

Recruitment of engineering professionals on regular basis

RITES Ltd., a Mini Ratna Central Public Sector Enterprise under the Ministry of Railways, Govt. of India is a premier multi-disciplinary consultancy organization in the fields of transport, infrastructure and related technologies.

RITES Ltd. is in urgent need of dynamic and hard working professionals as under:

VC No.	Post	No. of Vacancies					Total
		UR	EWS	OBC (NCL)	SC	ST	
43/23	Engineer (Civil)	7	1	-	2	-	10*

* 2 posts reserved for PwD category on horizontal basis

Category wise and post wise details of 2 vacancies reserved for Persons with Benchmark Disabilities (PwBDs) are given below:

VC No.	Post	Reserved for identified categories of Persons with Benchmark Disabilities (PwBDs)				
		Cat-a	Cat-b	Cat-c	Cat-d&e	Total PwBD
43/23	Engineer (Civil)	-	1	1	-	2

Age Limit

Maximum Age	Cut-off date for calculation of Age
32 Years	01.02.2023

Minimum Qualifications & Experience

VC No	Designation & Pay Scale (Rs.)	Minimum Qualification*	Minimum post - qualification experience
43/23	Engineer (Civil) (Rs. 40, 000 –1, 40, 000)	Full time Bachelor's Degree in Civil Engineering	2 Years

Experience is defined as under:

Candidates should have post-qualification experience of minimum two years in the field of Construction Supervision.

*Candidates belonging to UR/EWS category (and candidates belonging to SC/ST/OBC(NCL)/PWD applying against unreserved posts) should have first class degree/ minimum 60% marks in Minimum Qualification for consideration against unreserved posts.

Reserved category candidates (SC/ST/OBC(NCL)/PWD as applicable) should have at least 50% marks in Minimum Qualification for consideration against reserved posts.

Educational Qualification shall be as on 01.02.2023.

Note for Educational Qualification:

The candidate should possess Degree recognized by AICTE; from a University incorporated by an Act of Central or State legislature in India or other Educational Institutions established by an Act of Parliament or declared to be Deemed as University under Section 3 of the University Grants Commission Act, 1956. Sections A & B examination of the Institution of Engineers (India) which is treated as equivalent to Degree by Govt. of India, and recognized by AICTE shall also be accepted.

Selection Process

On the basis of applications received, eligible candidates will be required to appear in the written test (Off-Line/On-Line). The candidates may be shortlisted for selection on the basis of performance in the written test. The company reserves the right to shortlist the number of candidates for selection out of eligible candidates. Due to prevalent pandemic situation, based on the requirement and discretion of RITES, selection process may be conducted online.

Based upon the performance in the Written Test and fulfilling the conditions of eligibility; candidates shall be shortlisted for Interview.

The weightage distribution of various parameters of the selection shall be as under:

Experience	-	5%
Written Test	-	60%
Interview	-	35%
Total	-	100%

(Technical & Professional proficiency - 25 %; Personality Communication & Competency – 10%)

A minimum of 50% marks for UR/ EWS (45% for SC/ST/OBC (NCL)/PWD against reserved posts) in written test and a minimum of 60% marks for UR/ EWS (50% for SC/ST/OBC (NCL)/ PWD against reserved posts) in interview will be required to enable the candidate to be considered for placement on panel. There will be no minimum qualifying marks required in the aggregate.

There will be 125 objective type question carrying one mark each for a duration of 2.5 Hours. There will be no negative marking system applicable and therefore, no marks will be deducted in case of incorrect answer.

Appointment of selected candidates will be subject to their being found medically fit in the Medical Examination to be conducted as per RITES Rules and Standards of Medical Fitness for the relevant post.

Candidates have the option to appear for interview either in Hindi or English.

Relaxations & Concessions

Reservation/ relaxation/ concessions to EWS/ SC/ST/OBC (NCL)/PWD/ Ex-SM/ J&K Domicile would be provided against reserved posts (where applicable) as per extant Govt. orders.

Relaxation in upper age limit to OBC (NCL)/ SC/ ST candidates shall be provided against reserved posts as per extant Govt. orders.

RITES regular/contract employees fulfilling the educational qualification and experience criteria shall be given age relaxation of 5 years, over and above the upper age limit indicated above.

