



**GOVERNMENT OF INDIA**  
**MINISTRY OF RAILWAYS**  
**WESTERN RAILWAY**  
**RAILWAY RECRUITMENT CELL**  
Parcel Depot, Alibhai Premji Road, Grant Road (East), Mumbai – 400 007  
Website : [www.rrc-wr.com](http://www.rrc-wr.com)



**Notification No.GDCE 01/2023 Dated 31/07/2023.**  
**GENERAL DEPARTMENTAL COMPETITIVE EXAMINATION (GDCE)**

Railway Recruitment Cell, Western Railway (RRC-WR) invites **ONLINE** applications from **servicing regular employees** of Western Railway who have successfully completed period of probation as on 01/07/2023 under GDCE for various posts in Safety category.

Schedule for ONLINE Registration & submission of Online Application :

<b>Opening Date &amp; Time</b>	<b>02/08/2023 from 10.00 hrs.</b>
<b>Closing Date &amp; Time</b>	<b>31/08/2023 Up to 23.59hrs</b>

● **Important :**

- Please read all the instructions in this notification carefully and ensure that you are eligible to apply before filling the Online application form available on the RRC - WR website- <https://www.rrc-wr.com>
- Employees are advised in their own interest to submit Online Application much before the closing date to avoid possibility of any failure to submit application due to heavy load/jam on website.
- In case the employees does not have a VALID personal e-mail ID, he/she should create his / her personal e-mail ID before applying online application and must maintain that e-mail ID till the end of recruitment process.
- **Employees should regularly visit only RRC WR website <https://www.rrc-wr.com> for further updates.**

**I A. DETAILS OF VACANCIES:**

Vacancy Table and the Post parameters i.e. Medical Classification will be as per RRB standards.

Sr.No.	POST	Pay Level (7th CPC)	UR	SC	ST	OBC	TTL	Vacancy Table	Education Qualification & Medical Standard
1	Asst. Loco Pilot	2	313	88	41	161	603	Annx.1	Annx. 4
2	Technician- III	2	268	62	27	111	468	Annx.1	Annx. 5
3	Junior Engineer	6	165	37	9	66	277	Annx.2	Annx. 6
4	Train Manager	5	77	22	9	42	150	Annx.3	Annx. 7

## **B ELIGIBILITY CRITERIA:-**

### **(1) AGE LIMIT :- (As on 01/01/2024)**

	<b>UR</b>	<b>OBC</b>	<b>SC/ST</b>	<b>LOWER LIMIT</b>
<b>UPPER LIMIT</b>	<b>02/01/1982</b>	<b>02/01/1979</b>	<b>02/01/1977</b>	<b>01/01/2006</b> <b>18 years</b>
<b>Age Group</b>	<b>18- 42 years</b>	<b>18- 45 years</b>	<b>18-47 years</b>	

**Employees should ensure that their Date of Birth should match with the entries recorded in the Service Record.**

Note: No age relaxation is allowed to SC/ST/OBC-NCL (Non Creamy Layer) candidates applying against unreserved vacancies.

### **(2) Educational Qualification(as on closing date) (as on 31/08/2023)**

Candidates should have & possess the requisite minimum educational qualifications indicated for posts of this Notification No. GDCE 01/2023 from recognized Board/University/Institute as on the closing date for ONLINE application submission as per Annexure indicated in **Para I A** for respective post and the same may also be endorsed in the Service Sheet of the employees. Those awaiting results of the final examination of the prescribed minimum educational qualification SHOULD NOT apply.

## **II RECRUITMENT PROCESS :**

Only single ONLINE application has to be submitted by the candidate through the link provided on the official website of RRC/WR [www.rrc-wr](http://www.rrc-wr)

The recruitment process shall involve single stage Computer Based Test (CBT) , Aptitude Test (For ALP) and Documents Verification/Medical Examination.

Selection is made strictly as per merit, on the basis of above mentioned recruitment stages.

The date, time and venue for all the activities viz. CBT, Aptitude Test, Documents Verification, Medical Examination or any other additional activities as applicable shall be fixed by the RRC and shall be intimated to the eligible candidates in due course. Request for postponement of any of the above activities or for change of venue, date and shift will not be entertained under any circumstances.

The CBT shall have questions and answer options only in English ,Hindi, Marathi & Gujarati. Candidate to please note that there will be no supplementary exam (CBT, Aptitude Test etc.) for the absentee candidates under any circumstances.

### **III Computer Based Test (CBT)**

#### **1. GDCE for ALP/Technicians**

Only single online application (common to all the notified posts- ALP & Technicians) has to be submitted by the candidate through the link provided on the official website of RRC. The entire recruitment process shall involve CBT, Computer Based Aptitude Test (for ALP) and Document Verification & Medical examination as applicable.

The CBT shall have two parts viz. Part A and Part B as detailed below.

#### **PART-A**

**Duration: 90 Min**

The marks scored in Part A alone shall be used for short listing of candidates for further stages of recruitment process subject to the condition that the candidate is securing qualifying mark in Part B.

The syllabus for Part A shall be as below:

- a. Mathematics: Number system, BODMAS, Decimals, Fractions, LCM, HCF, Ratio and Proportion, Percentages, Mensuration, Time and Work; Time and Distance, Simple and Compound Interest, Profit and Loss, Algebra, Geometry and Trigonometry, Elementary Statistics, Square Root, Age Calculations, Calendar & Clock, Pipes & Cistern etc.
- b. General Intelligence and Reasoning: Analogies, Alphabetical and Number Series, Coding and Decoding, Mathematical operations, Relationships, Syllogism, Jumbling, Venn Diagram, Data Interpretation and Sufficiency, Conclusions and decision making, Similarities and differences, Analytical reasoning, Classification, Directions, Statement – Arguments and Assumptions etc.
- c. Basic Science and Engineering: The broad topics that are covered under this shall be Engineering Drawing (Projections, Views, Drawing Instruments, Lines, Geometric figures, Symbolic Representation), Units, Measurements, Mass Weight and Density, Work Power and Energy, Speed and Velocity, Heat and Temperature, Basic Electricity, Levers and Simple Machines, Occupational Safety and Health, Environment Education, IT Literacy etc.
- d. General Awareness on Current Affairs in Science & Technology, Sports, Culture, Personalities, Economics, Politics and any other subjects of importance.

#### **PART-B**

**Duration: 60 Min.**

**No of Questions: 75**

Qualifying Mark: 35% (This is applicable to all candidates and no relaxation is permissible)

This part is qualifying in nature and shall have questions from the trade syllabus prescribed by Director General of Employment & Training (DGET). Candidates with ITI/Trade Apprenticeship qualification or Diploma / Degree ( for the post of ALP only) can opt for questions from the relevant trade or any other trade as he /she desires.

Candidates who do not have ITI/Act Apprentice/Diploma qualifications and have qualified 10+2 with Physics and Mathematics will be eligible for the posts of Tech- III/Tele and Tech-III/Sig only. They should choose a special trade "Physics & Maths". If, they choose any other trade, they will not be considered for any of the posts. The Physics & Maths trade shall have questions on Physics and Mathematics of 10+2 standard.

**Candidates who do not have ITI/Act Apprentice qualifications but have Diploma/Degree in various specified streams will be considered for the post of ALP only.** Such candidates should choose their trades for Part-B of the CBT.

The trade syllabus can be obtained from the DGET website. The relevant trades for various 10+2/diploma/engineering discipline for appearing in the qualifying test is as below:

Sl. No.	Engineering Discipline(Diploma/Degree)	Relevant trade for PART B Qualifying Test to be selected from
1	Electrical Engineering and combination of various streams of Electrical Engineering	Electrician/ Instrument Mechanic/ Wiremen/Winder(Armature)/ Refrigeration and Air Conditioning Mechanic
2	Electronics Engineering and combination of various streams of Electronics Engineering	Electronics Mechanic/ Mechanic Radio & TV
3	Mechanical Engineering and combination of various streams of Mechanical Engineering	Fitter/ Mechanic Motor Vehicle/ Tractor Mechanic/ Mechanic Diesel/ Turner/ Machinist/ Refrigeration and Air Conditioning Mechanic/ Heat Engine/ Millwright Maintenance Mechanic
4	Automobile Engineering and combination of various streams of Automobile Engineering	Mechanic Motor Vehicle/ Tractor Mechanic/ Mechanic Diesel/ Heat Engine/ Refrigeration and Air Conditioning Mechanic
5	HSC (10+2) with Physics and Maths	Physics and Mathematics

#### **Computer Based Aptitude Test (Only for candidates who have opted for ALP)**

Qualifying marks: The candidate needs to secure a minimum score of 42 marks in each of the test batteries to qualify. This is applicable to all candidates and no relaxation is permissible.

Candidates equal to 8 times number of ALP vacancies for each of the communities i.e. UR, OBC-NCL, SC and ST shall be short listed for Computer Based AT (based on their performance in Part A of CBT subject to their qualifying the Part B of CBT) from among the candidates who have opted for the post of ALP.

Candidates will have to qualify in each of the test battery of Computer Based AT for considering them for the post of ALP. The Computer Based Aptitude Test shall have questions and answer options only in English and Hindi. There shall be no negative marking in Computer Based AT.

