



Recruitment of Engineering Professionals on Regular Basis.

RITES Ltd., a Navratna 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						Age limit (in years)
		UR	EWS	OBC (NCL)	SC	ST	Total	
RG/01-R1/25	Manager /Civil (Transport Planner / Transport Engineer)	-	-	1	-	-	1	35 Years
RG/05-R1/25	Senior Manager / Mechanical (Ventilation Expert)	-	-	1	-	-	1	38 Years
RG/06-R1/25	Senior Manager / ES&T (E&M Expert)	-	-	-	1	-	1	38 Years
RG/07-R1/25	Assistant Manager / Civil (Bridge Engineer)	1	-	-	-	1	2*	32 Years

* 1 post reserved for PwBD on a Horizontal Basis.

Note: Age, experience, and all other eligibility criteria shall be reckoned as on the last date of submission of the application i.e. 30.09.2025(cut-off date).

Minimum Qualifications & Experience

VC No	Designation / Post	Minimum Qualification*	Minimum post -qualification experience	Relevant Post-Qualification Work Experience Description required for all candidates
RG/01- R1/25	Manager /Civil (Transport Planner / Transport Engineer)	Full time bachelor's degree in civil engineering / Full time B. Arch – Architecture (5 Years) / Full time B Planning (4 Years) AND Master's degree in Transport Engineering/ Transport Planning or equivalent / synonymous / similar qualification	5 Years	• Minimum of 5 years of post-qualification experience in areas of urban transport planning / transport demand modeling / traffic engineering & management / multimodal integration • Should be proficient in GIS and demand modelling software's – CUBE/VISUM

Experience is defined as under:

a) For candidates from Central/State Govt./PSU/Autonomous Organizations

Candidates from Central/State Govt./PSUs/Autonomous Organizations having IDA/CDA Pay Scale etc. should have worked for at least 2 years in the IDA pay scale of Rs. 40,000-1,40,000 /CDA pay scale in the level 7 of pay matrix of 7th CPC (pre-revised IDA/CDA pay scales as applicable, for salary drawn in pre-revised pay scale)

For Candidates from State PSUs/Autonomous Organizations/PSBs/ Public Sector Insurance Companies/Other Statutory Bodies etc. not following IDA/CDA Pay Scale should have worked for at least 2 years in the equivalent pay scale to IDA pay scale of Rs. 40,000- 1,40,000 /CDA pay scale in the level 7 of pay matrix of 7th CPC. Equivalence in such cases shall be arrived at by comparison of the maximum basic pay in the pay scale in which the incumbent

drew salary with the relevant IDA/CDA Pay scale.

The afore-mentioned requirement of residency of two years in the immediate lower scale shall not be applicable in case of candidates from the same pay scale or higher pay scale of the advertised post.

b) Candidates from Private Sector or other Organizations

Candidates from private sector or other organizations should have an annual CTC of at least 14.46 LPA on the last date for submission of the application.

The criteria for both (a) & (b) above shall be applicable for the last (latest) organization in which candidate has worked/ is working.

VC No	Designation / Post	Minimum Qualification*	Minimum post - qualification experience	Relevant Post-Qualification Work Experience Description required for all candidates
RG/05-R1/25	Senior Manager / Mechanical (Ventilation Expert)	Full time bachelor's degree in mechanical engineering (M. Tech. in Aerodynamics or Thermal Engineering or Fluid Mechanics is preferred)	8 Years	Minimum of 5 years' experience in Design of Ventilation for Road / Rail / Metro tunnels with domain expertise in Tunnel ventilation / HVAC system / Industrial Ventilation.

Experience is defined as under:

a) For candidates from Central/State Govt./PSU/Autonomous Organizations

Candidates from Central/State Govt./PSUs/Autonomous Organizations having IDA/CDA Pay Scale etc. should have a total experience of 8 years and should worked for at least 2 years in the IDA pay scale of Rs. 50,000-1,60,000 /CDA pay scale in the level 9 of pay matrix of 7th CPC (pre-revised IDA/CDA pay scales as applicable, for salary drawn in pre-revised pay scale)

For Candidates from State PSUs/Autonomous Organizations/PSBs/ Public Sector Insurance Companies/Other Statutory Bodies etc. not following IDA/CDA Pay Scale should have a total experience of 8 years and should worked for at least 2 years in the equivalent pay scale to IDA pay scale of Rs. 50,000- 1,60,000 /CDA pay scale in the level 9 of pay matrix of 7th CPC. Equivalence in such cases shall be arrived at by comparison of the maximum basic pay in the pay scale in which the incumbent drew salary with the relevant IDA/CDA Pay scale.