PWD candidates suffering from not less than 40% of the relevant disability shall only be eligible for the benefit of PWD. Such PWD candidates shall be eligible for relaxation of 10 years in upper age limit.

PWD candidates will have to meet the Physical Requirements and Functional Classifications which have been identified for the post as under:

Categories for which identified	Functional Classification	Physical Requirements
Locomotor disability	OA, OL, Leprosy Cured, Acid Attack Victims	S, ST, BN, W, SE, MF, C, RW, KC, CL, JU, H
Hearing Impairment	HH	

Persons with Disabilities belonging to the category/ categories for which the post is identified (as indicated in Table above) can also apply even if no vacancies are specifically reserved for them. Such candidates will be considered for selection for appointment to the post by general standard of merit.

Functional Classification:

Code	Functions
OH	Orthopaedically Handicapped
VH	Visually Handicapped
HH	Hard of Hearing
OL	One leg
OA	One arm
BA	Both Arms
BH	Both Hands
MW	Muscular Weakness
OAL	One arm one leg
BLA	Both Legs and Arms
BLOA	Both Legs one Arm
LV	Low Vision
B	Blind
PD	Partially Deaf
FD	Fully Deaf
BL	Both legs
D	Dwarfism
CP	Cerebral Palsy
LC	Leprosy Cured
AAV	Acid Attack Victims
MD	Multiple Disabilities

Physical Requirements:

Code	Physical Requirements
S	Sitting
ST	Standing
W	Walking
SE	Seeing
H	Hearing/ Speaking
RW	Reading and Writing
C	Communication
MF	Manipulation by fingers
PP	Pulling & Pushing
L	Lifting
KC	Kneeling & Crouching
BN	Bending
M	Movement
JU	Jumping
CL	Climbing

The above lists are subject to revision.

Nature & Period of Engagement

The appointment will be initially on probation for a period of one year.

Selected candidates shall be liable for posting to any place in India as per requirements of the Company.

Candidates will be required to clear the screening test for confirmation of their services at the end of the probation period. Those who fail to qualify in the screening test, their probation period may be extended, and further action taken in accordance with the policy of the Company.

Candidates may also note that no application of an employee would be forwarded for jobs outside until he/ she completes 2 years of service in the Company.

Remuneration

The pay would be fixed at the minimum of the scale. Candidates from Government Departments/ PSUs are eligible for protection of their Basic Pay in accordance with the policy of the Company. In addition to Basic Pay candidates would be paid DA, Fixed/variable allowances as applicable to the scale, Performance Related Pay, Medical facilities, HRA/Lease accommodation, attractive superannuation package consisting of contribution to PF, Gratuity as per Gratuity Act and Post Retirement Medical Scheme. Other benefits would be as under:

- | | | |
|--|---|---|
| a) Leaves as per leave rules
b) Maternity Leave/ Paternity Leave
c) Medical facility.
d) Group Insurance.
e) Leave Encashment. | } | As per company rules applicable to Regular employees. |
|--|---|---|

The approximate emoluments at the minimum of the pay-scale is ₹ 13.76 LPA.

Remuneration mentioned above is only indicative. Actual remuneration shall depend upon place of posting and other terms & conditions of appointment.

Fees

The candidates will have to deposit the under mentioned amount of fees during online application:

Category	Fee
General/OBC Candidates	Rs. 600/- plus Taxes as applicable
EWS/ SC/ST/ PWD Candidates	Rs. 300/- plus Taxes as applicable

For any difficulty/ queries regarding fee payment, candidates may contact on following only:

Helpdesk No: 011 – 33557000, Extension Code - 13221

Helpdesk e-mail id: pghelpdesk@hdfcbank.com

Note:

- a) Candidates should note that the fee submitted through any other mode except the mode specified, will not be accepted by RITES and such applications will be treated as without fee and will be summarily rejected.
- b) Persons with disabilities are given concession in the fee provided they are otherwise eligible for appointment. A PWDs candidate claiming age relaxation/fee concession will be required to submit along with their Detailed Application Form, certified copy of the PWD certificate as per latest GOI format.