The ALP merit list will be drawn only from amongst the candidates qualifying in the Aptitude Test, with 70% weightage for the marks obtained in the Part A CBT and 30% weightage for the marks obtained in Computer Based AT.

Candidates are advised to visit websites of RDSO ([www.rdsso.indianrailways.gov.in](http://www.rdsso.indianrailways.gov.in) -> Directorates -> Psycho Technical Directorate -> Candidates Corner) for question patterns and other details of AT.

Based on the options and performance of candidates in part-A of the CBT subject to their qualifying the part-B of CBT (for Technician posts) and based on the performance of candidates in both part A of the CBT and Computer Based AT subject to their qualifying the part-B of CBT (for ALP), candidates equal to the number of vacancies will be called for Document verification.

Candidates are required to their category preference and exam group in Online Application.

## 2. GDCE PROCESS for Junior Engineer of various departments:

Only single online application common to all the notified posts of Junior Engineer (JE) has to be submitted by the candidate. The entire recruitment process shall involve Computer Based Test (CBT), and Document Verification/ Medical Examination as applicable. Selection is made strictly as per merit, on the basis of CBT.

### CBT:

**Duration:120 minutes**

**No of Questions:150**

**Syllabus:** The Questions will be of objective type with multiple choices and are likely to include questions pertaining to General Awareness, Physics and Chemistry, Basics of Computers and Applications, Basics of Environment and Pollution Control and Technical abilities for the post. The syllabus for General Awareness, Physics and Chemistry, Basics of Computers and Applications, Basics of Environment and Pollution Control is common for all notified posts under this CEN as detailed below:

- a) General Awareness : Knowledge of Current affairs, Indian geography, culture and history of India including freedom struggle, Indian Polity and constitution, Indian Economy, Environmental issues concerning India and the World, Sports, General scientific and technological developments etc.
- b) Physics and Chemistry: Up to 10th standard CBSE syllabus.
- c) Basics of Computers and Applications: Architecture of Computers; input and Output devices; Storage devices, Networking, Operating System like Windows, Unix, Linux; MS Office; Various data representation; Internet and Email; Websites & Web Browsers; Computer Virus.
- d) Basics of Environment and Pollution Control: Basics of Environment; Adverse effect of environmental pollution and control strategies; Air, water and Noise pollution, their effect and control; Waste Management, Global warming; Acid rain; Ozone depletion.
- e) Technical Abilities: Questions on the Technical abilities will be framed in the syllabus defined for various Exam Groups given at **Annexure- 8 to 11**

The section wise Number of questions and marks are as below:

Subjects	No. of Questions	Marks for each Section
General Awareness	15	15
Physics & Chemistry	15	15
Basic of Computers and Applications	10	10
Basics of Environment and Pollution Control	10	10
Technical Abilities	100	100
Total	150	150
Time in Minutes	120	

The section wise distribution given in the above table is only indicative and there may be some variations in the actual question papers. Virtual calculator will be made available on the Computer Monitor during CBT.

Discipline Mapping Tables:

Sl. No.	Three years Diploma in Engineering or Bachelor's Degree in Engineering/Technology	Exam Group
1.	Mechanical Engineering	Mechanical and Allied Engineering
	Production Engineering	
	Automobile Engineering	
	Manufacturing Engineering	
	Mechatronics Engineering	
	Industrial Engineering	
	Machining Engineering	
	Tools and Machining Engineering	
	Tools and Die Making Engineering	
Combination of any sub stream of basic streams of above disciplines		
2.	Electrical Engineering	Electrical and Allied

	Combination of any sub stream of basic streams of Electrical Engineering	Engineering
3.	Electronic Engineering	Electronics and Allied Engineering
	Instrumentation and Control Engineering	
	Communication Engineering	
	Computer Science and Engineering	
	Computer Engineering	
	Computer Science	
	Information Technology	
	Combination of sub streams of basic streams of above disciplines.	
4.	Civil Engineering	Civil and Allied Engineering
	Combination of any sub streams of basic streams of Civil Engineering	
	B.Sc. in Civil Engineering of 3 years duration	

All the candidates with the above qualification shall be tested in the Exam Group mapped as per the above chart.

A candidate possessing more than one minimum educational qualification, mapped to different Exam Groups, can choose any one Exam Group. These candidates would be eligible for all the posts for which they possess minimum educational qualifications.

Candidates are required to their category preference and exam group in Online Application

### 3. GDCE PROCESS for Train Manager.

Only single online application has to be submitted by the candidate through the link provided on the official websites of RRC. The recruitment process shall involve Computer Based Test (CBT) and Document Verification/Medical Examination. Selection is made strictly as per merit, on the basis of above mentioned recruitment stages.

Computer Based Test (CBT)

Exam Duration in Minutes	No. of Questions (each of 1 mark) from			Total No. of Questions
	General Awareness	Mathematics	General Intelligence and Reasoning	
90	40	30	30	100

The section wise distribution given in the above table is only indicative and there may be some variations in the actual question papers.

The standard of questions for the CBT will be generally in conformity with the educational standards prescribed for the posts.

The Questions will be of objective type with multiple choices and are likely to include questions pertaining to:

**a. Mathematics:** Number System, Decimals, Fractions, LCM, HCF, Ratio and Proportions, Percentage, Mensuration, Time and Work, Time and Distance, Simple and Compound Interest, Profit and Loss, Elementary Algebra, Geometry and Trigonometry, Elementary Statistics etc.

**b. General Intelligence and Reasoning:** Analogies, Completion of Number and Alphabetical Series, Coding and Decoding, Mathematical Operations, Similarities and Differences, Relationships, Analytical Reasoning, Syllogism, Jumbling, Venn Diagrams, Puzzle, Data Sufficiency, Statement- Conclusion, Statement- Courses of Action, Decision Making, Maps, Interpretation of Graphs etc.

**c. General Awareness:** Current Events of National and International Importance, Games and Sports, Art and Culture of India, Indian Literature, Monuments and Places of India, General Science and Life Science (up to 10th CBSE), History of India and Freedom Struggle, Physical, Social and Economic Geography of India and World, Indian Polity and Governance- constitution and political system, General Scientific and Technological Developments including Space and Nuclear Program of India, UN and Other important World Organizations, Environmental Issues Concerning India and World at Large, Basics of Computers and Computer Applications, Common Abbreviations, Transport Systems in India, Indian Economy, Famous Personalities of India and World, Flagship Government Programs, Flora and Fauna of India, Important Government and Public Sector Organizations of India etc.

#### **IV DOCUMENT VERIFICATION :**

- a. The candidates who qualify the CBT, will be called for **Document Verification and e-Call letter will be available for downloading from RRC Website.**
- b. Production of original documents of Date of birth, Educational Qualification Caste Certificate, along with **one set of self-attested photo copies** of all certificates, 2 recent passport size Photographs (self attested on reverse) e-call letter and Valid photo ID viz. Identity Card issued by his/her Employer in ORIGINAL on the day of Document Verification is mandatory. Documents valid for proof of age are Standard 10th or its equivalent Certificate or Mark Sheet indicating Date of Birth OR School Leaving Certificate indicating Date of Birth.
- c. Certificates in languages other than English or Hindi should be accompanied by an attested translation in English/Hindi.

#### **V GENERAL INSTRUCTIONS :**

1. Serving regular Employees of WR who have successfully completed period of probation and fulfills the eligibility criteria, may apply ONLINE through RRC/WR's official website www.rrc-wr.com
2. All regular employees possessing prescribed educational qualification as indicated **working in 7<sup>th</sup> CPC Level lower than the Grade Pay/Scale** for which GDCE is being conducted are eligible to appear in GDCE selection.
3. All regular employees possessing prescribed educational qualification as indicated **working in same 7<sup>th</sup> CPC Level** for which GDCE is being conducted are eligible to appear in selection from **non-safety to safety category posts as well as safety to safety category posts.**
4. Candidates should be a serving regular employee of Western Railway on 1st July' 2023. Candidates, who resign or transferred to other railway from WR, will not be considered for empanelment.
5. The employees should possess the requisite educational qualification on the closing date of application and the same may also be endorsed in the Service Sheet of the employees. Employees are requested to ensure that their Education qualification as mentioned in their Online application is duly entered in their service record. Those awaiting results of the final examination for the prescribed qualification are not eligible and hence should not apply.
6. Academic qualification must be from recognized Educational Institution / Board, otherwise candidature will be rejected.
7. Zone of consideration for GDCE will encompass staff belonging to all the Departments/Branches in all Divisions/Workshops/Headquarters office/Extra-Divisional Offices, as the case may be, subject to their applying in response to the notification.
8. **In terms of Railway Board's letter no.E(NG)II/2017/RC-2/1/ Policy dated 27-2-2019, notified posts are not suitable for PwBD employees.**
9. **RPF/RPSF personnel are not eligible to apply against the GDCE scheme in terms of Railway Board's letter No. E (NG) I/2002/PM2/9 dated 11.8.2003.**
10. **There is no separate reservation of posts for Economically Weaker Sections as per Railway Board's letter No. E(NG)I-2018/PM1/23 dated 02/05/2019.[RBE-72/2019].**
11. Employees selected under GDCE scheme shall be subjected to initial training of the same duration prescribed for directly recruited employees through RRBs.
12. Single stage written examination - Computer Based Test(CBT), CBAT for ALP followed by Document Verification and Medical examination will be conducted.
13. The request for postponement of examination or change of venue **will not be entertained** under any circumstances.