The afore-mentioned requirement of residency of two years in the immediate lower scale shall not be applicable in case of candidates from the same pay scale or higher pay scale of the advertised post.

b) Candidates from Private Sector or other Organizations

Candidates from private sector or other organizations should have a total experience of 8 years and should have an annual CTC of at least 17.79 LPA on the last date for submission of the application.

The criteria for both (a) & (b) above shall be applicable for the last (latest) organization in which candidate has worked/ is working.

VC No	Designation / Post	Minimum Qualification*	Minimum post - qualification experience	Relevant Post-Qualification Work Experience Description required for all candidates
RG/06-R1/25	Senior Manager /ES&T (E&M Expert)	Full time bachelor's degree in electrical engineering (M.Tech in Industrial power and Automation or Control and Automation or Power system is preferred)	8 Years	Minimum of 5 years' experience in E&M Design of Road / Rail / Metro Tunnels

Experience is defined as under:

a) For candidates from Central/State Govt./PSU/Autonomous Organizations

Candidates from Central/State Govt./PSUs/Autonomous Organizations having IDA/CDA Pay Scale etc. should have a total experience of 8 years and should worked for at least 2 years in the IDA pay scale of Rs. 50,000-1,60,000 /CDA pay scale in the level 9 of pay matrix of 7th CPC (pre-revised IDA/CDA pay scales as applicable, for salary drawn in pre-revised pay scale)

For Candidates from State PSUs/Autonomous Organizations/PSBs/ Public Sector Insurance Companies/Other Statutory Bodies etc. not following IDA/CDA Pay Scale should have a total experience of 8 years and should worked for at least 2 years in the equivalent pay scale to IDA pay scale of Rs. 50,000- 1,60,000 /CDA pay scale in the level 9 of pay matrix of 7th CPC. Equivalence in such cases shall be arrived at by comparison of the maximum basic pay in the pay scale in which the incumbent drew salary with the relevant IDA/CDA Pay scale.

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Candidates from private sector or other organizations should have a total experience of 8 years and should have an annual CTC of at least 17.79 LPA on the last date for submission of the application.

The criteria for both (a) & (b) above shall be applicable for the last (latest) organization in which candidate has worked/ is working.

VC No	Designation / Post	Minimum Qualification*	Minimum post qualification experience	Relevant Post-Qualification Work Experience Description required for all candidates
RG/07-R1/25	Assistant Manager /Civil (Bridge Engineer)	Full time bachelor's degree in civil engineering	2 Years	Minimum of 2 years' experience in Design of Bridges
<u>Experience is defined as under:</u> Minimum of 2 years' experience in Design of Bridges				

Note: The period of training (except on-the-job training) / internship / teaching / academic / fellowship / PhD research experience shall not be counted as a part of experience.

***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)/PwBD as applicable) should have at least 50% marks in Minimum Qualification for consideration against reserved posts.

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.

If the certificate or marksheet does not indicate the first class/division or percentage, the applicant shall provide the conversion formula for deriving the percentage from the CGPA/DGPA/etc., as issued by the concerned university/institution. In such cases where the university/institution does not have a conversion formula, an undertaking to this effect must be submitted duly signed by an authorized representative of the university/institution, and then minimum 6 on 10-point scale will be considered as 60%.

Selection Process

1. Written Test:

There will be 125 objective type questions 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 an incorrect answer. Candidates belonging to PwBD Category are eligible for an compensatory time of 50 minutes.

A minimum of 50% marks for UR/ EWS (45% for SC/ST/OBC (NCL)/PwBD against reserved posts) in written test will be required to enable the candidate to be considered for further consideration.

2. Document Scrutiny:

Based on the result of the written test and no. of vacancies, the documents submitted by candidates will be scrutinized by RITES Limited and shortlisted candidates will be called for interview preceded by verification of original documents. It will be the candidates' responsibility to upload supporting documents substantiating the claims submitted in the application form.

Relaxations & Concessions In case of deficiency in documents scrutinized by RITES in establishing the claim made in the application, the same shall be notified on the website along with the list of candidates to be called for the interview preceded by document verification. The candidates called for the interview shall bring all the required documents in original, including the original copies of such documents which fulfill the deficiency notified (as applicable). It shall be the responsibility of the candidate to produce all the documents establishing their eligibility and claim made in the application, and inability to produce the documents fulfilling the deficiency at the time of document verification before the interview will render their candidature ineligible.

The documents fulfilling the deficiency must be submitted at the time of document verification and the same must be issued in relation to the deficiency notified, with the purpose of substantiating the claim made in the application by such candidate; however, the date on the same shall not be later than the of date of document verification (submission of documents with regard to category status including OBC-NCL and EWS will continue to be governed as per the 'Relaxation & Concessions' section of this advertisement, to be read along with clause 8 under 'How to Apply' section of this advertisement).