How to Apply

- 1. Before applying candidates should ensure that they satisfy the necessary conditions and requirements of the position.**
2. Interested candidates fulfilling the above laid down eligibility criteria are required to apply online in the registration format available in the Career Section of RITES website, <http://www.rites.com>.
3. While submitting the online application; the system would generate 'Registration No.' on top of online form filled up by the candidate. Note down this "Registration No." and quote it for all further communication with RITES Ltd.
4. While filling up the required details, candidates are advised to carefully and correctly fill the details of "Identity Proof". Candidates are also advised to note the same and ensure the

availability of the same Identity Proof as it will be required to be produced in original at later stages of selection (if called).

5. **After filling up the required details under the “Fill/ Modify Application Form”, click on “Make payment”. The payment details show the amount to be paid to the bank based on your category.**

Applications without successful fee payment shall be treated as incomplete and shall be summarily rejected.

6. A copy of this online **APPLICATION FORM** containing the registration number is to be printed, signed, and furnished, along with **SELF-ATTESTED SCANNED COPIES** of the following documents in the given order only (from top to bottom):
 - a. 2 recent passport size colour photographs
 - b. High School certificate for proof of Date of Birth
 - c. Certificates of Academic & Professional qualifications and statements of marks of all the qualifications for all semesters/years (Xth, XIIth, Diploma/ Graduation/ Post-Graduation as applicable)
 - d. EWS/ SC/ST/OBC Certificate in the prescribed format by Govt. of India (if applicable)
 - e. Proof of Identity & Address (Passport, Voter ID, Driving Licence, Aadhaar Card etc)
 - f. PAN Card
 - g. Proof of different periods of experience as claimed in the Application Form (if applicable)
 - h. Any other document in support of your candidature
 - i. PWD Certificate as per latest format (if applicable).

No documents are to be submitted at present. Candidates may be asked to submit relevant documents at a later stage if so required.

7. Please attach copies of experience certificates from your previous employment in respect of claims made by you in your application. In respect of current employment, **experience certificate/ joining letter along with last months’ salary slips, or, Form 16 and other documents** which clearly prove your continuity in the job are to be attached. In case your claim is not established from the proofs submitted by you; your application is liable to be rejected. Please check your claims and certificates submitted by you carefully. Incomplete application, or, insufficient proof would entail rejection of your application. No claims would be entertained at a later stage.
8. **For proof of CTC/ salary, candidates shall have to submit a copy of their last Form No. 16/ Earning Card/ salary slip/ Appraisal letter/ any other suitable document.**
9. Community certificate (SC/ST/OBC) should be in the format prescribed by Government of India only. OBC candidates included in the Central List with certificate not more than 12 months old (with clear mention of candidate not belonging to “Creamy Layer”) in the GOI prescribed format only will be considered for the posts reserved for OBC. EWS certificate should also be as per Gov. of India format
10. **Hard copies of documents are not to be sent to this office through post/ courier.**
11. The candidates are also advised to keep a copy of Application Form submitted with them and to carry the same at the time of the Interview (if called).
12. **Candidates who have registered online but whose application are not submitted by the due date, their candidature may not be considered. The company reserves the right to consider only such applications which are received by the prescribed date. RITES Ltd. does not bear any responsibility for any delay for any reason whatsoever.**
13. Applications received after the last date of receipt of Application Form shall be rejected. RITES Ltd. does not bear any responsibility for any delay in post/courier for any reason whatsoever.

14. The **original testimonials/documents along with one self-attested copy** will have to be produced by the candidate(s) at the time of interview (if called).
15. Departmental Candidates of RITES are required to apply online and submit their hard copy through proper channel.
16. Candidates working in Government Departments/ PSU are required to apply through proper channel. The candidates who apply directly would have to bring NOC from their employer at the time of Interview (if called) so as to consider their claims under technical resignation category
17. Candidatures of applicants not fulfilling the minimum laid down criteria advertised with respect to educational qualifications, age, and experience for selection to the respective post, would be liable for cancellation.
18. Candidates should submit only one application for one vacancy and application once submitted cannot be altered. A valid e-mail ID is essential for submission of the online application. RITES will not be responsible for bouncing of any e-mail sent to the candidates. However, candidates can apply for any number of vacancies.
19. The candidates must submit all the details pertaining to his candidature viz. personal details, educational qualification details, experience details, category etc. Suppression, in this regard, if any, detected on a future date shall render the candidature liable for forfeiture.
20. If any claim made by a candidate is found to be incorrect, his/her candidature shall be summarily rejected.