14. Eligibility of the employees will be considered only on the strength of the information furnished in the ONLINE Application and the uploaded Educational/Technical Qualification Certificate. The onus is on the employees to prove with valid documents that all the information submitted by them in the online application are true.
15. **Employees need NOT send printouts** of application or Certificates or copies to RRC/WR OR DIVISIONS concerned by post.
16. On completion of all stages of recruitment process, Division /Unit will be allotted as per the option of the eligible employees ONLY subject to merit, medical standard and vacancy position by HQ office.
17. Special Note for all Employees seeking reservation/relaxation benefits: All those employees seeking reservation/relaxation benefits available for SC/ST/OBC-NCL must ensure that they are entitled to such reservation/relaxation as per eligibility prescribed in the Rules/Notification. They should be in possession of all the requisite certificates in the prescribed format in support of their claim as stipulated in the Rules/Notification.
18. Railway Administration reserves the right to alter the modus of Examinations or re-conduct examination or to cancel part or whole process at any stage.
19. The selection shall be made strictly as per merit in the written examination and found fit in prescribed Medical category. Category-wise merit list will be prepared.
20. The employees recommended for appointment should be FIT in prescribed Medical category.
21. Shortlisted employees will be called for verification of their original documents. During document verification the employees has to bring all necessary documents in original. After satisfactory Document Verification, the candidate will be considered for empanelment subject to fulfilment of other criteria.
22. Employees recommended for a particular category of post with a Higher Medical classification will not be considered for any alternative post with lower medical classification in the event of their medical unfitness.
23. Selected employees are liable to be posted anywhere on Western Railway. Decision of Railway Administration in this regard shall be final.
24. In the event of any mis-statement / discrepancy in the particulars / incomplete or invalid application or employee has suppressed any relevant information or the employee otherwise does not satisfy the eligibility criteria for the post being detected at any stage, his / her application / candidature will be cancelled or services will be terminated without any notice.
25. WR reserves rights to rectify inadvertent errors or omission at any stage of examination and an erroneously appointed employee shall be liable to be terminated from Rly. Service. **WR will not be responsible for any inadvertent errors.**
26. Employees should read the details and instructions on the e-Call letter carefully and follow them scrupulously. Failure to comply with the instructions may lead to cancellation of their candidature.
27. The trade/exam group is to be specified by employees having ITI/Act Apprentice/Diploma/Engg. qualification.
28. Preference of all posts as applied and for which employee is eligible may also be called for.
29. Minimum percentage of marks for eligibility in various categories: UR-40%, OBC(Non creamy layer) -30%, SC-30%, ST-25%.
30. There will be negative marking and 1/3 mark shall be deducted for each wrong answer.
31. In case of two or more candidates securing same marks, their merit position shall be determined by age criteria i.e., older person shall be placed at higher merit and in case age being same, then alphabetical order (a to z) of the name shall be taken into account to break the tie.
32. Candidates equal to the number of vacancies will be called for DV based on their merit in CBT and options.
33. Appointment of selected candidates is subject to their passing requisite Medical Fitness Test to be conducted by the Railway Administration, final verification of educational and community certificates and verification of antecedents/character of the candidates.



34. Admission to all stages of recruitment process shall be purely provisional, subject to the candidate satisfying the prescribed eligibility conditions.
35. Mere issue of e-Call letter to the candidates will NOT imply that their candidature has been finally accepted by the RRC.
36. RRC conducts Documents Verification of eligibility conditions with reference to original documents only after the candidates have qualified in all the stages of examinations and are shortlisted for Document Verification. RRC may reject the candidature of any applicant at any stage of recruitment process. In case the candidate is found not fulfilling the requisite criteria and if appointed, such a candidate is liable to be removed from service summarily.
37. Before applying for the post(s) against this notification, candidates should satisfy themselves that they fulfill all the eligibility norms including age, educational qualification(s) and medical standard(s). Candidates should ensure that they have requisite educational/technical qualifications from recognized Board/ University/ Institute as on the closing date for online application submission.
38. Candidates should enter their Name, Father's Name and Date of Birth as recorded in the SSLC/Matriculation/High School Examination Certificate or an equivalent Certificate as well as in their service record. No subsequent request for its change will be considered.
39. In cases of name change, candidates should indicate their changed name only in the ONLINE application. However, the details should match with the Matriculation or Equivalent certificate as well as Service Record. Date of such change should be prior to the date of submission of ONLINE application.
40. Gazette Notification or any other legal document as applicable for such cases should be submitted at the time of Document Verification (DV) along with the acceptance letter of employer.
41. Signatures of the candidates on all documents should be identical in all stages of recruitment process and must be in running hand and not in block/capital or disjointed letters. Signatures in different style at the time of CBT, CBAT, Document Verification; Medical examination etc. may result in cancellation of candidature.
42. Dates of examinations will be published on the website. The e-call letters for CBT, CBAT should be downloaded only from website. No call letter will be sent by post. The CBT Centre, date and shift indicated in the e-call letter shall be final. RRC reserve the right to conduct additional CBT/CBAT, and/or additional document verification etc., without assigning any reason. Request for postponement of any of the above activity or for change of venue, date and shift will not be entertained under any circumstances.
43. Vacancies indicated in this Notification are provisional and may undergo any change (increase/decrease) or even become NIL in total or in specific Units/ Communities/ Posts at a later stage depending upon the actual needs of the Railway Administration. Also, additional posts if required by the Railway may also be included at later stage.
44. The Railway Administration also reserves the right to cancel the notified vacancies at any stage at its discretion and such decision will be final and binding on all.
45. The function of the RRC is to recommend names of suitable candidates to the concerned authorities of the Railway Division who in turn will issue the offer of appointment letter subject to availability of vacancies and candidates satisfying all eligibility criteria.
46. Selected candidates will have to undergo training, wherever prescribed, and during training period payment will be regulated as per extant rules.
47. RRC reserves the right to incorporate any subsequent change/modifications/additions in the terms & conditions of recruitment under this Notification as necessitated and applicable.

## **VI HOW TO APPLY:**

**Eligible Serving Regular Western Railway Employees may apply ONLINE through website: [www.rrc-wr.com](http://www.rrc-wr.com)**

- 1) Serving Regular Employees of WR who have successfully completed period of probation and fulfills the eligibility criteria, may apply ONLINE through RRC/WR's official website [www.rrc-wr.com](http://www.rrc-wr.com)
- 2) Employees are required to go to the link provided for filling ONLINE application and fill up the personal details/BIO-DATA carefully.

- 3) Employees should ensure that their Name, Father's Name, Date of Birth, Educational qualification, Caste, etc matches with the entries in the Service Record.
- 4) Employees are advised to indicate their personal mobile no. and personal valid e-mail IDs in the ONLINE application and keep them active during the entire recruitment process for communicating them.
- 5) Employees are further advised to visit website of RRC frequently to get the latest information or any changes about this notification. The communication with the employees will be made through SMS & e-mail only. Employees are advised to provide only their own Mobile number/ e-mail ID so that they receive such communication.
- 6) A colour photograph of size 3.5cm x 3.5cm (not older than three months from the date of application) with clear front view of the candidate without cap and sunglasses should be uploaded. The photo should be only in JPEG format-100 DPI. The size of the uploaded photograph should be upto **200 kb**. Employees may note that RRC may at any stage, reject the application for uploading old/unclear photo along with online application or for any significant variations between photographs uploaded along with online application and physical appearance of the candidate. Employees are advised to bring one copy of the same photograph along with Hall Ticket/e-Call Letter and original valid Photo ID at the time of examination. They are also advised to keep 3 copies of the same photograph for further use. . Also, scanned signature (of size 3.0 cm X 6.0 cm, upto 200 kb size ONLY in JPEG format) is to be uploaded.
- 7) Certificate showing the required minimum Educational Qualification for eligibility to the post applied should be uploaded.
- 8) During submission of ONLINE application, a **Unique Registration Number** will be generated and issued to each candidate. Employees are advised to preserve/note their Registration Number for further stages of recruitment process/ correspondence.
- 9) To avoid last minute rush, employees are advised in their own interest to submit ONLINE application much before the closing date.