3. Interview:

Candidates will be called for interview in the ratio of 1:6 to the number of vacancies.

The weightage distribution of various parameters of the selection involving both written test & interview shall be as under:

Written Test	-	60%
Interview	-	40%
(Technical & Professional proficiency - 30 %; Personality Communication & Competency – 10%)		
Total	-	100%

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.

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

Based on the requirement and discretion of RITES, the selection process of written test or interview or both may be conducted from Regional Offices, which shall be intimated upon issuance of respective call letters to applicable candidates.

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.

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.

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 below.

The following relaxation in age shall be given, subject to production of required certificates:

- SC/ST Category: 5 years
- OBC-NCL Category: 3 years
- Ex-Servicemen: number of years of service rendered + 3 years
- J&K Domicile: 5 years
- Persons with Benchmark Disability (PwBD): 10Years; in addition to the age relaxation permissible for SC/ST/OBC-NCL category candidates, subject to the post being identified suitable for PWD as mentioned in the below table.

However, relaxation in upper age limit shall be applicable for PwBD candidates irrespective of the fact whether the post is reserved or not, provided the post is identified suitable for PwBDs as per the below table.

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

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

Discipline	Categories for which identified	Functional Classification	Physical Requirements
Mechanical	Locomotor disability	OA, OL, OAL, BL, Leprosy Cured, Acid Attack Victims	S, ST, BN, W, SE, MF, C, RW, KC, CL, JU, H, R

Discipline	Categories for which identified	Functional Classification	Physical Requirements
ES&T	Locomotor disability	OA, OL, OAL, BL, Leprosy Cured, Acid Attack Victims	S, ST, BN, W, SE, MF, C, RW, KC, CL, JU, H, R
	Hearing Impairment	HI	

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 Classifications		Physical Requirements	
Code	Classification	Code	Physical Requirements
OH	Orthopedically Handicapped	S	Sitting
VH	Visually Handicapped	ST	Standing
HH	Hard of Hearing	W	Walking
OL	One leg	SE	Seeing
OA	One arm	H	Hearing/ Speaking
BA	Both Arms	RW	Reading and Writing
BH	Both Hands	C	Communication
MW	Muscular Weakness	MF	Manipulation by fingers
OAL	One arm one leg	PP	Pulling & Pushing
BLA	Both Legs and Arms	L	Lifting
BLOA	Both Legs one Arm	KC	Kneeling & Crouching
LV	Low Vision	BN	Bending
B	Blind	M	Movement
PD	Partially Deaf	JU	Jumping
FD	Fully Deaf	CL	Climbing

BL	Both legs	CL	Climbing
D	Dwarfism		
CP	Cerebral Palsy		
LC	Leprosy Cured		
AAV	Acid Attack Victims		
MD	Multiple Disabilities		

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 at any place in India and abroad 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 will 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 | As per company rules applicable to |
| c) Medical facility. | Regular employees. |
| d) Group Insurance. | |
| e) Leave Encashment. | |

The approximate emoluments at the minimum of the pay-scale for the position is detailed below:

VC No	Post	Pay Scale	Approximate CTC
RG/01-R1/25	Manager /Civil (Transport Planner / Transport Engineer)	INR 50,000- 1,60,000	INR 17.97 Lacs
RG/05-R1/25	Senior Manager / Mechanical (Ventilation Expert)	INR 60,000- 1,80,000	INR 21.40 Lacs
RG/06-R1/25	Senior Manager / ES&T (E&M Expert)	INR 60,000- 1,80,000	INR 21.40 Lacs
RG/07-R1/25	Assistant Manager /Civil (Bridge Engineer)	INR 40,000-1,40,000	INR 14.46 Lacs

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) Posts not reserved for SC / ST / PwD category, candidates from such category will also have to make payment of full fees at this stage during online application.
- b) The fee charged from the candidates belonging to SC / ST / PwD category during online application would be later refunded upon their participation in the further selection process of written exam / interview (as applicable). The refund amount will be made to such candidates only by way of crediting the amount to the source account / debit card / credit card etc., from which such candidate had paid the fee, duly deducting GST / bank charges (as applicable), after submission and scrutiny of their category certificate.
- c) 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.
- d) 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.
- e) Candidates shall ensure that the invoice is generated upon successful payment of fee; and in case they are not able to download the invoice, it shall be candidates' responsibility to immediately communicate the same by writing an email to rectt@rites.com with registration details.

