three year's duration in **Civil Engineering** from a recognized Polytechnic / Institute.
Department of Computer Science and Engineering; **Department of Mathematics & Computing;** **Department of Information Technology**	Senior secondary (10+2) with Science from a Government recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a Government recognized board with at least 50% marks and ITI Course of one year or higher duration in **trade of Computer Hardware / Computer Hardware & Networking / Computer Software / Computer Networks / Computer Programming.** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in **trade of Computer Hardware / Computer Hardware & Networking / Computer Software / Computer Networks / Computer Programming / Computer Application.** **OR** Diploma of three year's duration in **Computer Science / Computer Engineering / Computer Applications / Information Technology** from a recognized Polytechnic/ Institute
Department of Electrical Engineering	Senior secondary (10+2) with Science from a Government recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a Government recognized board with at least 50% marks and ITI Course of one year or higher duration in **trade of Electrical / Electrician / Electrician Power Distribution / Electrician Power Electronics / Wireman.** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in **trade of Electrical / Electrician / Instrument Mechanic / Electrician Power Distribution / Electrician Power Electronics / Wireman.** **OR** Diploma of three year's duration in **Electrical Engineering / Electrical & Electronics Engineering / Electrical Engineering (Industrial Control)** from a Government recognized Polytechnic / Institute.

Department of Electronics & Communication Engineering	Senior secondary (10+2) with Science from a recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a recognized board with at least 50% marks and ITI Course of one year or higher duration in **trade of Instrument Mechanic / Computer Hardware & Networking / Computer Operator & Programming / Radio & TV Engineering / Mechanic Electronics Engineering / Computer Applications / Electrical Engineering / Electronics & Communication Engineering / Electronics & Communication Engineering – Industry Integrated / Electronics (Microprocessor) / Electronics Instrumentation Control / Biomedical Instrumentation Engineering.** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in **trade of Instrument Mechanic / Computer Hardware & Networking / Computer Operator & Programming / Radio & TV Engineering / Mechanic Electronics Engineering / Computer Applications / Electrical Engineering / Electronics & Communication Engineering / Electronics & Communication Engineering – Industry Integrated / Electronics (Microprocessor) /Electronics Instrumentation Control / Biomedical Instrumentation Engineering.** **OR** Diploma of three year's duration in **Communication Engineering / Computer & Communication Engineering / Computer Science Engineering / Control & Electrical Engineering / Electrical & Instrumentation Engineering/ Electrical & Electronics Engineering / Electrical Engineering / Electronic Instrumentation & Control Engineering / Electronics & Communication Engineering / Electronics & Electrical Communication Engineering / Electronics & Electrical Engineering / Electronics & Information Systems Engineering / Electronics & Instrumentation Engineering/ Electronics & Power Engineering/ Electronics & Telecom Engineering / Electronics & Telematics Engineering / Electronics Communication & Instrumentation Engineering / Electronics Design Technology / Electronics Engineering / Electronics Instrument & Control Engineering / Telecommunication Engineering / Applied Electronics & Telecommunication Engineering / Biomedical Equipment Engineering - Industry Integrated / Electrical & Electronics Engineering / Electronics (Microprocessor) Engineering / Electronics & Telecommunication Engineering / Electronics Instrumentation Control Engineering / Electronics Microwave Engineering / Computer Applications** from a recognized Polytechnic / Institute.

ANNEXURE-J

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF SENIOR TECHNICIAN

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-J1** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks for UR/OBC & 15 Marks i.e. 25% of total marks for ST.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) against each post in order of merit of Screening Test in respective category, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be based on experimental, practical & theoretical knowledge of Laboratory Experiments of the concerned trade/specialization.
- The **syllabus of the Skill Test is mentioned in the Annexure-J2** of the advertisement notice.
- Minimum Qualifying marks for the Skill Test shall be 30% of total marks.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:
The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-J3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks & 15 Marks i.e. 25% of total marks for ST

Note:
The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Senior Technician.

Annexure-J1

SYLLABUS FOR STAGE-I OF SENIOR TECHNICIAN

1. **General English** - Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic** - Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation** - Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science upto Secondary Level**

Annexure-J2

SYLLABUS FOR STAGE-II OF SENIOR TECHNICIAN

Senior Technician (Civil):

- The Skill test will be a test to check the knowledge of an applicant pertaining to various instruments / equipment in different laboratories of Civil Engineering i.e. Structures Testing, Concrete Technology, Transportation Engineering, Geotechnical Engineering, Environmental Engineering, Fluid Mechanics & Hydraulics.
- The skill test includes introduction of instruments/equipment of the above stated laboratories of Civil Engineering, Methodology of operation of instruments/equipment, Knowledge of the conduction of experiments/practical/tests etc. in the laboratory.

Senior Technician (Computer Science & Engineering / Information Technology / Mathematics & Computing):

- **Hardware:** Assembling of PC, Installation of Systems and troubleshooting, BIOS settings, Installation and testing of a printer, Printer Maintenance, Scanner Installation, Webcam Installation, Making various types of cables for networking, Installation and Maintenance of UPS Systems, Installation and maintenance of various networking devices like Router, Switches, Laying out Structured cabling, Installation of Firewalls and Connectivity of LAN & WAN, Installation of Wireless network devices
- **Software:** Debugging C/ C++ Programs, Installation & Administration of SQL & Oracle Installation of various variants of operating systems like Windows and Linux, Installation of Software like Visual Studio, UML, Cisco Packet tracer, Working of MS-Office components like Word, Excel & PowerPoint, Configuring and sharing internet in PCs and other devices, Configuring firewalls &Usage of access lists, Working with Wireless Networks (Installation & Configuration), Designing webpages using HTML, CSS, Java Script

Senior Technician (Electrical Engineering):

1. **Circuits and Principles:** DC circuits, Single-phase AC circuits, Conductors & Insulators-Properties & Classifications, Symbols & Graphical representation Overview of AC & DC, Different internal wiring practices, Testing of electrical components & equipment
2. **Installations and Testing:** Single-phase incoming supply system, Lighting circuits, Power circuits, Wiring in a control panel, Earthing, Measurements of soil resistivity, Measurement of earth resistance & testing the continuity of earth conductors, Maintain safety and health of the individual, Identification & Handling of tools & making electrical wire and cable joints, Identify different type of cable base on classification & construction, Test the underground cables for open, short circuit & ground fault and check insulation resistance
3. **Machines and Control:** Install DC motor & controller, Maintain DC motor installation, Maintain electrical motor starters and control circuits, Maintain electrical drive systems, Install AC motor & motor controller, Maintain AC motor installation, Maintenance of solar power plant and streetlights, UPS, general purpose power supply and lab electrical lab equipment
4. **Drafting and Design:** Electrical diagrams & drawings for residential, commercial & industrial premises, Switch-boards/ Control Panel drawings
5. **Measuring Instruments:** Multimeter - Working Principle & Applications of Analog & Digital Multimeter and their differences, Working principle & Application of Oscilloscope (CRO and DSO), Ammeter, Voltmeter, Tachometer, Tongue/Clamp-on meter, Power & Energy measurement using Wattmeter and Energy meter
6. **Electrical Safety**: Working & maintenance Fuses, Relays & circuit breakers; Identification/use of Fire extinguishers for different applications; Identification of protective devices; Stripping the cable insulation following safety procedure; Tools, Equipment & Safety Measures at work site

Senior Technician (Electronics & Communication Engineering):

1. Basic Electronics
2. Analog and Digital Electronics.
3. Basic Electronics Engineering Concepts.
4. Basic Electrical Engineering Concepts
5. Basic Communication Concepts
6. Basic AC Fundamentals.
7. Measurement and measuring instruments including working principles.