## **VII STEPS TO SUBMIT ONLINE APPLICATION**

1. Visit the website of RRC-WR i.e. [www.rrc-wr.com](http://www.rrc-wr.com)
2. Click on the "ONLINE/E-APPLICATION" link.
3. Click on the "New Registration" link. Fill in the basic details viz. HRMS ID, e-mail ID and Mobile number for registration.
4. On submission of required details, an e-mail will be received in the registered e-mail ID. Open inbox of your registered e-mail and use Username & password received in the email to proceed further.
5. Login using the Registration Number & Password sent in the e-mail.
6. Follow the instructions and complete the registration process step-by-step.
7. Upload your scanned recent colour photograph (of size 3.5 cm X 3.5 cm, upto 200 kb, 100 DPI, ONLY JPEG format ), scanned signature (of size 3.0 cm X 6.0 cm, upto 200 kb size ONLY in JPEG format) and the minimum required Educational/Technical Qualification Certificate.
8. Candidates are advised to take a printout of their application which is required to be produced at the time of Document Verification.
9. **Before submitting the application, employees should ensure and check the accuracy of all the details filled and then press the SUBMIT button for online application.**
10. **For detailed procedure of ONLINE application refer to the e-help link provided on the RRC website i.e. [www.rrc-wr.com](http://www.rrc-wr.com).**

## VIII DOCUMENTS TO BE UPLOADED:-

1. The employee should upload following document in JPG format ( Photograph having size upto 200 kb, Signature having size upto 200 kb .
2. Photograph:- A colour photograph not older than three months, with clear front view of the candidate, without cap and sunglasses, should be uploaded. Candidate may note that RRC may, at any stage, reject the applications for uploading old/unclear photo or for any significant variations between uploaded photograph and the actual physical appearance of the candidate. The photo affixed on the employee service certificate, uploaded in the online application and produced at the various stages of the exam must be the same. Candidates are advised to keep extra copies of the same photograph for Aptitude/skill/speed/ Document verification etc. Application without photograph is liable to be rejected
3. Signature:-running signature should be uploaded. Unsigned applications, signed in capital letters/ Disjointed letters/spaced out letters will be rejected.

## IX COMMUNITY CERTIFICATE

- **Employees should ensure that their Caste should match with the Service Sheet entries.**
- Candidates who claim to be **SC/ST** should invariably produce their Caste Certificates at the time of Document Verification in the prescribed Central Government Format (**Annexure 'A'**).
- Candidates who claim to be **OBC**, should invariably produce **OBC certificate** with non-creamy layer certificate valid for the current year **2023-2024** and also **latest certificate** at the time of Document Verification in Central Government format for appointment in Central Government service (**Annexure- ' B' & 'C'**).

## X INVALID APPLICATIONS:-

Applications with following deficiencies(one or more than one) will be summarily rejected

1. Applications sent through offline mode/manually and not registered ONLINE.
2. Applications which are incomplete in any manner.
3. Candidates not possessing the prescribed Educational qualifications at the time of submitting application.
4. Applications of over-aged or under-aged candidates and Date of Birth not filled in or wrongly filled.
5. If more than one application registered by the same candidate, all such applications will be rejected.
6. Photograph not uploaded, Black and white photo, photo with cap or sunglasses, disfigured, small size, full body, only one side view of the face or unrecognizable photo.
7. Application without scanned Photo and scanned Signature. Signature not uploaded or uploaded in capital letters
8. The candidature of the candidate is liable to be rejected in case details furnished in the online application are wrong/mismatch with the original document at the time of document verification.
9. Employee not considered / treated as Regular employee of Western Railway as on 1<sup>st</sup> July'2023.
10. Any other form of irregularities as observed and considered as invalid by RRC.

Note:- The list is only illustrative and not exhaustive. The applications will be rejected on any other irregularity/deficiency noticed by the RRC at any stage.

Note:- The list is only illustrative and not exhaustive. The applications will be rejected on any other irregularity/deficiency noticed by the RRC at any stage.

02/

**XI ACTION AGAINST EMPLOYEES FOUND GUILTY OF MISCONDUCT:-**


- 1 Employees are warned that they should not furnish any particulars that are false or suppress any material information while filling in the application form.
- 2 Employees are also warned that they should in no case attempt to alter or otherwise tamper with any entry in a document or its attested/certified copy submitted by them nor should they submit a tampered/fabricated document. If there is any inaccuracy or any discrepancy, an explanation regarding such discrepancy should be submitted.
- 3 Misconduct on the part of the candidate at any stage of the recruitment process is strictly prohibited.
- 4 Employees shall not bring or attempt to bring any political or other influence to further his/her interest in respect of recruitment. Attempting in such practice will be viewed seriously and their candidature shall be rejected without any notice.
- 5 A candidate found by the Railway Recruitment Cell to be guilty of:
  - a. Canvassing support for his candidature by any means;
  - b. Impersonation;
  - c. Taking help of impersonator ;
  - d. Submitting fabricated/tampered documents ;
  - e. Making statements which are incorrect or false, or suppressing material information ;
  - f. Resorting to any other irregular or improper means for furtherance of his candidature for the selection ;
  - g. Using unfair means during the examination, or possessing , carrying or using mobile phone, calculator or any other such instrument ,
  - h. Committing mischief in any other manner in the examination hall ;Harassing or doing bodily harm to the staff employed by the RRC-WR for the conduct of the test may, in addition to action under relevant provisions of the Rules/Laws which render him liable to criminal prosecution may further-
    - i. be disqualified by the RRC-WR from selection for which he is a candidate, or
    - ii. be debarred, either permanently or for a period decided by the RRC-WR, from any examination or selection conducted by any of the Railway Recruitment Cells/ Railway Recruitment Boards or/and
    - iii. be taken up for disciplinary action under the appropriate rules.

**NOTE:-**

1. List of eligible employees will be notified on RRC website.
2. e-Call letter for the written examination will be issued ONLINE.
3. For any legal issues arising out of this Employment Notice, the Jurisdiction shall be under Hon'ble Central Administrative Tribunal, Mumbai only.

**XII RAILWAY RECRUITMENT CELL'S DECISION WILL BE FINAL:**

The decision of RRC-WR in all matters relating to eligibility, acceptance or rejection of the applications, issue of free rail passes, penalty for false information, mode of selection, conduct of examination(s), allotment of examination centre, allotment of posts/places to selected employees and all other matters related with conduct of recruitment process will be final and binding on the employees, and no enquiry or correspondence will be entertained in this connection.

  
31/07/23  
Dy.CPO(Gazetted)  
Railway Recruitment Cell  
Western Railway

**Vacancy Table**

ALP

Annexure-1

CATEGORY NO.	POST	UR	SC	ST	OBC	TOTAL
1	ALP	313	88	41	161	603

**Technician- III**

Sr. No	CATE GORY NO.	POST	DEPT.	UR	SC	ST	OBC	TOTAL
1	2	TECH-III ELECT POWER	ELECT.	16	3	1	4	24
2	3	TECH-III ELECTRICAL TRAIN LIGHTING	ELECT.	13	2	1	3	19
3	4	TECH-III ELECT TRD	ELECT.	32	7	1	13	53
4	5	TECH-III ELECT TRD/OHE	ELECT.	3	1	0	2	6
5	6	TECH-III ELECT TRD/PSI	ELECT.	2	0	0	1	3
6	7	TECH-III ELECT TRS	ELECT.	18	4	2	6	30
7	8	TECH-III EMU	ELECT.	35	9	5	19	68
8	8	TECH-III FITTER	ELECT.	2	0	0	0	2
9	10	TECH-III R&AC	ELECT.	7	2	1	3	13
10	11	TECH-III BLACKSMITH	ENGG.	1	0	0	0	1
11	12	TECH-III BRIDGE	ENGG.	2	0	0	0	2
12	13	TECH-III TRACK MACHINE	ENGG.	4	1	0	1	6
13	14	TECH-III WELDER	ENGG.	1	0	0	0	1
14	15	TECH-III C&W	MECH.	27	8	4	14	53
15	16	TECH-III DSL ELECT	MECH.	6	3	1	3	13
16	17	TECH-III DSL MECH	MECH.	6	2	1	2	11
17	18	TECH-III FITTER	MECH.	44	11	5	19	79
18	19	TECH-III WELDER	MECH.	1	0	0	1	2

19	20	TECH-III SIGNAL	S&T	31	5	4	12	<b>52</b>
20	21	TECH-III TELECOMMUNICATION	S&T	17	4	1	8	<b>30</b>
<b>TOTAL</b>				<b>268</b>	<b>62</b>	<b>27</b>	<b>111</b>	<b>468</b>

**Vacancy Table of JUNIOR ENGINEER**

**Annexure 2**

Sr. No	CATEGORY NO.	POST	DEPT	UR	SC	ST	OBC	TOTAL
1	22	JUNIOR ENGINEER / ELECTRICAL /EMU	ELECT.	11	3	1	5	<b>20</b>
2	23	JUNIOR ENGINEER / ELECTRICAL /TRD	ELECT.	23	5	1	11	<b>40</b>
3	24	JUNIOR ENGINEER / ELECTRICAL /TRS	ELECT.	6	2	1	3	<b>12</b>
4	25	JUNIOR ENGINEER/ ELECTRICAL/GENERAL SERVICES	ELECT.	13	3	1	5	<b>22</b>
5	26	JUNIOR ENGINEER / WORKS	ENGG.	17	3	0	6	<b>26</b>
6	27	JUNIOR ENGINEER / P. WAY	ENGG.	36	10	2	12	<b>60</b>
7	28	JUNIOR ENGINEER / TRACK MACHINE	ENGG.	11	2	0	5	<b>18</b>
8	29	JUNIOR ENGINEER / BRIDGE	ENGG.	1	0	0	1	<b>2</b>
9	30	JUNIOR ENGINEER / CARRIAGE and WAGON	MECH.	19	4	0	9	<b>32</b>
10	31	JUNIOR ENGINEER/ DIESEL MECHANICAL	MECH.	2	0	0	0	<b>2</b>
11	32	JUNIOR ENGINEER / S and T /SIGNAL	S&T	13	3	2	5	<b>23</b>
12	33	JUNIOR ENGINEER / S and T /TELE.	S&T	13	2	1	4	<b>20</b>
<b>TOTAL</b>				<b>165</b>	<b>37</b>	<b>9</b>	<b>66</b>	<b>277</b>