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)

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	Bangalore
4	Mumbai
5	Hyderabad
6	Guwahati

***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 candidates separately.

Syllabus for Written Test

SN.	VC Nos.	Syllabus for Written Test
1	RG/01-R1/25: Manager/Civil (Transport Planner/ Transport Engineer)	• Concepts & Theory of Transport Planning and Traffic Engineering. Planning and Analysis of Primary Traffic & Travel Surveys, Traffic forecasting techniques. • Urban transport planning & transport demand modelling process – stages, study area, zoning, data base, concept of trip generation, trip distribution, modal split and traffic assignment. • Role of transport, types of transport systems, evolution of transport modes, transport problems and mobility issues. Urban form and Transport patterns, land use – transport cycle, concept of accessibility. • Hierarchy, capacity and geometric design elements of roads, intersections and various public transit systems. Basic principles of Transport infrastructure design. • Transport Economics – economic evaluation, Vehicle Operating Costs, Value of Travel Time savings, Accident Costs. • Transit Oriented Development – Definition, Concepts, Elements and Components, Types of value Capture Finance. • Intelligent Transport System and Integrated Traffic Management System, Traffic Management techniques and Measures .
2	RG/05-R1/25: Senior Manager / Mechanical (Ventilation Expert)	Applied Mechanics and Design • Engineering Mechanics: Introduction to Mechanics, Statics and Dynamics, Work- Energy and Impulse-Momentum Principles including the Virtual work and potential energy, Basic of Vibration. • Mechanics of Materials: Stress and strain, elastic constants, Poisson's ratio; Mohr's circle for plane stress and plane strain; thin cylinders; shear force and bending moment diagrams; bending and shear stresses; concept of shear centre; deflection of beams; torsion of circular shafts; Euler's theory of columns; energy methods; thermal stresses; strain gauges and rosettes; testing of materials with universal testing machine; testing of hardness and impact strength. • Theory of Machines: Displacement, velocity and acceleration analysis of plane mechanisms; dynamic analysis of linkages; cams; gears and gear trains; flywheels and governors; balancing of reciprocating and rotating masses; gyroscope. • Vibrations: Free and forced vibration of single degree of freedom systems, effect of damping; vibration isolation; resonance; critical speeds of shafts. • Machine Design: Design for static and dynamic loading; failure theories; fatigue strength and the S-N diagram; principles of the design of machine elements such as bolted, riveted and welded joints; shafts, gears, rolling and sliding contact bearings, brakes and clutches, springs. Fluid Mechanics and Thermal Sciences • Fluid Mechanics: Fluid properties; fluid statics, forces on submerged bodies, stability of floating bodies; control-volume analysis of mass, momentum and energy; fluid acceleration; differential equations of continuity and momentum; Bernoulli's equation; dimensional analysis; viscous flow of incompressible fluids, boundary layer, elementary turbulent flow, flow through pipes, head losses in pipes, bends and fittings; basics of compressible fluid flow. • Heat-Transfer: Modes of heat transfer; one dimensional heat conduction, resistance concept and electrical analogy, heat transfer through fins;