8. Magnetic Circuit.
9. Basic Computer knowledge
10. IT Literacy

Annexure-J3

SYLLABUS FOR STAGE-III OF SENIOR TECHNICIAN

- **Units and Measurement:**
  Definition; Classifications: Fundamental & Derived units; Systems of units: FPS, CGS, MKS; Units of physical quantities & their symbols; Conversion factors; Measurement of mechanical quantities & Electrical quantities

- **Mass, Weight and Density**:
  Definition; Comparison between mass & weight; Comparison between density & relative density/specific gravity; Volume of different geometries (Cube, Cylinder, Cone, Sphere etc.)

- **Work, Power and Energy:**
  Definition; Work & its Units; Measurement of work; Work done on bodies moving on horizontal & inclined planes including frictional forces; Concept of Power & its units; Calculations of power; Concept of Kinetic energy & potential energy; Expressions for Kinetic energy & potential energy; Principle of conservation of energy

- **Speed and Velocity:**
  Definition of speed, velocity & their comparison; Scalar & Vector quantity; Average Velocity, Acceleration & Retardation; Equations of motion; Circular Motion; Relation between circular motion & Linear motion

- **Heat and Temperature**:
  Definition; Specific Heat & Thermal Capacity; Types of heat: Sensible Heat & Latent Heat; Difference between heat & temperature; Different temperature scales & conversions; Temperature measuring instruments

- **Electricity:**
  Source of electricity: Battery, Generator, Thermocouple; Types of electric current: Direct current & Alternate current; Difference between Direct current & Alternate current, Electrical Terms & units; Ohm's Law; Kirchhoff's law; Relationships between Current, Volt, Resistance & Power; Resistance connections; Problems on series & parallel circuits; Insulators: Properties & Classification; Conductors: Properties & Classification; Electric Power, Work & energy

- **Fluids:**
  Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), Effect of gravity on fluid pressure; Viscosity, Stokes' law, Terminal velocity, Streamline and Turbulent flow, critical velocity, Bernoulli's theorem and its simple applications, Surface energy and surface tension, Angle of contact, Excess of pressure across a curved surface, Application of surface tension ideas to drops, bubbles and capillary rise.

- **Thermal Properties of Matter:**
  Heat, Temperature, thermal expansion; Thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; C_P, C_V - calorimetry; change of state - latent heat capacity, Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law.

- **Oscillations:**
  Periodic motion - time period, frequency, displacement as a function of time, periodic functions and their applications, Simple harmonic motion (S.H.M), uniform circular motion and its equations of motion; phase; oscillations of a loaded spring- restoring force and force constant; energy in S.H.M., Kinetic and potential energies; simple pendulum derivation of expression for its time period

- **Ray Optics and Optical Instruments:**
  Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism, Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

- **States of Matter:**
  Classification of matter into solid, liquid and gaseous states; Gaseous State: Measurable properties of gases, Gas laws – Boyle's law, Charles's law, Graham's law of diffusion, Avogadro's law, Dalton's law of partial pressure; The concept of the absolute scale of temperature; Ideal gas equation, kinetic theory of gases (only postulates); The concept of average, root mean square and most probable velocities; Real gases, deviation from Ideal behaviour, compressibility factor, van der Waals equation, liquefaction of gases, critical constants; Liquid State: Properties of liquids – vapour pressure, viscosity and surface tension and effect of temperature on them; Solid State: Classification of solids-molecular, ionic, covalent and metallic solids, amorphous and crystalline solids; Bragg's Law and its applications; Unit cell and lattices, packing in solids (FCC, BCC and HCP lattices), voids, calculations involving unit cell parameters, imperfections in solids; Electrical, magnetic and dielectric properties.

- **Occupational Safety & Health:**
  Introduction & Importance of Occupational Safety & Health; Occupational Hazards - Basic Hazards, Chemical Hazards, Vibroacoustic Hazards, Mechanical Hazards, Electrical Hazards, Thermal Hazards; Occupational health; Occupational hygienic; Occupational Diseases/Disorders & its prevention; Accident & safety - Basic principles for protective equipment, Accident Prevention techniques – control of accidents and safety measures • First Aid: Care of injured & Sick at the workplaces, First-Aid & Transportation of sick person

- **Environment & Ecosystem:**
  Introduction to Environment; Relationship between Society & Environment; Ecosystem & Factors causing imbalance; Pollution - Pollution & pollutants including liquid, gaseous, solid and hazardous waste; Energy Conservation - Conservation of Energy, re-use & recycle; Global warming - Global warming, climate change & Ozone layer depletion; Ground Water - Hydrological cycle, ground and surface water; Conservation & Harvesting of water; Environment: Right attitude towards environment; Maintenance of in-house environment.

- **I.T. Literacy:**
  Computer: Introduction, Computer & its applications; Hardware & peripherals; switching on & shutting down of computer; WINDOWS: Basics of Operating System, WINDOWS, Create, Copy, Move and delete Files and Folders; Use of External memory like pen drive, CD, DVD etc.; MS office: Basic operations of Word Processing (Cut /Copy /Paste/ Formatting), Basics of Excel worksheet (Commands/simple formulas and functions); INTERNET: Computer Networks (LAN/WAN), Applications of Internet (Browsing, Searching, Emailing, Social Networking); WEB Browser - World Wide Web (WWW), Web Browsing; Information Security and antivirus tools; Awareness of IT – ACT; Importance of information security; types of cybercrimes.