**Vacancy Table of Train Manager**

**Annexure 3**

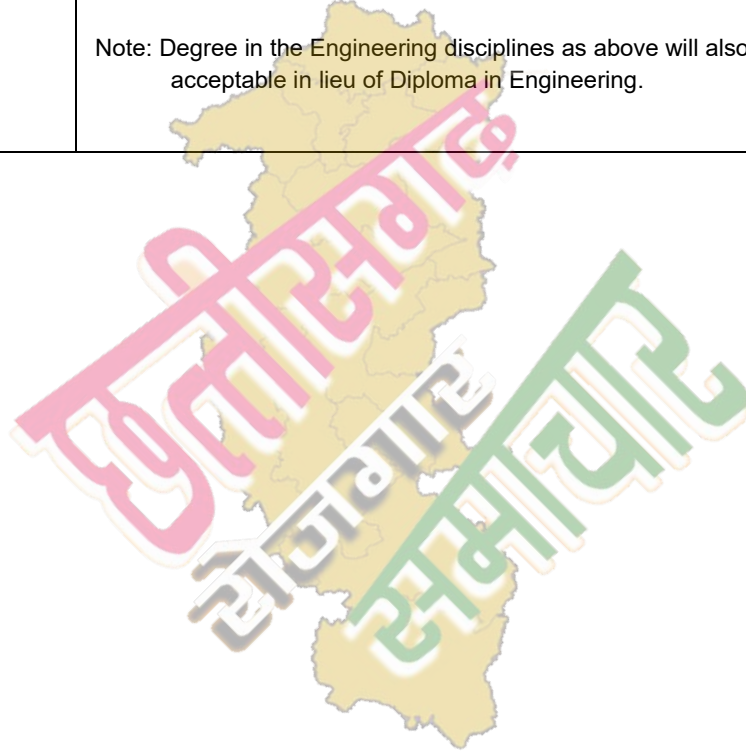
Category	POST	UR	SC	ST	OBC	TOTAL
34	TRAIN MANAGER	77	22	9	42	150

## Educational Qualification

1. ALP

Annexure 4

CAT. NO.	POST	Medical Standard	EDUCATION QUALIFICATION
1	ALP	A1	<p>A. Matriculation / SSLC plus ITI from recognised institutions of NCVT/SCVT in the trades of Armature and Coil Winder / Electrician / Electronics Mechanic / Fitter / Heat Engine / Instrument Mechanic / Machinist / Mechanic Diesel / Mechanic Motor Vehicle / Millwright Maintenance Mechanic / Mechanic Radio &amp; TV / Refrigeration and Air-conditioning Mechanic / Tractor Mechanic / Turner / Wireman (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trades mentioned above (OR)</p> <p>B. 3 years Diploma in Mechanical / Electrical / Electronics / Automobile Engineering (OR) Combination of various streams of these Engineering disciplines from a recognised Institution in lieu of ITI.</p> <p>Note: Degree in the Engineering disciplines as above will also be acceptable in lieu of Diploma in Engineering.</p>

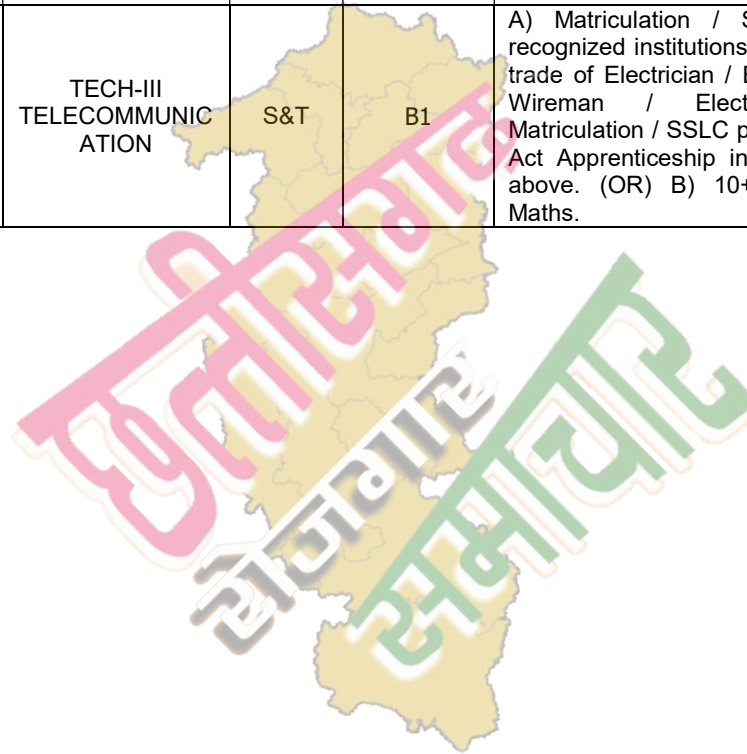


Sr. No	CATEGORY NO.	POST	DEPT.	Medical Standard	EDUCATION QUALIFICATION
1	2	TECH-III ELECT POWER	ELECT.	B2	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Electrician / Wireman / Mechanic HT, LT equipments and Cable Jointing / Electronics Mechanic. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
2	3	TECH-III ELECTRICAL TRAIN LIGHTING	ELECT.	B2	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Electrician / Wireman / Mechanic HT, LT Equipments and Cable Jointing / Electronics Mechanic. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
3	4	TECH-III ELECT TRD	ELECT.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Electrician / Wireman / Mechanic HT, LT equipments and Cable Jointing / Electronics Mechanic. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
4	5	TECH-III ELECT TRD/OHE	ELECT.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Electrician / Wireman / Mechanic HT, LT Equipments and Cable Jointing / Electronics Mechanic. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
5	6	TECH-III ELECT TRD/PSI	ELECT.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Electrician / Wireman / Mechanic HT, LT Equipments and Cable Jointing / Electronics Mechanic. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
6	7	TECH-III ELECT TRS	ELECT.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Electrician / Wireman / Electronics Mechanic / Mechanic Power Electronics / Mechanic HT, LT Equipments and Cable Jointing / Fitter / Welder / Painter General / Machinist / Carpenter. (OR) Matriculation / SSLC plus Course Completed Act Apprentices
7	8	TECH-III EMU	ELECT.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Electrician / Wireman / Electronics Mechanic / Mechanic Power Electronics / Mechanic HT, LT Equipments and Cable Jointing / Fitter / Welder / Painter General / Machinist / Carpenter. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.



8	9	TECH-III FITTER	ELECT.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Fitter. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
9	10	TECH-III R&AC	ELECT.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Refrigeration and Air Conditioning Mechanic / Electrician / Wireman / Electronics Mechanic. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
10	11	TECH-III BLACKSMITH	ENGG.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Forger and Heat Treater. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
11	12	TECH-III BRIDGE	ENGG.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Fitter / Fitter (Structural) / Welder. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
12	13	TECH-III TRACK MACHINE	ENGG.	A3	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Fitter / Electrician / Electronics Mechanic / Instrument Mechanic / Mechanic Mechatronics / Mechanic Diesel / Mechanic Motor Vehicle / Welder / Machinist. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
13	14	TECH-III WELDER	ENGG.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Welder / Welder (Gas and Electric) / Gas Cutter / Structural Welder / Welder (Pipe) / Welder (TIG/MIG). (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
14	15	TECH-III C&W	MECH.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Fitter / Carpenter / Welder / Plumber / Pipe Fitter (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
15	16	TECH-III DSL ELECT	MECH.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Electrician / Mechanic Auto electrical and Electronics / Wireman / Electronics Mechanic / Mechanic Power Electronics. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
16	17	TECH-III DSL MECH	MECH.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Fitter / Mechanic Diesel / Mechanic (Repair and Maintenance of Heavy Vehicles) / Mechanic Automobile (Advanced Diesel Engine) / Mechanic Motor Vehicle / Tractor Mechanic / Welder / Painter. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.

17	18	TECH-III FITTER	MECH.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Fitter. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
18	19	TECH-III WELDER	MECH.	B1	Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Welder / Welder (Gas and Electric) / Gas Cutter / Structural Welder / Welder (Pipe) / Welder (TIG/MIG). (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above.
19	20	TECH-III SIGNAL	S&T	B1	A) Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Electrician / Electronics Mechanic / Wireman / Electrical Fitter. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above. (OR) B) 10+2 with Physics and Maths.
20	21	TECH-III TELECOMMUNICATION	S&T	B1	A) Matriculation / SSLC plus ITI from recognized institutions of NCVT/SCVT in the trade of Electrician / Electronics Mechanic / Wireman / Electrical Fitter. (OR) Matriculation / SSLC plus Course Completed Act Apprenticeship in the trade mentioned above. (OR) B) 10+2 with Physics and Maths.