		unsteady heat conduction, lumped parameter system, Heisler's charts; thermal boundary layer, dimensionless parameters in free and forced convective heat transfer, heat transfer correlations for flow over flat plates and through pipes, effect of turbulence; heat exchanger performance, LMTD and NTU methods; radiative heat transfer, Stefan-Boltzmann law, Wien's displacement law, black and grey surfaces, view factors, radiation network analysis • Thermodynamics: Thermodynamic systems and processes; properties of pure substances, behaviour of ideal and real gases; zeroth and first laws of thermodynamics, calculation of work and heat in various processes; second law of thermodynamics; thermodynamic property charts and tables, availability and irreversibility; thermodynamic relations. • Applications: Power Engineering: Air and gas compressors; vapour and gas power cycles, concepts of regeneration and reheat. I.C. Engines: Air-standard Otto, Diesel and dual cycles. Refrigeration and air-conditioning: Vapour and gas refrigeration and heat pump cycles; properties of moist air, psychrometric chart, basic psychrometric processes. Turbomachinery: Impulse and reaction principles, velocity diagrams, Pelton-wheel, Francis and Kaplan turbines; steam and gas turbines. Materials, Manufacturing and Industrial Engineering • Engineering Materials: Structure and properties of engineering materials, phase diagrams, heat treatment, stress-strain diagrams for engineering materials. • Metrology and Inspection: Limits, fits and tolerances; linear and angular measurements; comparators; interferometry; form and finish measurement; alignment and testing methods; tolerance analysis in manufacturing and assembly; concepts of coordinate-measuring machine (CMM). • Computer Integrated Manufacturing: Basic concepts of CAD/CAM and their integration tools; additive manufacturing. • Production Planning and Control: Forecasting models, aggregate production planning, scheduling, materials requirement planning; lean manufacturing. • Inventory Control: Deterministic models; safety stock inventory control systems. Fundamentals of Ventilation • Basics of Ventilation: Definitions and principles (natural vs. mechanical ventilation), Types of ventilation systems (supply, exhaust, balanced), Components of ventilation systems (fans, ducts, filters). • Thermodynamics and Heat Transfer: Basics of thermodynamics (first and second laws), Heat transfer mechanisms (conduction, convection, radiation), Psychrometrics: temperature, humidity, and air properties. HVAC Systems and Design • HVAC Principles: Heating, Ventilation, and Air Conditioning (HVAC) fundamentals, Types of HVAC systems (centralized, decentralized), Refrigeration cycles and their role in HVAC. • Duct Design: Duct sizing and layout principles, Calculation of pressure losses in ducts, Noise and vibration control in duct systems. • Energy Efficiency: Energy conservation techniques in HVAC, Use of Variable Air Volume (VAV) systems. Tunnel Ventilation • Tunnel Ventilation Basics: Purpose and importance (fresh air supply, smoke
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		control), Longitudinal, transverse, and semi-transverse systems. • Design Parameters: Airflow requirements and velocity, Fan selection and arrangement, Pressure drop and temperature control. • Fire and Smoke Management: Smoke extraction systems, Emergency ventilation during fires, Standards and guidelines for fire safety (NFPA 130). • Standards and Guidelines • International Standards: Overview of ASHRAE standards, NFPA, PIARC & UIC codes related to HVAC and ventilation. • Indian Standards: BIS codes applicable to HVAC and ventilation systems, Environmental standards for air quality. Computational Tools and Analysis • CFD for Ventilation Design: Basics of Computational Fluid Dynamics (CFD), Airflow and heat transfer simulations, Tools like ANSYS Fluent, OpenFOAM. • Modeling and Optimization: Design and optimization using Revit MEP or similar software, Energy modeling tools (e.g., EnergyPlus). Environmental and Health Aspects • Indoor Air Quality (IAQ): Pollutants and their effects on health, Air quality monitoring and control, Ventilation's role in mitigating Sick Building Syndrome (SBS). • Thermal Comfort: Factors influencing thermal comfort, Standards for acceptable thermal conditions.
3	RG/06-R1/25-Senior Manager / ES&T (E&M Expert)	• Unit 1: Electric Circuits and Fields- ○ Concept of Circuit and Network, Types of elements, R-L- C Parameters, Independent and Dependent sources, Source transformation and Kirchhoff's Laws. • Unit 2: Signals and Systems- ○ Time-domain representations for LTI systems – 2: properties of impulse response representation, Differential and difference equation Representations, Block diagram representations. Fourier representation for signals. • Unit 3: Electrical Machines- ○ Basic principles, Construction, and working of various electrical machines such as generators, motors, and transformers. Induction Machines: Construction, Working principle. • Unit 4: Power Systems- ○ The power plant, transformer, transmission line, substations, distribution line, and distribution transformer including concept clearance of Step-up and Step Down Transformer. • Unit 5: Control Systems- ○ Concept of continuous & discrete Signals, Open- loop control system, Closed- Loop control System, Embedded Control Systems, Advantages/Disadvantages of different control system. • Unit 6: Electrical and Electronic Measurements- ○ Detailed design and concept building of electrical and electronics measurement topics like measuring instruments, wattmeter's, energy meters, instrument transformers, bridges, transducers, and sensors.