ANNEXURE-K

DETAILS OF RECRUIMENT PROCESS TO THE POST OF TECHNICIAN

Recruitment Rules (2019) for the post of TECHNICIAN

Sl.No.	Particular	Criteria
1.	Name of the Post	**Technician**
2.	Number of Post(s)	As per sanctioned strength.
3.	Classification	Group - C
4.	Scale of Pay (Grade Pay, Band Pay)	PB :1 (Rs.5,200 - 20,200/-) with Grade Pay of Rs.2000/-
5.	Whether Selection Post or non-Selection Posts	Not Applicable
6.	Age limit for direct recruits	27 years Note:- Relaxable for Departmental Candidates upto five years in accordance with the instructions or orders issued by the Central Government
7.	Educational and other qualifications required for direct recruits	**Essential:** Senior secondary (10+2) with Science from a Government recognized board with at least 60% marks Or Senior secondary (10+2) from a Government recognized board with at least 50% marks and ITI Course of one year or higher duration in appropriate trade. Or Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in appropriate trade. Or Diploma in Engineering of three year's duration in relevant field from a Government recognized Polytechnic / Institute.
8.	Whether age and educational qualifications prescribed for direct recruits will apply in the case of promotees	Age bar: Not applicable Educational Qualifications: No. However, must possess at least Senior Secondary with Science or Secondary and ITI certificate of 2 years duration in appropriate trade.
9.	Period of probation, if any	1 year for direct recruits as per NIT Statutes
10.	Method of Recruitment : whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	i) 75% Direct recruitment ii) 25% by Promotion.

ANNEXURE-K

Sl.No.	Particular	Criteria
11.	In case of recruitment by promotion/deputation/absorption, grades from which promotion/ deputation/ absorption to be made	**Promotion:** Lab Attendant (SG-II) with at least 2 years regular service with Grade Pay of Rs.2000/- through DPC and working performance record (APAR), through prescribed test and interview.
12.	If DPC exists, what is its composition	As per provisions contained in the NITSER Act, 2007, First Statutes and the subsequent Statutes.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

K. Rajin

ANNEXURE-K

DETAILS OF ESSENTIAL EDUCATIONAL QUALIFICATION ALONG WITH TRADE / SPECIALIZATION FOR RECRUIMENT TO THE POST OF TECHNICIAN

Name of Department	Essential Educational Qualification with Trade/Specialization
Department of Civil Engineering	Senior secondary (10+2) with Science from a recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a recognized board with at least 50% marks and ITI Course of one year or higher duration in **trade related to Civil Engineering.** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in **trade related to Civil Engineering.** **OR** Diploma of three year's duration in **Civil Engineering** from a recognized Polytechnic / Institute.
Department of Computer Science and Engineering; **Department of Mathematics & Computing;** **Department of Information Technology**	Senior secondary (10+2) with Science from a Government recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a Government recognized board with at least 50% marks and ITI Course of one year or higher duration in **trade of Computer Hardware / Computer Hardware and Networking / Computer Software / Computer Networks / Computer Programming.** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in **trade of Computer Hardware / Computer Hardware and Networking / Computer Software / Computer Networks / Computer Programming / Computer Application.** **OR** Diploma of three year's duration in **Computer Science / Computer Engineering / Computer Applications / Information Technology** from a recognized Polytechnic/ Institute
Department of Electronics & Communication Engineering	Senior secondary (10+2) with Science from a recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a recognized board with at least 50% marks and ITI Course of one year or higher duration in **trade of Instrument Mechanic / Computer Hardware & Networking / Computer Operator & Programming / Radio & TV Engineering / Mechanic Electronics Engineering / Computer Applications / Electrical Engineering / Electronics & Communication Engineering / Electronics & Communication Engineering – Industry Integrated / Electronics (Microprocessor) / Electronics Instrumentation Control / Biomedical Instrumentation Engineering.** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in **trade of Instrument Mechanic / Computer Hardware & Networking / Computer Operator & Programming / Radio & TV Engineering / Mechanic Electronics Engineering / Computer Applications / Electrical Engineering / Electronics & Communication Engineering / Electronics & Communication Engineering – Industry Integrated / Electronics (Microprocessor) /Electronics Instrumentation Control / Biomedical Instrumentation Engineering.** **OR** Diploma of three year's duration in **Communication Engineering / Computer & Communication Engineering / Computer Science Engineering / Control & Electrical Engineering / Electrical &**

Department of Electronics & Communication Engineering	**Instrumentation Engineering/ Electrical & Electronics Engineering / Electrical Engineering / Electronic Instrumentation & Control Engineering / Electronics & Communication Engineering / Electronics & Electrical Communication Engineering / Electronics & Electrical Engineering / Electronics & Information Systems Engineering / Electronics & Instrumentation Engineering/ Electronics & Power Engineering/ Electronics & Telecom Engineering / Electronics & Telematics Engineering / Electronics Communication & Instrumentation Engineering / Electronics Design Technology / Electronics Engineering / Electronics Instrument & Control Engineering / Telecommunication Engineering / Applied Electronics & Telecommunication Engineering / Biomedical Equipment Engineering - Industry Integrated / Electrical & Electronics Engineering / Electronics (Microprocessor) Engineering / Electronics & Telecommunication Engineering / Electronics Instrumentation Control Engineering / Electronics Microwave Engineering / Computer Applications** from a recognized Polytechnic / Institute.
Department of Industrial & Production Engineering	Senior secondary (10+2) with Science from a Government recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a Government recognized board with at least 50% marks and ITI Course of one year or higher duration in **trade of Fitter / Welder / Carpenter / Smithy / foundry / Machinist / Computer Aided Drafting.** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in **trade of Fitter / Welder / Carpenter/ Smithy / Foundry.** **OR** Diploma in three year's duration in **Mechanical Engineering / Production Engineering / Automobile Engineering / Industrial & Production Engineering** from a Government recognized Polytechnic / Institute
Department of Mechanical Engineering; **Central Workshop**	Senior secondary (10+2) with Science from a Government recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a Government recognized board with at least 50% marks and ITI Course of one year or higher duration in **trade** of **Refrigeration & Air Conditioning / Advanced Tool & Die Maker / Advanced Welding / CAD / CAM / Heat Engine Automobile.** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in **trade of Refrigeration & Air Conditioning / Advanced Tool & Die Maker / Advanced Welding, / CAD / CAM / Heat Engine Automobile.** **OR** Diploma of three year's duration in **Mechanical Engineering / Production Engineering / Automobile Engineering** from a Government recognized Polytechnic / Institute .