Venue & Time

S. No.	Selection Round	Venue & Date
1	Written Test	6 different locations across India* (Exact address shall be communicated to the candidates later)
2	Interview (Subject to performance in Written Test)	Venue for the Interview shall be communicated to shortlisted candidates

Candidates are required to give two preferences for their choice of center for the Written Test at the time of online application. Although efforts shall be made to allot a center of choice to the candidates, however RITES reserves the right to allot to a candidate a center which was not indicated as his preference.

Test Centers for Written Test*:

S. No.	City
1	Delhi/Gurgaon
2	Kolkata
3	Chennai
4	Mumbai
5	Hyderabad
6	Nagpur

***All centers except Delhi/ Gurgaon are tentative and will depend on number of candidates and discretion of RITES.**

Exact Date, time and details of venue of the selection shall be communicated to shortlisted candidates.

Syllabus for Written Test

Topics
General Aptitude/ General Knowledge/ General Awareness etc
Surveying: - Types of leveling Instruments, Temporary adjustments, Booking and reducing of levels, Checking the leveling work, longitudinal section, Cross Sections, Error due to curvature and refraction.
Total station/GPS Survey-Features of total station and GPS, Principles of working with GPS, adjustment of errors, Open and closed traverse and their application to engineering problems.
Trigonometrically Leveling-Heights and Distances, Geometrical Observations, Determination of Difference in Elevation.
Triangulation Systems, Base Line Measurement, Calculations of Length of Base, Measurement of Horizontal Angles.
Contours and Contour Interval, Methods of Locating Contours, Interpolation of Contours.
Route Surveying-Elements of Reconnaissance Survey, Preliminary Survey, Final Location Survey, Construction Survey.
Simple, compound, reverse and transition curves, Vertical curves for roads and railways, setting out curve by offset and by method of deflection angles, Length of curves calculation.
Hydrographic survey-sounding, charting, cross section of streams and rivers and gauging of discharges.
Principles and utility of Aerial photogrammetric and remote sensing, satellite data.
Soil as a three phase system water content, density and unit weights, specific gravity, voids ratio porosity and degree of saturation, density index.
Classification of soils, compaction, standard Procter test, water density relationship, modified proctor test, field compaction methods, field compaction control, calibration curve, factors affecting compaction.
Exploratory boring, depth of exploration, spacing and number of boring, method of sampling and types of samples, bore logs, core recovery, rock quality designation, field vane shear test, standard penetration test and its application, field plate load test and limitation, ultimate bearing capacity of shallow foundation, Plate load test, Elements of combined and raft foundation.
Pile foundation – General considerations in pile foundation, types of piles, pile load test and use of relevant IS code.
Stability of slopes, classical theory of earth pressure by Rankine and Coulomb, active and passive pressure against retaining walls.
Differential method of improving soil characteristics at site, element of soil stabilization, sand drain, vibro flotation technique.
Data Required for Preparation of an estimate, Types of an estimates, Items of Work, Description of an Item of work, Measurement of Works, Guidelines for Measurements, I.S. mode or Units of measurements, Plinth Area, Floor Area, Carpet and F.S.I.
General procedure of measurement of works, Methods of taking out Quantities, Various items of works, Prime Costs and Provisional Sums, Provisional Quantities, Contingencies, Work-charged, Establishment, Centage Charges, Building Estimate Methods, Checks over Accuracy of Detailed Estimates.