		• Unit 7: Analog and Digital Electronics- ○ Analog communication basics, such as modulation, de-modulation, noise and bandwidth, transmitters and receivers, and signal-to-noise ratio. The Digital communication basics, such as sampling, quantizing, coding, frequency and time domain multiplexing, and power line carrier communication systems. The ○ Digital circuits and logic, such as binary representation, logic gates, combinational and sequential circuits, flip-flops, registers, and counters. The analog ICs and devices, such as BJTs and MOSFETs, biasing, amplifiers, filters, oscillators, and converters. • Unit 8: Power Electronics and Drives- ○ Power electronic devices (silicon and wide bandgap), Power conversion designs, modulation, and control, Reliability of power electronics, Modeling and control of components, converters, and systems, High power/voltage power conversion. • Unit 9: Application/utilization of Electrical Energy- ○ Introduction, terms used in illumination, laws of illumination, polar curves, photometry, integrating sphere, sources of light. Discharge lamps, MV and SV lamps – comparison between tungsten filament lamps and fluorescent tubes, Basic principles of light control, Types and design of lighting and flood lighting. ELECTRIC TRACTION – I System of electric traction and track electrification. Review of existing electric traction systems in India. Special features of traction motor, methods of electric braking-plugging rheostatic braking and regenerative braking. ELECTRIC TRACTION-III: Mechanics of train movement. Speed-time curves for different services – trapezoidal and quadrilateral speed time curves. Calculations of tractive effort, power, specific energy consumption for given run, effect of varying acceleration and braking retardation, adhesive weight and braking retardation adhesive weight and coefficient of adhesion. • HVAC System & Design concept, cable size calculation on basis of load, L.T. Panel design with Load Calculation, Building Management System with full Automation of connected Electrical Equipment's including Pump & Motors, Lux Calculation & Design Calculation, Lightning Arrestor Design, Earthing concept & Design, Lighting Circuit Design, Fire Detection & Alarm System, Traction System, Fire Fighting design & calculation as per the Chief Fire Officer(C.F.O.) requirements, and NBC, IEC, IEEE-80, IS norms relevant with noted areas.
4	RG/07-R1/25: Assistant Manager /Civil (Bridge Engineer)	• Structural Analysis- Beams: Bending moment and shear force in statically determinate beams; Simple stress and strain relationships; Simple bending theory, flexural and shear stresses, shear centre; Uniform torsion, Transformation of stress; buckling of column, combined and direct bending stresses, Analysis of Fixed Beam and Continuous Beams, Analysis of trusses, arches, beams, cables and frames. 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, 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. • Design of Steel Structures- 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. • Prestressed Concrete Structures- Specification of materials, methods of prestressing, losses, analysis, and design of members for moment and shear, stresses in anchorage zones of pretensioned and post tensioned members, design of end block, prestressed concrete compression members, partial prestressing, composite construction with prestressed concrete and reinforced concrete, two-way prestressing, Short term deflections of uncracked members, Prediction of long- term deflections, Review of Indian code. • Design of Bridges- Introduction and Type of Bridges, Introduction to bridge codes. Site investigation and planning- Factors affecting scour and its evaluation. Analysis and Design of Bridge foundations - open, pile, and well. Analysis and Design of Piers, abutments, and approach structures; Superstructure - analysis and design of right, skew, and curved slabs. Steel, RCC and PSC Girder bridges - types, load distribution, design. Steel - Concrete composite bridges: load distribution, design philosophy, shear connectors with relevant Indian Codes such as IS, IRC and IRS etc. Detailing with relevant Indian Codes. Introduction to long span bridges - cantilever, arch, cable stayed and suspension bridges, etc. • Structural Dynamics and Earthquake Engineering-Introduction - Single and multi-degree freedom systems, undamped and damped systems, numerical integration scheme, modal analysis for undamped and damped systems. Characteristics of earthquake, Earthquake response of structures, Concept of earthquake resistant design. Codal provision for design of buildings, masonry structures and bridges etc, liquefaction, Detailing earthquake resistant structures with relevant Indian Codes • Foundation Engineering- 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.
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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 "Upload Documents". Post successful upload of documents, candidate needs to click on "Make payment".

The payment details show the amount to be paid to the bank based on category against which you are submitting application form.

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

6. In respect of claims made by you in your application with regard to experience, documents in support therefore have to be uploaded on RITES website and needs to be re-produced on the day of interview. In case your claim is not established from the proofs submitted by you; your candidature is liable to be rejected at the time shortlisting/ document scrutiny. Please check your claims vis-a-vis the certificates in support thereof establishing your candidature. Incomplete application or insufficient upload of proof would entail rejection of your candidature. No additional information other than those furnished in the Application shall be allowed to be considered at a later stage.

7. For proof of CTC/ salary, candidates shall have to upload a copy of their last Form No. 16/ Earning Card/ salary slip/ Appraisal letter/ any other suitable document and the same needs to be re-produced on the day of interview.

8. For availing reservation, SC/ST/OBC-NCL candidates should furnish Caste Certificate from competent authorities as per the format given at **Annexure I** (for SC/ST candidates) and at **Annexure II** (for OBC-NCL candidates) **valid as on the crucial date i. e. last date stipulated for submission of application.** Further, in case of OBC-NCL candidates, the certificates should specifically indicate that they do not belong to the Persons/Sections (Creamy Layer) mentioned in Column 3 of the Schedule of the Government of India, Department of Personnel and Training O.M.No.36012/22/93-Estt. (SCT) dated 08.09.93 & its subsequent revision through O.M.No.36033/3/2004-Estt. (Res) dated 09.03.2004, 27.05.2013, 13.09.2017 and further revision, if any, received till the closing date for ONLINE Registration of applications for this Advertisement.

The candidates should ensure that they belong to the OBC- Non-Creamy Layer (NCL) category while applying for the posts against this Advertisement. Further, in addition to the community certificate (OBC), a declaration in the prescribed format as per **Annexure III** has to be furnished by the candidates during document verification, that he/she does not belong to the creamy layer on the crucial date i. e. last date stipulated for submission of application in this Advertisement.

The certificate produced shall not be older than one year on the crucial date i. e. last date stipulated for submission of application in this Advertisement. In case of not complying to these stipulations, their claim for reserved status (OBC-NCL) will not be entertained and the candidature / application of such candidates, if fulfilling all the eligibility conditions for General (Unreserved) category, will be considered under General (UR) vacancies only.