Department of Instrument & Control Engineering	Senior secondary (10+2) with Science from a Government recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a Government recognized board with at least 50% marks and ITI Course of one year or higher duration in **trade of Electrical / Electrician / Instrument Mechanic / Electrician Power Distribution / Electrician Power Electronics / Wireman.** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration in **trade of Electrical / Electrician / Instrument Mechanic / Electrician Power Distribution / Electrician Power Electronics / Wireman.** **OR** Diploma of three year's duration in **Electrical Engineering / Electrical & Electronics Engineering / Electrical Engineering (Industrial Control) / Instrumentation & Control Engineering / Electronics and Instrumentation Engineering / Electronics Engineering** from a Government recognized Polytechnic / Institute.
Department of Textile Technology	Senior secondary (10+2) with Science from a Government recognized board with at least 60% marks. **OR** Senior secondary (10+2) from a Government recognized board with at least 50% marks and ITI Course of one year or higher duration related to **Textile Technology** **OR** Secondary (10) with at least 60% marks and ITI Certificate of 2 years duration related to **Textile Technology.** **OR** Diploma of three year's duration in **Textile Technology / Spinning / Weaving / Knitting / Garment** from a Government recognized Polytechnic / Institute
Department of Physics	Senior secondary (10+2) with Science from a Government recognized board with at least 60% marks.

ANNEXURE-K

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF TECHNICIAN

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-K1** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks for UR/OBC/EWS & 15 Marks i.e. 25% of total marks for SC/ST.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) against each post in order of merit of Screening Test in respective category, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be based on experimental, practical & theoretical knowledge of Laboratory Experiments of the concerned trade/specialization.
- The **syllabus of the Skill Test is mentioned in the Annexure-K2** of the advertisement notice.
- Minimum Qualifying marks for the Skill Test shall be 30% of total marks.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-K3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks for UR/OBC/EWS & 15 Marks i.e. 25% of total marks for SC/ST

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Technician.

Annexure-K1

SYLLABUS FOR STAGE-I OF TECHNICIAN

1. **General English** - Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic** - Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation** - Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science upto Secondary Level**

Annexure-K2

SYLLABUS FOR STAGE-II OF TECHNICIAN

Technician (Civil):

- The Skill test will be a test to check the knowledge of an applicant pertaining to various instruments / equipment in different laboratories of Civil Engineering as mentioned below:
  - Structures Testing
  - Concrete Technology
  - Transportation Engineering
  - Geotechnical Engineering
  - Environmental Engineering
  - Fluid Mechanics & Hydraulics

- The skill test includes introduction of instruments/equipment of the above stated laboratories of Civil Engineering, Methodology of operation of instruments/equipment, Knowledge of the conduction of experiments/practical/tests etc. in the laboratory.

Technician (Computer Science & Engineering / Information Technology / Mathematics & Computing):

1. **Hardware:** Assembling of PC, Installation of Systems and troubleshooting, BIOS settings, Installation and testing of a printer, Printer Maintenance, Scanner Installation, Webcam Installation, Making various types of cables for networking, Installation and Maintenance of UPS Systems, Installation and maintenance of various networking devices like Router, Switches, Laying out Structured cabling, Installation of Firewalls and Connectivity of LAN & WAN, Installation of Wireless network devices

2. **Software:** Debugging C/ C++ Programs, Installation & Administration of SQL & Oracle Installation of various variants of operating systems like Windows and Linux, Installation of Software like Visual Studio, UML, Cisco Packet tracer, Working of MS-Office components like Word, Excel & PowerPoint, Configuring and sharing internet in PCs and other devices, Configuring firewalls &Usage of access lists, Working with Wireless Networks (Installation & Configuration), Designing webpages using HTML, CSS, Java Script

Technician (Electronics & Communication Engineering):

1. Basic Electronics
2. Analog and Digital Electronics.
3. Basic Electronics Engineering Concepts.
4. Basic Electrical Engineering Concepts
5. Basic Communication Concepts
6. Basic AC Fundamentals.
7. Measurement and measuring instruments including working principles.
8. Magnetic Circuit.
9. Basic Computer knowledge
10. IT Literacy

Technician (Mechnical Engineering / Central Workshop):

1. Identification & applications of different tool
2. Identification & applications different types of gears
3. Identification & applications different types of pumps and turbines
4. Identification & applications different types of universal testing Machine
5. Identification & applications different types of measuring instruments.
6. Identification & applications different types of machines used in cutting of metals
7. Identification & applications of different types of robots
8. Identification & applications of different types of metals
9. Identification & applications of different types of vibration sensor

10. Identification & applications of different types of solar cell
11. Theoretical & practical knowledge of different types of Maching processes & principles.
12. Theoretical & practical knowledge of different types of Engines

Technician (Instrumentation & Control Engineering):

1. To verify Theremin's Theorem and Norton Theorem for a given network
2. To determine resonance frequency & Q-factor in RLC circuits
3. To measure amplitude, frequency and phase angle by Cathode Ray Oscilloscope (CRO).
4. To measure the unknown. Resistance by *Wheatstone's bridge (use null deflection method*.)
5. To measure unknown capacitance by Wien bridge
6. To perform open circuit test on a single phase transformer
7. To perform short circuit test on a single phase transformer
8. To determine the speed-Torque characteristics of a AC servo motor
9. To determine the speed-Torque characteristics of a DC servo motor
10. To Perform addition of two, 8-Bit numbers using assembly language code for 8085 microprocessor kit.
11. To Perform Hexadecimal additions of two numbers using assembly language code for 8085 microprocessor kit.
12. To convert temperature from ˚Celsius to ˚Fahrenheit and Kelvin scale.
13. To obtain Lissajous pattern for two different sinusoidal signals.
14. To plot the Characteristics of I/P converter and Pneumatic control valve in Pressure process station.
15. To determine PH, Conductivity and Turbidity of unknown Solution
16. To determine the viscosity of given sample

Technician (Industrial & Production Engineering):

1. Demonstration of various equipment pertaining to manufacturing, design & industrial engineering laboratories.
2. Equipment in various labs and their working principles:
   - Automation equipment
   - Conventional & CNC machines
   - Metrology equipment
   - Ergonomics equipment etc.
3. Software:
   - Auto-CAD
   - Solid works
   - Ergo master
4. Programming
   - PLC
   - Robotics
   - CNC

Technician (Physics):

The candidate is expected to perform and have working knowledge of the experiments related to the following topics:

1. Error Analysis and Measurements
2. Electrostatics
3. Current electricity & effects of electric current
4. Electromagnetic induction and alternating current
5. Electromagnetic waves
6. Atomic physics
7. Nuclear physics
8. Semiconductor devices and their applications
9. Thermal Conductivity
10. Optics

Technician (Textile Technology):

1. **Textile Fiber**
   - (i) Identification of cotton
   - (ii) Identification of wool
   - (iii) Identification of silk
   - (iv) Identification of Bast fibres
   - (v) Identification of polyester
   - (vi) Estimation of fiber/filament fineness using projection microscope.

