

**RITES LIMITED****(A Govt. of India Enterprise)****Shikhar, Plot No. 1, Sector – 29, Gurgaon – 122001****Recruitment of Design Engineer on contract 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 on contract basis as under:

VC No.	Post	No. of Vacancies					
		UR	EWS	OBC (NCL)	SC	ST	Total
197/23	Engineer (Design)	2	-	-	1	1	04

**Age Limit**

Maximum Age	Cut-off date for calculation of Age
40 Years	01.07.2023

**Minimum Qualifications & Experience**

VC No	Designation	Minimum Qualification*	Minimum post - qualification experience/ Relevant Experience
197/23	Engineer (Design)	Full Time Bachelors Degree in Civil Engineering.	4/2 Years

**Experience is defined as under:**

Experience in Structural Design and Drawings for concrete/steel works, Rail- Road Over Bridges (ROBS), pre-stressed concrete bridges, balanced cantilever bridges, steel bridges, foot- over bridges (FOB), elevated segmental structures/ continuous bridges etc.

\*Candidate belonging to General/ 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.

**Note for Educational Qualifications:**

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.

Experience shall be calculated as on 01.07.2023.

### 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.

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:

SN	Categories for which identified	Functional Classification	Physical Requirements
1	Locomotor disability	OA, OL, Leprosy Cured, Acid Attack Victims	S, ST, BN, W, SE, MF, C, R, W & RW

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
OL	One leg affected (R or L)
OA	One arm affected
OAL	One arm one leg affected
BL	Both legs affected
HI	Hearing Impaired
LV	Low Vision

Physical Requirements:

Code	Physical Requirements
S	Work performed by sitting (on bench or chair)
ST	Work performed by standing
SE	Work performed by seeing
RW	Work performed by reading and writing
BN	Work performed by bending
MF	Work performed by manipulation by fingers
C	Work performed by communication
W	Work performed by walking
H	Hearing/ Speaking
KC	Kneeling and Crouching
JU	Jumping
CL	Climbing

The above lists are subject to revision.

## 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 Exam	-	60%
Interview	-	35%
(Technical & Professional proficiency - 25 %; Personality Communication & Competency – 10%)		
Total	-	100%

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.

The candidates shall have to produce copies of educational qualification and experience claimed which shall be verified from the original documents at the appropriate stage and shall be subject to verification from the original source.

Based upon fulfilling the conditions of eligibility; candidates shall be shortlisted for Interview.

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

## Nature & Period of Engagement

The appointment shall be purely on contract basis initially for a period of one year, extendable until completion of the assignment subject to mutual consent and satisfactory performance.

Selected candidates shall be liable for posting in Maharashtra State initially, however they may be posted anywhere in India as per Company requirements.

## Remuneration

Pay, allowances and perks for the post would be as per the number of minimum post-qualification work experience detailed below:

Number of Minimum Work Experience as per the advertisement	Monthly Basic Pay for Degree Holders	Yearly CTC for Degree Holders
4	24761	540784

**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 applicable taxes
EWS/ SC/ST/ PWD Candidates	Rs. 300/- plus applicable taxes

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. 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 selection (if called).
7. A copy of **SELF-ATTESTED SCANNED COPIES** of the following documents needs to be produced on the day of interview in the given order only from top to bottom (if called):
  - 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.**

The scan copy of the documents should be of good quality and clearly visible.

8. Please attach copies of experience certificates from your previous employer 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.
9. 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.
10. 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.
11. Hard copies of documents are not to be sent to this office through post/ courier. Documents are to be uploaded on RITES portal only.
12. The original testimonials/documents along with one self-attested copy will have to be produced by the candidate(s) at the time of selection (if called).
13. **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.**
14. Mere applying for the post/ submission of documents/ appearing or qualifying in the selection does not confer any right on the candidates for claiming selection. If it is found that a candidate does not fulfill the advertised eligibility criteria, his/her candidature will be summarily rejected.
15. 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.
16. 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.
17. 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	Mumbai
2	Interview (Subject to performance in Written Test)	Venue for the Interview shall be communicated to shortlisted candidates

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

## 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](http://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 also will be uploaded on RITES website.