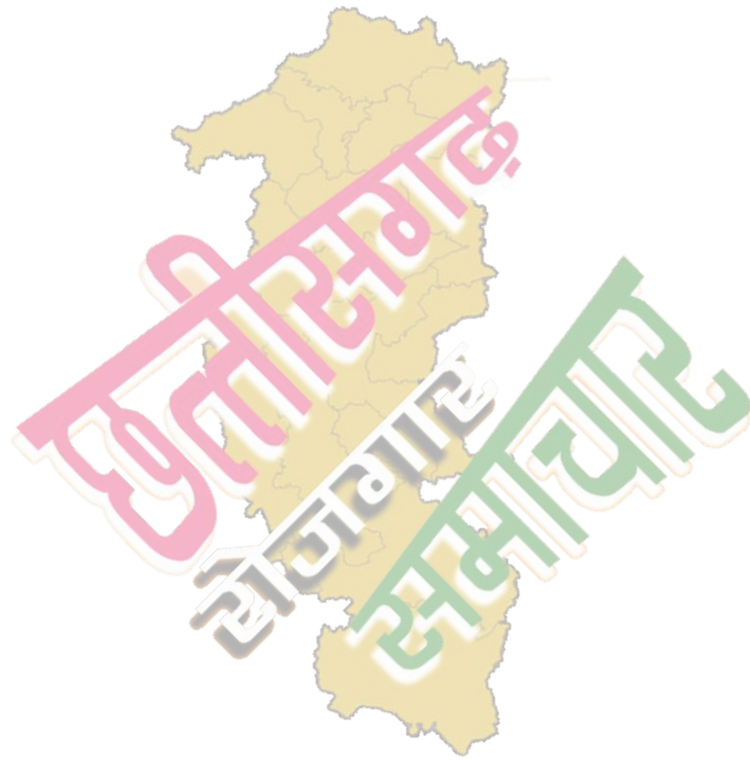
**Educational Qualification of & Medical Standard for JUNIOR ENGINEER**

**Annexure 6**

Sr. No	CATEGORY NO.	POST	DEPT.	Medical Standard	EDUCATION QUALIFICATION
1	22	JUNIOR ENGINEER / ELECTRICAL / EMU	ELECT.	A3	Three years Diploma in (a) Mechanical / Electrical / Electronics Engineering OR (b) a combination of any sub stream of basic streams of Mechanical / Electrical / Electronics Engineering from a recognised University/ Institute.
2	23	JUNIOR ENGINEER / ELECTRICAL / TRD	ELECT.	A3	
3	24	JUNIOR ENGINEER / ELECTRICAL / TRS	ELECT.	A3	
4	25	JUNIOR ENGINEER/ ELECTRICAL/GENERAL SERVICES	ELECT.	B1	
5	26	JUNIOR ENGINEER / WORKS	ENGG.	B1	(a) Three years Diploma in Civil Engineering or B.Sc. in Civil Engineering of three years duration or (b) a combination of any sub stream of basic streams of Civil Engineering from a recognized University / Institute
6	27	JUNIOR ENGINEER / P WAY	ENGG.	A3	
8	28	JUNIOR ENGINEER / BRIDGE	ENGG.	A3	
7	29	JUNIOR ENGINEER / TRACK MACHINE	ENGG.	A3	(a) Three years Diploma in (a) Mechanical / Electrical / Electronics / Instrumentation & Control / Automobile / Production Engineering OR (b) a combination of any sub stream of basic streams of Mechanical / Electrical / Electronics / Instrumentation & Control / Automobile / Production Engineering from a recognised University/ Institute.
9	30	JUNIOR ENGINEER / CARRIAGE and WAGON	MECH.	B1	Three years Diploma in (a) Mechanical / Electrical / Electronics / Manufacturing / Mechatronics / Industrial / Machining / Instrumentation & Control / Tools & Machining / Tools & Die Making / Automobile / Production Engineering OR (b) a combination of any sub stream of basic streams of Mechanical / Electrical / Electronics / Manufacturing / Mechatronics / Industrial / Machining / Instrumentation & Control / Tools & Machining / Tools & Die Making / Automobile / Production Engineering from a recognised University/ Institute.
10	31	JUNIOR ENGINEER/ DIESEL MECHANICAL	MECH.	B1	
11	32	JUNIOR ENGINEER / S and T /SIGNAL	S&T	A3	Three years Diploma in (a) Electrical / Electronics / Information Technology / Communication Engineering / Computer Science & Engineering / Computer Science / Computer Engineering OR (b) a combination of any sub stream of basic streams of Electrical / Electronics / Information Technology / Communication Engineering / Computer Science & Engineering / Computer Science / Computer Engineering from a recognized University/Institute.
12	33	JUNIOR ENGINEER / S and T /TELE	S&T	A3	

**Educational Qualification & Medical Standard for Train Manager****Annexure 7**

Sr. No	CATEGORY NO.	POST	DEPT.	Medical Standard	EDUCATION QUALIFICATION
1	34	Train Manager	OPTG.	A2	Degree from recognized University or equivalent.



## Syllabus for Civil &amp; Allied Engineering Exam Group – JE

Sl. No.	Subject
1	Engineering Mechanics- Force (resolution of force, moment of force, force system, composition of forces), Equilibrium, Friction, Centroid and Center of gravity, Simple machines.
2	Building Construction- Building components (substructure, superstructure), type of structure (load bearing, framed and composite structures).
3	Building materials- Masonry materials (stones, bricks, and mortars), Timber and miscellaneous materials (glass, plastic, fiber, aluminum steel, galvanized iron, bitumen, PVC, CPVC, and PPF).
4	Construction of substructure- job layout, earthwork, foundation (types, dewatering, coffer dams, bearing capacity).
5	Construction of superstructure- stone masonry, brick masonry, Hollow concrete block masonry, composite masonry, cavity wall, doors and windows, vertical communication (stairs, lifts, escalators), scaffolding and shoring.
6	Building finishes- Floors (finishes, process of laying), walls (plastering, pointing, painting) and roofs (roofing materials including RCC).
7	Building maintenance- Cracks (causes, type, repairs- grouting, guniting, epoxy etc.), settlement (causes and remedial measures), and re-baring techniques.
8	Building drawing- Conventions (type of lines, symbols), planning of building (principles of planning for residential and public buildings, rules and byelaws), drawings (plan, elevation, section, site plan, location plan, foundation plan, working drawing), perspective drawing.
9	Concrete Technology- Properties of various types/grades of cement, properties of coarse and fine aggregates, properties of concrete (water cement ratio, properties of fresh and hardened concrete), Concrete mix design, testing of concrete, quality control of concrete (batching, formwork, transportation, placing, compaction, curing, waterproofing), extreme weather concreting and chemical admixtures, properties of special concrete (ready mix, RCC, pre-stressed, fiber reinforced, precast, high performance).
10	Surveying- Types of survey, chain and cross staff survey (principle, ranging, triangulation, chaining, errors, finding area), compass survey (principle, bearing of line, prismatic compass, traversing, local attraction, calculation of bearings, angles and local attraction) leveling (dumpy level, recording in level book, temporary adjustment, methods of reduction of levels, classification of leveling, tilting level, auto level, sources of errors, precautions and difficulties in leveling), contouring (contour interval, characteristics, method of locating, interpolation, establishing grade contours, uses of contour maps), area and volume measurements, plane table survey (principles, setting, method), theodolite survey (components, adjustments, measurements, traversing), Tacheometric survey, curves (types, setting out), advanced survey equipment, aerial survey and remote sensing.
11	Computer Aided Design- CAD Software (AutoCAD, Auto Civil, 3D Max etc.), CAD commands, generation of plan, elevation, section, site plan, area statement, 3D view.
12	Geo Technical Engineering- Application of Geo Technical Engineering in design of foundation, pavement, earth retaining structures, earthen dams etc., physical properties of soil, permeability of soil and seepage analysis, shear strength of soil, bearing capacity of soil, compaction and stabilization of soil, site investigation and sub soil exploration.