2. **Yarn Formation**
   - (i) Study of general outline of opener and clearer machine employed in B/R line process.
   - (ii) Study of gearing mechanism, calculation of the speed of different organs of carding machine.
   - (iii) Calculation of draft between different zones of carding machine and its production.
   - (iv) Calculation of the total draft and its distribution in draw frame machine.
   - (v) Effects of break draft and roller settings on sliver uniformity.
   - (vi) Measurement of nip-load pressure, roller eccentricity and shore hardness of top roller drafting rollers.

3. **Fabric Formation**
   - (i) Study of the motion transmission system in winding machine.
   - (ii) Study of Package stop motion in cone winding machine.
   - (iii) Calculation of winding speed on grooved drum winding system and study of anti-patterning system incorporated to it.
   - (iv) Study of the motion transmission system in Pirn winding machine.
   - (v) Calculation of winding speed and traversing speed of Pirn winding machine.
   - (vi) Study of the sectional warping machine and planning the width of a section according to pattern of the given striped fabric.

4. **Fabric structure and design analysis**

   To analyze the yarn and fabric particulars of the different weave structures along with their graphical presentation and weaving plans.
   - (i) Plain weave
   - (ii) Twill weave
   - (iii) Satin/sateen weave
   - (iv) Diamond weave
   - (v) Honeycomb weaves

Annexure-K3

SYLLABUS FOR STAGE-III OF TECHNICIAN

- **Units and Measurement:**
  Definition; Classifications: Fundamental & Derived units; Systems of units: FPS, CGS, MKS; Units of physical quantities & their symbols; Conversion factors; Measurement of mechanical quantities & Electrical quantities

- **Mass, Weight and Density**:
  Definition; Comparison between mass & weight; Comparison between density & relative density/specific gravity; Volume of different geometries (Cube, Cylinder, Cone, Sphere etc.)

- **Work, Power and Energy:**
  Definition; Work & its Units; Measurement of work; Work done on bodies moving on horizontal & inclined planes including frictional forces; Concept of Power & its units; Calculations of power; Concept of Kinetic energy & potential energy; Expressions for Kinetic energy & potential energy; Principle of conservation of energy

- **Speed and Velocity:**
  Definition of speed, velocity & their comparison; Scalar & Vector quantity; Average Velocity, Acceleration & Retardation; Equations of motion; Circular Motion; Relation between circular motion & Linear motion

- **Heat and Temperature**:
  Definition; Specific Heat & Thermal Capacity; Types of heat: Sensible Heat & Latent Heat; Difference between heat & temperature; Different temperature scales & conversions; Temperature measuring instruments

- **Electricity:**
  Source of electricity: Battery, Generator, Thermocouple; Types of electric current: Direct current & Alternate current; Difference between Direct current & Alternate current, Electrical Terms & units; Ohm's Law; Kirchhoff's law; Relationships between Current, Volt, Resistance & Power; Resistance connections; Problems on series & parallel circuits; Insulators: Properties & Classification; Conductors: Properties & Classification; Electric Power, Work & energy

- **Fluids:**
  Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), Effect of gravity on fluid pressure; Viscosity, Stokes' law, Terminal velocity, Streamline and Turbulent flow, critical velocity, Bernoulli's theorem and its simple applications, Surface energy and surface tension, Angle of contact, Excess of pressure across a curved surface, Application of surface tension ideas to drops, bubbles and capillary rise.

- **Thermal Properties of Matter:**
  Heat, Temperature, thermal expansion; Thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; C_P, C_V - calorimetry; change of state - latent heat capacity, Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law.

- **Oscillations:**
  Periodic motion - time period, frequency, displacement as a function of time, periodic functions and their applications, Simple harmonic motion (S.H.M), uniform circular motion and its equations of motion; phase; oscillations of a loaded spring- restoring force and force constant; energy in S.H.M., Kinetic and potential energies; simple pendulum derivation of expression for its time period

- **Ray Optics and Optical Instruments:**
  Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism, Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

- **States of Matter:**
  Classification of matter into solid, liquid and gaseous states; Gaseous State: Measurable properties of gases, Gas laws – Boyle's law, Charles's law, Graham's law of diffusion, Avogadro's law, Dalton's law of partial pressure; The concept of the absolute scale of temperature; Ideal gas equation, kinetic theory of gases (only postulates); The concept of average, root mean square and most probable velocities; Real gases, deviation from Ideal behaviour, compressibility factor, van der Waals equation, liquefaction of gases, critical constants; Liquid State: Properties of liquids – vapour pressure, viscosity and surface tension and effect of temperature on them; Solid State: Classification of solids-molecular, ionic, covalent and metallic solids, amorphous and crystalline solids; Bragg's Law and its applications; Unit cell and lattices, packing in solids (FCC, BCC and HCP lattices), voids, calculations involving unit cell parameters, imperfections in solids; Electrical, magnetic and dielectric properties.

- **Occupational Safety & Health:**
  Introduction & Importance of Occupational Safety & Health; Occupational Hazards - Basic Hazards, Chemical Hazards, Vibroacoustic Hazards, Mechanical Hazards, Electrical Hazards, Thermal Hazards; Occupational health; Occupational hygienic; Occupational Diseases/Disorders & its prevention; Accident & safety - Basic principles for protective equipment, Accident Prevention techniques – control of accidents and safety measures • First Aid: Care of injured & Sick at the workplaces, First-Aid & Transportation of sick person

- **Environment & Ecosystem:**
  Introduction to Environment; Relationship between Society & Environment; Ecosystem & Factors causing imbalance; Pollution - Pollution & pollutants including liquid, gaseous, solid and hazardous waste; Energy Conservation - Conservation of Energy, re-use & recycle; Global warming - Global warming, climate change & Ozone layer depletion; Ground Water - Hydrological cycle, ground and surface water; Conservation & Harvesting of water; Environment: Right attitude towards environment; Maintenance of in-house environment.

- **I.T. Literacy:**
  Computer: Introduction, Computer & its applications; Hardware & peripherals; switching on & shutting down of computer; WINDOWS: Basics of Operating System, WINDOWS, Create, Copy, Move and delete Files and Folders; Use of External memory like pen drive, CD, DVD etc.; MS office: Basic operations of Word Processing (Cut /Copy /Paste/ Formatting), Basics of Excel worksheet (Commands/simple formulas and functions); INTERNET: Computer Networks (LAN/WAN), Applications of Internet (Browsing, Searching, Emailing, Social Networking); WEB Browser - World Wide Web (WWW), Web Browsing; Information Security and antivirus tools; Awareness of IT – ACT; Importance of information security; types of cybercrimes.