EWS Category

The candidates applying against the vacancies reserved for EWS must possess Income and Asset Certificate **as on the crucial date i. e. last date stipulated for submission of application in this Advertisement.** **EWS certificate should be as per Gov. of India format.** In case of non-compliance to these stipulations, their claim for reserved status under EWS will not be entertained and the candidature / application of such candidates, if fulfilling all the eligibility conditions for General (UR) category, will be considered under General (UR) vacancies only.

As regards OBC NCL & EWS category candidates, candidates will be afforded opportunity of submission of the valid OBC NCL Certificate and EWS Certificate (as applicable) on the date of their joining, **valid as on the crucial date i. e.**

the last date stipulated for submission of application in this Advertisement. Those reserved category candidates who shall not be able to produce valid certificate in support of their claim in the application form for belonging to reserved category even after this additional opportunity; they will be treated as UR Category candidates.

9. Hard copies of documents are not to be sent to this office through post/ courier.

10. A copy of this online **APPLICATION FORM** containing the registration number is to be printed, signed, and retained. The same is to be submitted along with **SELF-ATTESTED SCANNED COPIES** of the following documents strictly in the following order. (if called for document verification on the day of interview):

- 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 License, 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. PwBD Certificate as per latest format (if applicable).

Scanned copies of all above-mentioned documents need to be uploaded on RITES website for successful submission of applications. Candidates need to ensure that scanned copies are clear and visible.

11. 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). The original copies shall be returned after verification.

12. 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.

13. 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 separately.

14. 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.

15. If any claim made by a candidate is found to be incorrect, his/her candidature shall be summarily rejected.

16. Departmental Candidates of RITES are required to apply online and submit their hard copy through proper channel.

17. Candidates working in Government Departments/ PSUs on regular basis are required to apply through proper channel. Such Candidates who apply directly would have to bring No Objection Certificate (NOC) at the time of Interview (if called) for being eligible for protection of their pay, transfer of gratuity, Leave etc., subject to satisfaction of other terms and conditions in this regard. NOC submitted after due date shall not be considered.

18. Candidates have to bring duly filled two copies of Annexure A, and documents mentioned therein in chronological order and submit at the time of Document verification/Selection process.

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. Candidates working in any organization 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. Offer letter is not considered as proof of experience and candidate has to submit joining & relieving order / experience certificate for claiming the experience.
8. Legal jurisdiction will be Delhi in case of any dispute
9. No fares / TA / DA shall be payable.
10. **Age, experience, and all other eligibility criteria shall be reckoned as on the last date of submission of application (cut-off date).**
11. Date of acquiring the qualification will be earliest of the following:
 - (i) Last day of month in which final examination of qualifying degree has been held. In cases where exact date of written examination is stated, the same will be treated as date of acquiring the qualification.
 - (ii) Date of declaration of result.
 - (iii) Date of issuance of marksheet.
 - (iv) Date of issuance of degree.

There shall be no relaxation on this account.

12. Where a specialization is required in the qualifying degree in the educational qualification, candidate is required to submit a certificate from the University/ Institution clearly specifying the specialization in the qualifying degree.

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 any, 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 duly in advance of the last date affording opportunity to redress genuine and reasonable grievance.

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	Dates
1	Commencement of submission of online application and online payment of fees	27.08.2025
2	Last date of submission of online application and online payment of fees	30.09.2025 (Till 23:59)
3	Date of written test	To be notified later
4	Date of Interview	To be notified later

Rites Limited**Documents Submission Checklist**

With reference to my application, I am submitting requisite Document(s) along with duly self-attested photocopies of my certificates as under (in chronological order):

S. No.	Documents name	Submitted (Y/N)	Remarks
01	10 th /High School certificate for proof of Date of Birth		
02	12 th Marksheet		
03	Diploma / Graduation Marksheets- All semesters & certificate		
04	Post Graduation Marksheet All semesters & certificate (as applicable)		
05	PhD Marksheets & Certificate, if any		
06	Other Academic Qualification / Certification, please specify: _____		
07	List of Experience certificates submitted: 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____		
08	Last company relieving letter/ experience certificate, NOC (For Govt./PSU Employees)		
09	AADHAR Card		
10	PAN Card		
11	02 recent passport size colour photographs		

I also certify that the above documents are authentic, valid and true to the best of my knowledge. If any of the above document(s) or any information contained therein is found to be false, my candidature/ employment may be summarily rejected/ cancelled.