## Syllabus for Written Test

### Engineer (Design)

#### Structural Analysis:

Simple stresses and strains, Shear Force and Bending Moments, stresses in beams, direct and bending stresses. Deflections of beams, Fixed 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.

#### Design of Reinforced Concrete Structures:

Method of Design - Working Stress Method, Limit State Method, Singly and Doubly Reinforced Beams and slabs, columns, and footings. Continuous beams and slabs, Cantilever beams and slabs. Shear Stress, Diagonal Tension, Shear Reinforcement, Development Length, Anchorage Bond, Flexural Bond

#### Design of Steel Structures:

Stress strain curve for mild steel, rolled steel section, Structural fasteners – Types of riveted and bolted joints, strength of riveted/ bolted joints. Efficiency of joints, welded joints. Advantages and disadvantages of welded joints. Types of welds. Design of fillet welds, design of Butt welds. Design of eccentric connection. Tension members. Design of axially loaded Tension Members. Compression member – Design of compression members. Plate girder- Design of web, Design of Flanges.

#### Design of Prestressed Concrete Structures:

Advantages of prestressed concrete, Applications of prestressed concrete, materials for prestressed concrete. Prestressing systems, Analysis of prestress and bending stresses. Losses of prestress. Deflection of prestressed concrete members, Flexural strength of prestressed concrete sections. Shear and Torsional resistance of prestressed concrete members. Design of prestressed concrete sections.

### **Design of Bridges:**

Introduction and Types of Bridges, Site investigation and planning of bridges. Factors affecting scour and its evaluation. Type of Bridge foundations. Design of bridge foundation - open, pile, and well foundation. Analysis and Design of Piers, abutments, and Superstructure. Types of superstructures and design. Steel, RCC and PSC Girder bridges. Steel - Concrete composite bridges: load distribution, design philosophy, shear connectors with relevant Indian Codes such as IS, IRC and IRS etc. Concept of earthquake resistant design of structures. Introduction to long span bridges - cantilever, arch, cable stayed and suspension bridges, etc.

### **Soil Mechanics and Foundation Engineering:**

Three-phase system and phase relationships, index properties; Unified and Indian standard soil classification system Permeability - one dimensional flow, Seepage through soils - two - dimensional flow, flow nets, uplift pressure, piping, capillarity, seepage force Principle of effective stress and quicksand condition. Compaction of soils; One- dimensional consolidation, time rate of consolidation Shear Strength, Mohr's circle, effective and total shear strength parameters Stress-Strain characteristics of clays and sand; Stress paths.

Sub-surface investigations - Drilling bore holes, sampling, plate load test, standard penetration and cone penetration tests Earth pressure theories - Rankine and Coulomb; Stability of slopes - Finite and infinite slopes, Bishop's method Stress distribution in soils - Boussinesq's theory; Pressure bulbs, Shallow foundations - Terzaghi's and Meyerhoff's bearing capacity theories, effect of water table Combined footing and raft foundation; Contact pressure Settlement analysis in sands and clays Deep foundations - dynamic and static formulae, Axial load capacity of piles in sands and clays, pile load test, pile under lateral loading, pile group efficiency, negative skin friction.

## **Communication with RITES**

Any information regarding this recruitment process would be made available on the email 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 site 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](mailto: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.**

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 may not be attended to.

#### **Important Dates**

<b>S. No.</b>	<b>Particular</b>	<b>Date</b>
1	Commencement of submission of online application and online payment of fees	17.07.2023
2	Last date of submission of online application and online payment of fees	28.07.2023
3	Date of Written Examination	04.08.2023
4	Date of Interview	To be notified later