ANNEXURE-L

DETAILS OF RECRUIMENT PROCESS TO THE POST OF JUNIOR ASSISTANT

Recruitment Rules (2019) for the post of JUNIOR ASSISTANT in NITs

Sl.No.	Particular	Criteria
1.	Name of the Post	**Junior Assistant**
2.	Number of Post(s)	As per sanctioned strength.
3.	Classification	Group - C
4.	Scale of Pay (Grade Pay, Band Pay)	PB : 1 (Rs.5,200 - 20,200/-) with Grade Pay of Rs.2000/-
5.	Whether Selection Post or non-Selection Posts	Not Applicable
6.	Age limit for direct recruits	27 years Note:- Relaxable for Departmental Candidates upto five years in accordance with the instructions or orders issued by the Central Government
7.	Educational and other qualifications required for direct recruits	Senior secondary (10+2) from a recognized board with a minimum Typing speed of 35 w.p.m. and proficiency in Computer Word Processing and Spread Sheet. **Desirable:** Proficiency in other computer skills; stenography skills.
8.	Whether age and educational qualifications prescribed for direct recruits will apply in the case of promotes	Age bar: Not applicable Qualifications and Experience: No, but must possess at least 10+2 and having proficiency in Computer Word Processing.
9.	Period of probation, if any	1 Year for direct recruits as per NIT Statutes
10.	Method of Recruitment whether by direct recruitment or by promotion or by deputation or transfer & percentage of the vacancies to be filled by various methods	75% Direct recruitment. 25% by Promotion.
11.	In case of recruitment by promotion / deputation / transfer, grades from which promotion / deputation / transfer to be made	**Promotion:** Office Attendant (SG-II) with at least 2 years regular service with Grade Pay of Rs.2000/- through DPC and working performance record (APAR), through prescribed test and interview.

Sl.No.	Particular	Criteria
12.	If DPC exists, what is its composition	As per the provisions contained in the NITSER Act, 2007, First Statutes and the subsequent Statutes.
13.	Circumstances in which UPSC is to be consulted in making recruitment	Not Applicable

K.Rajan

ANNEXURE-L

STANDARD OPERATING PROCEDURE FOR RECRUITMENT TO THE POST OF JUNIOR ASSISTANT

Stage – I

Screening Test: Maximum Marks - 60 Marks:

- The Screening Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-L1** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks for UR & OBC and 15 Marks i.e. 25% of total marks for SC.
- The Screening Test will be only qualifying in nature.

Note:

1. Top Ten Eligible candidates (as per RRs & other provisions of Advertisement) against each post in order of merit of Screening Test respective category, and who will secure equal to or more than prescribed qualifying marks as mentioned above, shall be called for Stage – II for the Recruitment Process.
2. All the candidates who have submitted online application either on or before the closing date will be called to appear in the Stage-I of the Recruitment Process i.e. Screening Test without checking the eligibility of the candidate/applicant. The eligibility of the candidate/applicant will be checked after the Screening Test i.e. Stage-I. So, all the candidates may be advised to verify his/her eligibility for the applied post(s) as per advertisement document before appearing in the Stage-I of the Recruitment Process i.e. Screening Test. Mere calling for the Screening Test will not make any candidate eligible for the applied post.

Stage – II

Skill Test:

- The Skill Test will be only qualifying in nature.
- The Skill Test will be Typing Test and Computer Proficiency Test.
- It is mandatory to pass the prescribed Typing Test and the Minimum Qualifying marks for the Computer Proficiency Test shall be 30% of total marks.
- The **syllabus of the Skill Test is mentioned in the Annexure-L2** of the advertisement notice.
- The candidates who will qualify the Skill Test shall be allowed to appear in Stage-III of the recruitment process.

Note:

The original documents in support of the eligibility of the applicant shall be verified before the Stage-III Test. If any applicant fails to produce the requisite document(s) in support of his/her eligibility for the applied post, he/she shall not be allowed to appear in the Stage-III of the recruitment process.

Stage – III

Final Test:

- The Final Test shall be a Computer Based Test which will consist of 60 Multiple Choice Questions (MCQs) as per **syllabus mentioned in the Annexure-L3** of the advertisement notice.
- Total Duration of Screening Test will be 75 Minutes.
- For each right answer, one mark will be awarded while there will be 1/4th Negative marking for each wrong answer. There will be no mark awarded/deducted for unattempted question.
- Minimum Qualifying marks for the Screening Test shall be 18 Marks i.e. 30% of total marks for UR & OBC and 15 Marks i.e. 25% of total marks for SC.

Note:

The Total Marks obtained by the candidate in Stage – III i.e. Final Test will be taken into consideration for deciding the final merit for selection to the post of Junior Assistant.

Annexure-L1

SYLLABUS FOR STAGE-I OF JUNIOR ASSISTANT

1. **General English -** Tenses, Active and Passive, Direct & Indirect speech, Punctuation, Correction of sentence, One word substitutes, Modals, Articles, Clauses, Synonyms, Antonyms, Idioms & Phrases.
2. **Numerical Aptitude Arithmetic -** Simplification of Fractions, Simple and Compound Interest, Profit and Loss, Percentage, Averages, Number System, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square root, Cube root, Time and Distance and Other Basic Arithmetic related problems.
3. **Reasoning and Data Interpretation -** Number Series Compilation, Missing Number finding, Pattern series, Direction Sense Test, Series Compilations, Classification, Missing Character finding, odd man out, Blood relations, Analogy, Coding & Decoding, Letter & Symbol Series, Verbal reasoning, Statements & Conclusions, Letter & Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Pie Chart & Bar Chart
4. **General Science upto Secondary Level**

Annexure-L2

SYLLABUS FOR STAGE-II OF JUNIOR ASSISTANT (PAY LEVEL – 03)

1. **Typing Test:**
   - Minimum Typing Speed of 35 Words per Minutes
   - Duration: 10 Minutes

2. **Computer Proficiency Test:**
   - Computer Proficiency Test shall be conducted in order to check the Knowledge of the Applicant regarding Computer Word Processing and Spread Sheet.

Annexure-L3

SYLLABUS FOR STAGE-III OF JUNIOR ASSISTANT (PAY LEVEL – 03)

- General Knowledge and Current Affairs
- Applications of Computer Software like MS-Word, Excel, Power Point, Tally etc. used in day-to-day office work.
- Internet, email and various online tools used in day-to-day office work.
- Questions relating to:
  - NIT Act & Statutes and their subsequent amendments
  - CCS (Leave) Rules
  - TA/DA Rules
  - LTC Rules
  - Office Procedure
  - Right to Information Act
  - CCS (Conduct) Rules
  - CCS (CCA) Rules

Annexure-I

FORMAT FOR SC/ ST CERTIFICATE

A candidate who claims to belong to one of the Scheduled Caste or the Scheduled Tribes should submit in support of his/ her claim an attested/certified copy of a certificate in the form given below, from the District Officer or the sub-Divisional Officer or any other officer as indicated below of the District in which his parents (or surviving parent) ordinarily reside who has been designated by the State Government concerned as competent to issue such a certificate. If both his parents are dead, the officer signing the certificate should be of the district in which the candidate himself ordinarily resides otherwise than for the purpose of his own education. Wherever photograph is an integral part of the certificate, the Commission would accept only attested photocopies of such certificates and not any other attested or true copy.