13	Hydraulics- properties of fluid, hydrostatic pressure, measurement of liquid pressure in pipes, fundamentals of fluid flow, flow of liquid through pipes, flow through open channel, flow measuring devices, hydraulic machines.
14	Irrigation Engineering- Hydrology, investigation and reservoir planning, percolation tanks, diversion head works.
15	Mechanics of Structures- Stress and strain, shear force and bending moment, moment of inertia, stresses in beams, analysis of trusses, strain energy.
16	Theory of structures- Direct and bending stresses, slope and deflection, fixed beam, continuous beam, moment distribution method, columns.
17	Design of Concrete Structures- Working Stress method, Limit State method, analysis and design of singly reinforced and doubly reinforced sections, shear, bond and development length, analysis and design of T Beam, slab, axially loaded column and footings.
18	Design of Steel Structures- Types of sections, grades of steel, strength characteristics, IS Code, Connections, Design of tension and compression members, steel roof truss, beams, column bases.
19	Transportation Engineering- Railway Engineering (alignment and gauges, permanent way, railway track geometrics, branching of tracks, stations and yards, track maintenance), Bridge engineering (site selection, investigation, component parts of bridge, permanent and temporary bridges, inspection and maintenance), Tunnel engineering (classification, shape and sizes, tunnel investigation and surveying, method of tunneling in various strata, precautions, equipment, explosives, lining and ventilation).
20	Highway Engineering- Road Engineering, investigation for road project, geometric design of highways, construction of road pavements and materials, traffic engineering, hill roads, drainage of roads, maintenance and repair of roads.
21	Environmental Engineering- Environmental pollution and control, public water supply, domestic sewage, solid wastemanagement, environmental sanitation, and plumbing.
22	Advanced Construction Techniques and Equipment- Fibers and plastics, artificial timber, advanced concreting methods (under water concreting, ready mix concrete, tremix concreting, special concretes), formwork, pre-fabricated construction, soil reinforcing techniques, hoisting and conveying equipment, earth moving machinery (exaction and compaction equipment), concrete mixers, stone crushers, pile driving equipment, working of hot mix bitumen plant, bitumen paver, floor polishing machines.
23	Estimating and Costing- Types of estimates (approximate, detailed), mode of measurements and rate analysis.
24	Contracts and Accounts- Types of engineering contracts, Tender and tender documents, payment, specifications.

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## Syllabus for Electrical &amp; Allied Engineering Exam Group – JE

Sl.No	Subject
1.	Basic concepts: Concepts of resistance, inductance, capacitance, and various factors affecting them. Concepts of current, voltage, power, energy and their units.
2.	Circuit law: Kirchhoff's law, Simple Circuit solution using network theorems.
3.	Magnetic Circuit: Concepts of flux, mmf, reluctance, Different kinds of magnetic materials, Magnetic calculations for conductors of different configuration e.g. straight, circular, solenoidal, etc. Electromagnetic induction, self and mutual induction.
4.	AC Fundamentals: Instantaneous, peak, R.M.S. and average values of alternating waves, Representation of sinusoidal wave form, simple series and parallel AC Circuits consisting of R.L. and C, Resonance, Tank Circuit. Poly Phase system – star and delta connection, 3 phase power, DC and sinusoidal response of R-L and R-C circuit.
5.	Measurement and measuring instruments: Measurement of power (1 phase and 3 phase, both active and re-active) and energy, 2 wattmeter method of 3 phase power measurement. Measurement of frequency and phase angle. Ammeter and voltmeter (both moving coil and moving iron type), extension of range wattmeter, Multimeters, Megger, Energy meter AC Bridges. Use of CRO, Signal Generator, CT, PT and their uses. Earth Fault detection.
6.	Electrical Machines: (a) D.C. Machine – Construction, Basic Principles of D.C. motors and generators, their characteristics, speed control and starting of D.C. Motors. Method of braking motor, Losses and efficiency of D.C. Machines. (b) 1 phase and 3 phase transformers – Construction, Principles of operation, equivalent circuit, voltage regulation, O.C. and S.C. Tests, Losses and efficiency. Effect of voltage, frequency and wave form on losses. Parallel operation of 1 phase / 3 phase transformers. Auto transformers. (c) 3 phase induction motors, rotating magnetic field, principle of operation, equivalent circuit, torque-speed characteristics, starting and speed control of 3 phase induction motors. Methods of braking, effect of voltage and frequency variation on torque speed characteristics, Fractional Kilowatt Motors and Single Phase Induction Motors: Characteristics and applications.
7.	Synchronous Machines: Generation of 3-phase e.m.f. armature reaction, voltage regulation, parallel operation of two alternators, synchronizing, control of active and reactive power. Starting and applications of synchronous motors.
8.	Generation, Transmission and Distribution: Different types of power stations, Load factor, diversity factor, demand factor, cost of generation, inter-connection of power stations. Power factor improvement, various types of tariffs, types of faults, short circuit current for symmetrical faults. Switchgears and Protection: Rating of circuit breakers, Principles of arc extinction by oil and air, H.R.C. Fuses, Protection against earth leakage / over current, etc. Buchholz relay, Merz-Price system of protection of generators & transformers, protection of feeders and bus bars. Lightning arresters, various transmission and distribution system, comparison of conductor materials, efficiency of different system. Cable – Different type of cables, cable rating and derating factor.
9.	Estimation and costing: Estimation of lighting scheme, electric installation of machines and relevant IE rules. Earthing practices and IE Rules.
10.	Utilization of Electrical Energy: Illumination, Electric heating, Electric welding, Electroplating, Electric drives and motors.
11.	Basic Electronics: Working of various electronic devices e.g. P N Junction diodes, Transistors (NPN and PNP type), BJT and JFET. Simple circuits using these devices.

**Syllabus for Electronics & Allied Engineering Exam Group – JE**

Sl.No.	Subject
1.	Electronic Components & Materials Conductors, Semi conductor& Insulators; Magnetic materials; Jointing & Cleaning materials for U/G copper cable & OFC; Cells and Batteries (chargeable and non chargeable); Relays, Switches, MCB & Connectors.
2.	Electronic Devices and circuits PN Junction diodes, thyristor; Diode and triode circuits; Junction Transistors; Amplifiers; Oscillator; M u l t i v i b r a t o r ,counters; Rectifiers; Inverter and UPS.
3.	Digital Electronics Number System & Binary codes; Boolean Algebra & Logic gates; Combinational & Sequential logic circuits; A/D & D/Aconverter, counters; Memories
4.	Linear Integrated Circuit Introduction to operational Amplifier; Linear applications; Non Linear applications; Voltage regulators; Timers; Phase lock loop.
5.	Microprocessor and Microcontroller Introduction to microprocessor, 8085 microprocessor working; Assembly Language programming; Peripherals & othermicroprocessors; Microcontrollers
6.	Electronic Measurements Measuring systems; Basic principles of measurement; Range Extension methods; Cathode ray oscilloscope, LCD, LEDpanel; Transducers
7.	Communication Engineering Introduction to communication; Modulation techniques; Multiplexing Techniques; Wave Propagation, Transmission line characteristics, OFC; Fundamentals of Public Address systems, Electronic exchange, Radar, Cellular and Satellite Communication.
8.	Data communication and Network Introduction to data communication; Hardware and interface; Introduction to Networks and Networking devices; Local Area Network and Wide area network; Internet working.
9.	Computer Programming Programming concepts; Fundamentals of 'C' and C ++; Operators in 'C' and C ++; Control Statements; Functions, ArrayString & Pointers, File Structure; Data Structure and DBMS
10	Basic Electrical Engg. DC Circuits; AC fundamentals; Magnetic, Thermal and Chemical effects of Electric current; Earthing - Installation, Maintenance, Testing,

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**Syllabus for Mechanical & Allied Engineering Exam Group – JE**

Sl.No.	Subject
1.	Engineering Mechanics :
	Resolution of forces, Equilibrium and Equilibrant, parallelogram law of forces, triangle law of forces, polygon law of forces and Lami's theorem, couple and <b>moment</b> of a couple, condition for equilibrium of rigid body subjected to number of coplanar non-concurrent forces, definition of static friction, dynamic friction, derivation of limiting angle of friction and angle of repose, resolution of forces considering friction when a body moves on horizontal plane and inclined plane, calculation of moment of inertia and radius of gyration of : (a) I-Section (b) channel section (c) T-Section (d) L-Section (Equal & unequal lengths) (e) Z-Section (f) Built up sections (simple cases only), Newton's laws of motion (without derivation), motion of projectile, D'Alembert's principle, definition law of conservation of energy, law of conservation of momentum.
2.	Material Science :
	Mechanical properties of engineering materials – tensile strength, compressive strength, ductility, malleability, hardness, toughness, brittleness, impact strength, fatigue, creep resistance.  Classification of steels, mild steel and alloy steels.  Importance of heat treatment. Heat treatment processes – annealing, normalizing, hardening, tempering, carburizing, nitriding and cyaniding.
3.	Strength of Materials :
	Stress, strain, stress strain diagram, factor of safety, thermal stresses, strain energy, proof resilience and modulus of resilience. Shear force and bending moment diagram – cant lever beam, simply supported beam, continuous beam, fixed beam. Torsion in shafts and springs, thin cylinder shells.
4.	Machining :
	Working principle of lathe. Types of lathes – Engine lathe – construction details and specifications. Nomenclature of single point cutting tool, geometry, tool signature, functions of tool angles. General and special operations – (Turning, facing, taper turning thread cutting, knurling, forming, drilling, boring, reaming, key way cutting), cutting fluids, coolants and lubricants. Introduction to shaper, slotter, planer, broaching, milling and manufacture of gears, heat treatment process applied to gears.
5.	Welding :
	Welding – Introduction, classification of welding processes, advantages and limitations of welding, principles of arc welding, arc welding equipment, choice of electrodes for different metals, principle of gas (oxy-acetylene) welding, equipment of gas welding, welding procedures (arc & gas), soldering and brazing techniques, types and applications of solders and fluxes, various flame cutting processes, advantages and limitations of flame cutting, defects in welding, testing and inspection modern welding methods, (submerged, CO <sub>2</sub> , atomic – hydrogen, ultrasonic welding), brief description of MIG & TIG welding.
6.	Grinding & Finishing Process :
	Principles of metal removal by grinding, abrasives, natural and artificial, bonds and binding processes, vitrified, silicate, shellac rubber, grinding machines, classification: cylindrical, surface, tool & cutter grinding machine, construction details, relative merits, principles of centreless grinding, advantages & limitations of centreless grinding work, holding devices, wheel maintenance, balancing of wheels, coolants used, finishing by grinding, honing, lapping, super finishing, electroplating, basic principles – plating metals, applications, hot dipping, galvanizing tin coating, parkerising, anodizing, metal spraying, wire process, powder process and applications, organic coatings, oil base paint, lacquer base enamels, bituminous paints, rubber base coating.