Signature of candidate	
Name of candidate	
Date of Documents Submission	
Post Name	
VC No against which Documents Submission	

For official use only _____

I have verified the above documents submitted by the candidate and found **them to be / not to be** (strike out one of these) in order as per company requirement(s)

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Any other remarks/ details of lack of documents:	
Signature of officer accepting documents	
Name of officer accepting documents	
Designation of officer accepting documents	
Date	

FORM OF CASTE CERTIFICATE FOR SC/ST

This is to certify that Shri*/ Srimati/ Kumari*
 son/daughter* of Village/Town
 District/Division* of
 the State/Union Territory* belongs to the
Caste*/Tribe which is recognised as a Scheduled Caste /
 Scheduled Tribe under:-

- *The Constitution Scheduled Castes Order 1950.
- *The Constitution Scheduled Tribes Order 1950.
- *The Constitution (Scheduled Castes) (Union Territories) (Part C States) Order 1951;
- *The Constitution (Scheduled Tribes) (Union Territories) (Part C States) Order 1951;
- [As amended by the Scheduled Castes 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 Castes and Scheduled Tribes Orders, (Amendment) Act 1976]
- *The Constitution (Jammu and Kashmir)* Scheduled Castes Orders, 1956
- *The Constitution (Andaman and Nicobar Islands)* Scheduled Tribes Order, 1959 as amended by the Scheduled Castes and Scheduled *Tribes Orders (Amendment) Act, 1976
- *The Constitution (Dadra and Nagar Haveli)* Scheduled Castes Order, 1962.
- *The Constitution (Dadra and Nagar Haveli) Scheduled Tribes, Order, 1962
- *The Constitution (Pondicherry) Scheduled Castes Orders, 1964
- *The Constitution (Uttar Pradesh) Scheduled Tribes Order, 1967
- *The Constitution (Goa, Daman and Diu) Scheduled Castes Order, 1968
- *The Constitution (Goa, Daman and Diu) Scheduled Tribes Order, 1968
- *The Constitution (Nagaland) Scheduled Tribes Order, 1970.
- *The Constitution (Sikkim) Scheduled Castes Order, 1978
- *The Constitution (Sikkim) Scheduled Tribes Order, 1978
- *The Constitution (Jammu & Kashmir) Scheduled Tribes Order, 1989.
- *The Constitution (SC) Orders (Amendment) Act, 1990
- *The Constitution (ST) Orders (Amendment) Ordinance Act, 1991
- *The Constitution (ST) Orders (Amendment) Ordinance Act, 1996
- *The Constitution (Scheduled Castes) Orders (Amendment) Act, 2002
- *The Constitution (Scheduled Castes) Orders (Second Amendment) Act, 2002.
- *The Scheduled Castes and Scheduled Tribes Orders (Amendment) Act, 2002.

2. Applicable in the case of Scheduled Castes/Scheduled Tribes persons who have migrated from one State/Union Territory Administration.

This certificate is issued on the basis of the Scheduled Castes/ Scheduled Tribes Certificate issued to Shri / Srimati *father / mother* of Shri / Srimati / Kumari of Village / Town* in District / Division * of the State / Union Territory * who belongs to theCaste*/Tribe which is recognised as a Scheduled Caste / Scheduled Tribe in the Station/ Union Territory* issued by the dated

3. Shri / Srimati / Kumari* and /or* his/her* family
ordinarily resides in Village / Town* District / Division*
..... of the State/ Union Territory* of

Place.....

Signature.....

Date.....

Designation.....

(with seal of Office)

State/ Union

Territory.....

* Please delete the words which are not applicable.

@ Please quote the specific presidential order.

% Delete the Paragraph, which is not applicable

Note: (a) The term "ordinarily reside(s)" used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950. Officers competent to issue Caste/Tribe certificates.

1. District Magistrate / Additional District Magistrate / Collector / Deputy Commissioner / Additional Deputy Commissioner / Deputy Collector / 1st Class Stipendiary Magistrate / Sub-Divisional Magistrate / Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner. 2. Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate. 3. Revenue Officers not below the rank of Tehsildar. 4. Sub-Divisional Officer of the area where the candidate and / or his / her family normally reside(s). 5. Certificates issued by Gazetted Officers of the Central or of a State Government Countersigned by the District Magistrate concerned. 6. Administrator/ Secretary to Administrator (Laccadive, Minicoy and Admindivi Islands).

OBC CERTIFICATE FORMAT**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 candidate 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.**

DECLARATION**Annexure III**

**Proforma for declaration to be submitted by Other Backward Class
Candidates at the time of document verification, who had applied for the post
against VC No. _____**

"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
persons/sections (Creamy Layer) mentioned in column 3 of the Schedule to the above
referred Office Memorandum dated 08.03.1993 and its subsequent revision through
O.M.No.36033/1/2013-Estt. (Res) dated 27.05.2013 and 13.09.2017.

Place:

Signature of the Candidate

Date:

Name of the candidate