(*The format of the certificate to be produced by Scheduled Castes and Scheduled Tribes candidates applying for appointment to posts under Government of India)*

This is to certify that Shri/Shrimati/Kumari*_____son/ daughter of_____of village/town*_____in District/Division *_____of the State/Union Territory* _____belongs to the Caste/Tribes_____which is recognized as a ScheduledCastes/Scheduled Tribes* under:-

The Constitution (Scheduled Castes) order, 1950 _____
The Constitution (Scheduled Tribes) order, 1950 _____
The Constitution (Scheduled Castes) Union Territories order, 1951 *
The Constitution (Scheduled Tribes) Union Territories Order, 1951*_____

As amended by the Scheduled Castes and Scheduled Tribes Lists(Modification) order, 1956, the Bombay Reorganization Act, 1960 & the Punjab Reorganization Act, 1966, the State of HimachalPradesh Act 1970, the North-Eastern Area(Reorganization) Act, 1971 and the Scheduled Castes and Scheduled Tribes Order(Amendment) Act, 1976.

The Constitution (Jammu & Kashmir) Scheduled Castes Order, 1956_____.
The Constitution (Andaman and Nicobar Islands) Scheduled Tribes Order, 1959 as amended by the Scheduled Castes and Scheduled Tribes order (Amendment Act), 1976*.
The Constitution (Dadra and Nagar Haveli) Scheduled Castes order 1962. The Constitution (Dadra and Nagar Haveli) Scheduled Tribes Order 1962@. The Constitution (Pondicherry) Scheduled Castes Order 1964@
The Constitution (Scheduled Tribes) (Uttar Pradesh) Order, 1967 @ The Constitution (Goa, Daman & Diu) Scheduled Castes Order, 1968@ The Constitution (Goa, Daman & Diu) Scheduled Tribes Order 1968 @ The Constitution (Nagaland) Scheduled Tribes Order, 1970@
The Constitution (Sikkim) Scheduled Castes Order 1978@ The Constitution (Sikkim) Scheduled Tribes Order 1978@
The Constitution (Jammu & Kashmir) Scheduled Tribes Order, 1989@ The Constitution (SC) orders (Amendment) Act, 1990@
The Constitution (ST) orders (Amendment) Ordinance 1991@ The Constitution (ST) orders (Second Amendment) Act, 1991@The Constitution (ST) orders (Amendment) Ordinance 1996@
The Scheduled Caste and Scheduled Tribe Orders (Amendment) Act 2002@
The Constitution (Scheduled Caste) Orders(Amendment) Act 2002@
The Constitution(Scheduled Caste and Scheduled Tribe) Orders (Amendment) Act 2002@The Constitution (Scheduled Caste) Order (Amendment) Act 2007@
%2. Applicable in the case of Scheduled Castes, Scheduled Tribes persons who have migrated fromone State/Union Territory Administration.

This certificate is issued on the basis of the Scheduled Castes/ Scheduled Tribes certificate issued to Shri/Shrimati____Father/mother of Shri/Srimati/Kumari*_____of village/town*_____in District/Division* of the State/Union Territory*___who belong to the _____Caste/Tribe which is recognized as a Scheduled Caste/Scheduled Tribe in the State/Union Territory* issued by the __dated__.

Shri/Shrimati/Kumari and /or * his/her family ordinarily reside(s) in village/town* _____of _____ District/Division*_____of the State/Union Territory of _____.

Signature_____

** Designation_____

(with seal of office)

Place_____

Date_____

* Please delete the words which are

not applicable@ Please quote specific

presidential order

% Delete the paragraph which is not applicable.

NOTE: The term ordinarily reside(s) used here will have the same meaning as in section 20 of the Representation of the People Act, 1950.

** List of authorities empowered to issue Caste/Tribe Certificates:

(i) District Magistrate/Additional District Magistrate/Collector/Deputy Commissioner/AdditionalDeputy Commissioner/Dy. Collector/Ist Class Stipendiary Magistrate/Sub-Divisional Magistrate/Extra-Assistant Commissioner/Taluka Magistrate/Executive Magistrate.

(ii) Chief Presidency Magistrate/Additional Chief Presidency Magistrate/Presidency Magistrate.

(iii) Revenue Officers not below the rank of Tehsildar.

(iv) Sub-Divisional Officers of the area where the candidate and/or his family normally resides.

NOTE: ST candidates belonging to Tamil Nadu State should submit caste certificate ONLY FROMTHE REVENUE DIVISIONAL OFFICER.

ANNEXURE-II

(FORM OF CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES APPLYING FOR APPOINTMENT TO POSTS UNDER THE GOVERNMENT OF INDIA)

This is to certify that Shri/Smt./Kumari _____son/daughter of _____of village/town _____

in District/Division _____ in the State/Union Territory _____belongs to the _____Community which is recognized as a backward class under the Government of India, Ministry of Social Justice and Empowerment's Resolution No. _____ dated _____*. Shri/Smt./Kumari_____and/or his/her family ordinarily reside(s) in the _____District/Division of the_____State/Union Territory. This is also to certify that he/she does not belong to the persons/sections (Creamy Layer) mentioned in Column 3 of the Schedule to the Government of India, Department of Personnel & Training O.M. No. 36012/22/93-Estt (SCT) dated 8.9.1993**.

District Magistrate: _____

Deputy Commissioner etc.: _____

Dated:

Seal:

---

* The authority issuing the certificate may have to mention the details of Resolution of Government of India, in which the caste of the candidate is mentioned as OBC.

** As amended from time to time.

Note: The term ”Ordinarily” used here will have the same meaning as in Section 20 of the Representation of the People Act,1950.

Annexure-III

Government of .....

(Name & Address of the authority issuing the certificate)

INCOME & ASSEST CERTIFICATE TO BE PRODUCED BY ECONOMICALLY WEAKER SECTIONS

Certificate No._____ Date _____

VALID FOR THE YEAR_____

This is to certify that Shri/Smt./Kumari_____son/daughter/wife of

_____permanent resident of_____,

Village/Street_____Post Office_____District_____in the State/ Union Territory_____ Pin Code_____whose photograph is attested below belongs to Economically Weaker Sections, since the gross annual income* of his/ her 'family'** is below Rs. 8 Lakh (Rupees Eight Lakh only) for the financial year _____ His/ her family does not own or possess any of the following assets *** :

I. 5 acres of agricultural land and above;
II. Residential flat of 1000 sq. ft. and above;
III Residential plot of 100 sq. yards and above in notified municipalities;
IV Residential plot of 200 sq. yards and above in areas other than the notified municipalities.