7.	Metrology :
	Linear measurement – Slip gauges and dial indicators, angle measurements, bevel protractor, sine bar, angle slip gauges, comparators (a) mechanical (b) electrical (c) optical (d) pneumatic. Measurement of surface roughness; methods of measurements by comparison, tracer instruments and by interferometry, collimators, measuring microscope, interferometer, inspection of machine parts using the concepts of shadow projection and profile projection.
8.	Fluid Mechanics & Hydraulic Machinery :
	Properties of fluid, density, specific weight, specific gravity, viscosity, surface tension, compressibility capillarity, Pascal's law, measurement of pressures, concept of buoyancy. Concept of Reynold's number, pressure, potential and kinetic energy of liquids, total energy, laws of conservation, mass, energy and momentum, velocity of liquids and discharge, Bernoulli's equation and assumptions, venturimeters, pitot- tube, current meters. Working principle & constructional details of centrifugal pump, efficiencies – manometric efficiency, volumetric efficiency, mechanical efficiency and overall efficiency, cavitation and its effect, working principle of jet & submersible pumps with line diagrams.
9.	Industrial Management :
	Job analysis, motivation, different theories, satisfaction, performance reward systems, production, planning and control, relation with other departments, routing, scheduling, dispatching, PERT and CPM, simple problems. Materials in industry, inventory control model, ABC Analysis, Safety stock, re-order, level, economic ordering quantity, break even analysis, stores layout, stores equipment, stores records, purchasing procedures, purchase records, Bin card, Cardex, Material handling, Manual lifting, hoist, cranes, conveyors, trucks, fork trucks.
10.	Thermal Engineering :
	Laws of thermo dynamics, conversion of heat into work vice versa , laws of perfect gases, thermo dynamic processes – isochoric, isobaric, isothermal hyperbolic, isentropic, polytropic and throttling, modes of heat transfer, thermal conductivity, convective heat transfer coefficient, Stefan Boltzman law by radiation and overall heat transfer coefficient. Air standards cycles – Carnot cycle, Otto cycle, Diesel cycle, construction and working of internal combustion engines, comparison of diesel engine and petrol engine. Systems of internal combustion engine, performance of internal combustion engines. Air compressors their cycles refrigeration cycles, principle of a refrigeration plant.

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**PROFORMA FOR CASTE CERTIFICATE FOR SC/ST EMPLOYEES**

**(Format of certificate to be produced by employees belonging to Scheduled Castes or Scheduled Tribes in support of Claim)**

This is to certify that Shri /Smt. / Kum\* \_\_\_\_\_ Son / Daughter\* of \_\_\_\_\_ of village / town\* \_\_\_\_\_ District / Division\* \_\_\_\_\_ of State / Union Territory\* \_\_\_\_\_ belongs to the \_\_\_\_\_ Caste / Tribe\* which is recognized as a Scheduled Caste / Scheduled Tribe\* under:

- The Constitution (Scheduled Caste) / (Scheduled Tribes) Order, 1950.
- The Constitution (Scheduled Caste) (Union Territories) Order, 1951.
- The Constitution (Scheduled Tribes) (Union Territories) order, 1951 (as amended by the Scheduled Caste and Scheduled Tribes Lists Modification), Order, 1956. The Bombay Re-organisation Act 1960, The Punjab Re-organisation Act, 1966, The State of Himachal Pradesh Act, 1970, The North Eastern Areas Re-organisation Act, 1971, and the Scheduled Caste / Scheduled Tribes Order (Amendment) Act, 1976.
- The Constitution (Jammu and Kashmir) Scheduled Caste / Scheduled Tribe Order, 1956.
- The Constitution (Andaman and Nicobar Islands) Scheduled Tribes Order, 1959.
- The Constitution (Dadra and Nagar Haveli) Scheduled Castes / Scheduled Tribes Order, 1962.
- The Constitution (Pondicherry) Scheduled Castes Order, 1964.
- The Constitution Scheduled Tribes (Uttar Pradesh) Order, 1967.
- The Constitution (Goa, Daman and Diu) Scheduled Castes / Scheduled Tribes Order, 1968.
- The Constitution (Nagaland) Scheduled Tribes Order, 1970.
- The Constitution (Sikkim) Scheduled Caste / Scheduled Tribes Order, 1978.
- The Constitution (Jammu and Kashmir) Scheduled Tribes Order, 1989.
- The Constitution (SC) Orders (Amendment) Act, 1990.
- The Constitution (ST) Orders (Amendment) Act, Ordinance 1991.
- The Constitution (ST) Orders (Second Amendment) Act, 1991.
- The Constitution (ST) Orders (Amendment) Ordinance, 1996.

**2. Application in the case of Scheduled Caste / Scheduled Tribe Persons who have migrated from One State/Union Territory Administration.**

This certificate is issued on the basis of Scheduled Caste / Scheduled Tribe certificate issued to Shri / Smt. / Kum\* \_\_\_\_\_ Father / Mother of Shri / Smt. / Kum \_\_\_\_\_ of Village / town in District / Division\* \_\_\_\_\_ of State / Union Territory \_\_\_\_\_ who belongs to the \_\_\_\_\_ Caste/Tribe\* which is recognized as a Scheduled Caste / Scheduled Tribe \* in State / Union Territory \* \_\_\_\_\_ issued by the \_\_\_\_\_ (Name of prescribed authority) vide their No. \_\_\_\_\_ dated \_\_\_\_\_.

3. Shri/Smt./Kum.\* \_\_\_\_\_ and or his/her\* family ordinarily reside(s) in village/town\* \_\_\_\_\_ of \_\_\_\_\_ District/Division of State/Union Territory of \_\_\_\_\_ Place \_\_\_\_\_ State/Union Territory of \_\_\_\_\_

Signature \_\_\_\_\_

Designation \_\_\_\_\_

(with seal of office) \_\_\_\_\_

(\* Please delete the words which are not applicable (\*) Please quote specific presidential offer (\*). Delete the Paragraph which is not applicable. (\*)

**Please Note: The term \*Ordinarily resides\* used 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 :**

1. District Magistrate/Additional District Magistrate/Collector/Deputy Commissioner/ Additional Deputy Commissioner / Deputy Collector/1<sup>st</sup> Class Stipendiary Magistrate/Sub Divisional Magistrate/Taluka Magistrate/Executive Magistrate/Extra Assistant Commissioner.
2. Chief Presidency Magistrate/additional Chief Presidency Magistrate/Presidency Magistrate.
3. Revenues Officers not below the rank of Tehsildar.

4. Sub Divisional Officer of the area where the employees and / or his family normally resides.

**Annexure - B**

**FORM OF CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES APPLYING FOR APPOINTMENT TO POST 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 recognised as a Backward Class under the Government of India, Ministry of Social Justice and Empowerment's Resolution No Dated \*.

Shri/Smt./Kum.\*.....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 OM No. 36012/22/93-Estt(SCT), dated 8.9.1993 and modified vide Government of India, Department of Personnel and Training O.M.No.36033/1/2013-Estt. (Res) dated 27.05.2013 and 13.09.2017\*\*.

Date: \_\_\_\_\_

**DISTRICT MAGISTRATE / DY.  
COMMISSIONER ETC.**

**(Seal)**

**\* The authority issuing the certificate may have to mention the details of Resolution of Government of India, in which the caste of the employees 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.**

PROFORMA FOR DECLARATION TO BE SUBMITTED BY **OTHER BACKWARD CLASS EMPLOYEES** ALONGWITH THE APPLICATION

**DECLARATION**

" I \_\_\_\_\_ son / daughter of Shri \_\_\_\_\_ resident of Village / Town / City \_\_\_\_\_ District \_\_\_\_\_ State \_\_\_\_\_ hereby declare that I belong to the \_\_\_\_\_ ( Indicate your sub caste) community which is recognized as a backward class by the Government of India for the purpose of reservation in services as per orders contained in Department of Personnel and Training Office Memorandum No. 36012/22/93-Estt(SCT) dated 08.09.1993. It is also declared that I do not belong to person / sections ( Creamy Layer) mentioned in column 3 of the Scheduled to the above referred Office Memorandum dated 08.09.1993 and its subsequent through O. M. No. 36033/3/2004-Estt(Res) dated 09.03.2004".

Place : \_\_\_\_\_

Signature of the Employees \_\_\_\_\_

Date : \_\_\_\_\_

Name of the Employees \_\_\_\_\_