Analysis of Rates – quantities of Materials and labour Required for different items of Works. Approximate Rates of Equipment/Machinery required for different items of Works. Transportation of Materials and cost. Rates specified for various categories of Laborers in Building Industry. Analysis of Rates of Principal Items of Work in the Building Construction.
Type of Specifications, Detailed Specifications, Standard Specifications
Type of tenders, components of tender document, preparation of tender document.
Beam:- Types of Supports, Shear Force and Bending Moment, Shear Force and Bending Moment Diagrams, Graphical Method of Plotting S.F. and B.M. Diagrams.
Beams: - Deflections by Moment Area Method and Conjugate Beam Method, Slope and Deflection for Cantilever and Simply Supported Beam, Analysis of Fixed Beam and Continuous Beams.
Column analysis with different support condition, column carrying eccentric load, laterally loaded column, effective height, short column, slender column.
Deflection of framed structures Moving loads on beam/frames, influence lines for bending moment and shear force in members of framed structure. Moment distribution and slope deflection methods.
Method of Design – Working Stress Method, Ultimate Load Method, Limit State Method
Singly and Doubly Reinforced Beams and slabs, columns
Shear Stress, Diagonal Tension, Shear Reinforcement, Development Length, Anchorage Bond, Flexural Bond
Basic Concepts of Prestressed Concrete
Stress strain curve for mild steel, rolled steel section, loads, permissible stresses, working stresses, factor of safety minimum thickness of structural members, Design methods.
Compression Members-Effective length, Slenderness ratio, Column design , Types of sections, assumptions, Design of Axially loaded compression members
Tension Members-Net sectional area, Permissible stress, Design of axially loaded tension member
Design of Plate girder – bending, shear, economical depth.
Welded joints, types of welds, design of fillet weld, design of butt weld.
Classification of highways, types of surveys, cross-section and profiles, soil investigation
Elements of right of way and standards, gradient, speed, sight distances, curves.
Testing of aggregate, bitumen and cement, Field quality test for earthwork, concrete work, brick & stone masonry, Road work.
California bearing ratio method for design of flexible pavement
Design of concrete pavement, pavement joints, preparation of the sub-grade and sub-base
Types of alignment survey, parameters of speed, loading and permanent way for various classes of railway line, schedule of dimensions.
Curves, gradient, earthwork and permanent way-rails, sleepers, ballast, fastenings and fixtures, points and crossings, level crossing.
Daily maintenance, periodical maintenance, maintenance of track alignment, maintenance of drainage, maintenance of track components, maintenance of points and crossings, maintenance of level crossing.
Airport Site Selection, Estimation of Future Air Traffic Needs, Runway Orientation, Runway Configuration, Basic Runway Length, Correction for Elevation, Temperature and Gradient, Airport Classification, Airport Capacity, Runway Capacity, Gate Capacity, Taxiway Capacity, Airport layout.

General Instructions

1. Management reserves the right to cancel/ restrict/ enlarge/ modify/ alter the selection/ recruitment process at any stage, without issuing any further notice or assigning any reason thereafter.
2. The number of vacancies may vary.
3. Departmental candidates of RITES and candidates working in Government Departments/ PSU shall be allowed to join RITES only after being properly relieved from their parent organization.
4. Before applying, the Candidates must satisfy themselves about their eligibility for the post applied for.
5. In case it is detected at any stage of recruitment that a candidate does not fulfill the eligibility norms and/or that he/she has furnished any incorrect/false information or has suppressed any material fact (s), his/her candidature is liable for cancellation. If any of these shortcomings is/are detected even after appointment, his/her services are liable to be terminated.
6. **Any corrigendum/addendum to this advertisement will be displayed only on the Company's website www.rites.com. Therefore, applicants are advised to keep checking the Company's website for any update.**
7. The period of training/internship shall not be counted towards post qualification experience.
8. Legal jurisdiction will be Delhi in case of any dispute
9. No train/bus fare / TA / DA shall be payable.
10. In case a candidate is found suitable for a lower post than for which he/she has applied, he/she shall only be considered for the post for which he/she has been found suitable by the selection committee.

Communication with RITES

Any information regarding this recruitment process would be made available on the e-mail address provided by the candidate at the time of registration and/or shall be uploaded on RITES website. Candidates are advised to periodically check the Career section of RITES website for further updates.

Candidates are encouraged to go through the detailed advertisement and read the "Frequently Asked Questions (FAQs)" uploaded on RITES website under Career section to solve their queries.

Queries if remaining should be sent to rectt@rites.com only and contain the following particulars:

- i. VC No.
- ii. REGISTRATION/ROLL NO.
- iii. NAME OF CANDIDATE IN FULL AND IN BLOCK LETTERS.
- iv. Valid email address as given in the application

Communications not containing above particulars shall NOT BE ATTENDED TO.

Any query/ issue should be brought to notice of RITES well in advance of the due date. RITES will not be responsible for non-submission of application due to issues brought to notice at the last moment.

Queries related to information already provided in the advertisement shall not be attended to.

Important Dates

S. No.	Particular	Date
1	Commencement of submission of online application and online	15.02.2023

	payment of fees	
2	Last date of submission of online application and online payment of fees	13.03.2023
3	Date of selection	To be notified later