2. Shri/Smt./Kumari_____belongs to the_____caste which is not recognized as a Scheduled Caste, Scheduled Tribe and Other Backward Classes (Central List).

Signature with seal of Office_____

Recent Passport size attested photograph of theapplicant

Name_____

Designation_____

*Note 1: Income covered all sources i.e. salary, agriculture, business, profession etc.

** Note 2: The term ‘Family' for this purpose include the person, who seeks benefit of reservation, his/ her parents and siblings below the age of 18 years as also his/her spouse and children below the age of 18 years.

***Note 3: The property held by a “Family” in different locations or different places/cities have been clubbed while applying the land or property holding test to determine EWS status.

Annexure-IV (A)

Form-V

Certificate of Disability

(In cases of amputation or complete permanent paralysis of limbs or dwarfism and in case of blindness)

[See rule 18(1)]

(Name and Address of the Medical Authority issuing the Certificate)

Recent passport size attested photograph (Showing face only) of the person with disability.

Certificate No. Date:

This is to certify that I have carefully examined Shri/Smt./Kum.

_____son/wife/daughter of Shri_____Date of Birth (DD/MM/YY)_____Age_____years, male/female _____ registration No._____permanent resident of House No. _____ Ward/Village/Street_____Post Office_____ District

_____State_____, whose photograph is affixed above, and am satisfied that:

(A) he/she is a case of:

- locomotor disability
- dwarfism

(Please tick as applicable)

(B) the diagnosis in his/her case is _____

(C) he/she has_____% (in figure)_____percent (in words) permanent locomotor disability/dwarfism/blindness in relation to his/her_____(part of body) as per guidelines (..... number and date of issue of the guidelines to be specified).

2. The applicant has submitted the following document as proof of residence:-

Nature of Document	Date of Issue	Details of authority issuing certificate

(Signature and Seal of Authorised Signatory of notified Medical Authority)

Signature/thumb impression of the person
in whose favour certificate of disability is issued

Annexure-IV(B)

Form - VI
Certificate of Disability
(In cases of multiple disabilities)
[See rule 18(1)]
(Name and Address of the Medical Authority issuing the Certificate)

Recent passport size attested photograph (Showing face only) of the

Certificate No. Date:

This is to certify that we have carefully examined Shri/Smt./Kum. _____ son/wife/daughter of Shri _____Date of Birth (DD/MM/YY) _ Age__years, male/female_____.

Registration No._____permanent resident of House No. _____ Ward/Village/Street_____Post Office _____District_____State

_____, whose photograph is affixed above, and am satisfied that:

(A) he/she is a case of Multiple Disability. His/her extent of permanent physical impairment/disability has been evaluated as per guidelines (..... number and date of issue of the guidelines to be specified) for the disabilities ticked below, and is shown against the relevant disability in the table below:

S. No	Disability	Affected part of body	Diagnosis	Permanent physical impairment/mental disability (in %)
1.	Locomotor disability	@		
2.	Leprosy cured			
3.	Dwarfism			
4.	Cerebral Palsy			
5.	Acid attack Victim			
6.	Blindness(Single eye)			
7.	Low vision			
8.	Hard of Hearing	£		

(B) In the light of the above, his/her over all permanent physical impairment as per guidelines (… number and date of issue of the guidelines to be specified), is as follows:

In figures.....percent
In words: -.....percent

2. This condition is progressive/non-progressive/likely to improve/not likely to improve.

3. Reassessment of disability is :

(i) not necessary,
or
(ii) is recommended/after ..... years ..... months, and therefore this certificate shall be valid till ----- ----- ------

(DD) (MM) (YY)

@ e.g. Left/right (arms/legs)

£ e.g. Left/Right/both ears

4. The applicant has submitted the following document as proof of residence:

Nature of document	Date of issue	Details of authority issuing certificate

5. Signature and seal of the Medical Authority.

Name and Seal of Member	Name and Seal of Member	Name and Seal of the Chairperson

Signature/thumb impression of the person in

whose favour certificate of disability is issued.

Annexure-IV(C)

Form – VII Certificate of Disability
(In cases other than those mentioned in Forms VII(A) and VII(B)(Name and Address of the Medical Authority issuing the Certificate)
(See rule 18(1))

Recent passport size attested photograph (Showing face only) of the person with disability

Certificate No. Date:

This is to certify that I have carefully examined

Shri/Smt./Kum._____son/wife/daughter of Shri_____Date of Birth (DD/MM/YY)_____

_____Age_____ years, male/female_____Registration No.

_____permanent resident of House No._____Ward/Village/Street

_____Post Office_____District_____ State_____, whose photograph is affixed above, and am satisfied that he/she is a case of_ _____disability. His/her extent of percentage physical impairment/disability has been evaluated as per guidelines (..... number and date of issue of the guidelines to be specified) and is shown against the relevant disability in the table below:

S. No	Disability	Affected part of body	Diagnosis	Permanent physical impairment/mental disability (in %)
1.	Locomotor disability	@		
2.	Muscular Dystrophy			
3.	Leprosy cured			
4.	Cerebral Palsy			
5.	Acid attack Victim			
6.	Low vision	#		
7.	Deaf	€		
8.	Hard of Hearing	€		
9.	Speech and Language disability			
10.	Intellectual Disability			
11.	Specific Learning Disability			
12.	Autism Spectrum Disorder			
13.	Mental illness			

14.	Chronic Neurological Conditions			
15.	Multiple sclerosis			
16.	Parkinson's disease			
17.	Haemophilia			
18.	Thalassemia			
19.	Sickle Cell disease			

(Please strike out the disabilities which are not applicable)

2. The above condition is progressive/non-progressive/likely to improve/not likely toimprove.

3. Reassessment of disability is:

(i) not necessary, or

(ii) is recommended/after_____years_____months, and therefore thiscertificate shall be valid till (DD/MM/YY) ____

@ - eg. Left/Right/both arms/legs

- eg. Single eye/both eyes

€ - eg. Left/Right/both ears

4. The applicant has submitted the following document as proof of residence:

Nature of document	Date of issue	Details of authority issuing certificate

(Authorized Signatory of notified Medical Authority)

(Name and Seal)

Countersigned
{Countersignature and seal of the Chief Medical Officer/Medical Superintendent/ Head of Government Hospital, in case the Certificate is issued by a medical authority who is not a Government servant (with seal)}

Signature/thumb impression of the person in

whose favour certificate of disability is issued

Note: In case this certificate is issued by a medical authority who is not a Government servant, it shall be valid only if countersigned by the Chief Medical Officer of the District