List of Shortlisted Candidates for Written Test for the post of Engineer (Electrical) against VC No. 59/15

S. No.	Registration No.	Name	Category
1	234897	SANJAY KUMAR	GEN
2	234278	NILADRI MALLICK	GEN
3	233353	SUMANTA BANERJEE	GEN
4	230950	TRINATH KUNAPAREDDY	GEN
5	229961	ASHUTOSH KUMAR	GEN
6	228972	DHEERENDRA	GEN
7	228661	TAZKIR KHAN	GEN
8	227335	VENTRAPRAGADA RAJESH	GEN
9	227312	ASHISH KUMAR JHA	GEN
10	224571	SUKANTA BAIRAGI	GEN
11	224395	SHETH BHAVINKUMAR	GEN
12	224356	DEEPAK RAMESHCHANDRA JOSHI	GEN
13	224202	JOSHAN THOMAS	GEN
14	223789	BUDDALA NAGENDRA	GEN
15	222437	VIVEKANANTHAN	GEN
16	222067	PANKAJ KUMAR SHUKLA	GEN
17	221466	ANKITKUMAR	GEN
18	220700	SANKARANARAYANAN S	GEN
19	220300	RITESH KUMAR	GEN
20	220207	VISHAKHA	GEN
21	218858	ACHYUT MONDAL	GEN
22	218811	ARUNKUMAR V	GEN
23	217282	KUMARAGURUBARAN	GEN
24	232551	SUNIL KUMAR REDDY	OBC
25	228176	RAMJAG VAISHYA	OBC
26	227761	GOPINADH MOPIDEVI	OBC
27	227437	K . BALAMURALI	OBC
28	221873	E.THIYAGARAJAN	OBC
29	221472	ABHISHEK KUMAR	OBC
30	218293	N SATISH GOUD	OBC
31	218061	CHOLAN K	OBC
32	230250	M NEELA MEGHA SHYAM	SC
33	226670	ANUJ KUMAR	SC
34	218945	MUKESH KUMAR	SC

Shortlisted candidates are requested to check their email Inbox/ Spam/ Junk Folder for further details about the Process

Candidates are advised to report at the venue 30 minutes in advance to ensure smooth conduct of the examination.

Selection Round	Date and Time	Address
Written Test	31.10.2015 10:00 AM	ICF Technical Training Centre Next to ICF stadium Chennai - 600 038 Tamil Nadu Bus Stop : Ambedkar Arangam Nearest Railway Station: Perambur Loco Works or Villivakkam
Interview (Subject to merit list of Written Test)	01.11.2015 10:00 AM	

Candidates are advised to report at the venue 30 minutes in advance to ensure smooth conduct of the examination.

Candidates are also requested to bring the following documents (in original alongwith a set of self-attested copies), at the time of interview, failing which their candidature is liable to be rejected:

i. Call letter (Sent in e-mail)
ii. Your Application Form
iii. Proof of Date of Birth
iv. Certificate of Academic & Professional qualifications and statements of marks of all the qualifications for all semesters/years
v. Proof of Identity (Election Card, Passport, Driving License, Adhar Card, PAN Card etc.)
vi. SC/ST/OBC certificate in the presented format, if applicable
vii. Experience Certificates for the period as indicated in your application form
viii. Any other document in support of your candidature

Syllabus for written Test for Engineers (Electrical) in RITES Ltd.

(A) Engineering Mathematics

Linear Algebra: Matrix Algebra, Systems of linear equations, Eigen values and eigen vectors.

Calculus: Mean value theorems, Theorems of integral calculus, Evaluation of definite and improper integrals, Partial Derivatives, Maxima and minima, Multiple integrals, Fourier series. Vector identities, Directional derivatives, Line, Surface and Volume integrals, Stokes, Gauss and Green's theorems.

Differential equations: First order equation (linear and nonlinear), Higher order linear differential equations with constant coefficients, Method of variation of parameters, Cauchy's and Euler's equations, Initial and boundary value problems, Partial Differential Equations and variable separable method.

Complex variables: Analytic functions, Cauchy's integral theorem and integral formula, Taylor's and Laurent' series, Residue theorem, solution integrals.

Probability and Statistics: Sampling theorems, Conditional probability, Mean, median, mode and standard deviation, Random variables, Discrete and continuous distributions, Poisson, Normal and Binomial distribution, Correlation and regression analysis.

Numerical Methods: Solutions of non-linear algebraic equations, single and multi-step methods for differential equations.

Transform Theory: Fourier transform, Laplace transform, Z-transform.

(B) Electrical Engineering

Electric Circuits and Fields: Network graph, KCL, KVL, node and mesh analysis, transient response of dc and ac networks; sinusoidal steady-state analysis, resonance, basic filter concepts; ideal current and voltage sources, Thevenin's, Norton's and Superposition and Maximum Power Transfer theorems, two-port networks, three phase circuits; Gauss Theorem, electric field and potential due to point, line, plane and spherical charge distributions; Ampere's and Biot-Savart's laws; inductance; dielectrics; capacitance.

Signals and Systems: Representation of continuous and discrete-time signals; shifting and scaling operations; linear, time-invariant and causal systems; Fourier series representation of continuous periodic signals; sampling theorem; Fourier, Laplace and Z transforms.

Electrical Machines: Single phase transformer – equivalent circuit, phasor diagram, tests, regulation and efficiency; three phase transformers – connections, parallel operation; auto-transformer; energy conversion principles; DC machines – types, windings, generator characteristics, armature reaction and commutation, starting and speed control of motors; three phase induction motors – principles, types, performance characteristics, starting and speed control; single phase induction motors; synchronous machines – performance, regulation and parallel operation of generators, motor starting, characteristics and applications; servo and stepper motors.

Power Systems: Basic power generation concepts; transmission line models and performance; cable performance, insulation; corona and radio interference; distribution systems; per-unit quantities; bus impedance and admittance matrices; load flow; voltage control; power factor correction; economic operation; symmetrical components; fault analysis; principles of over-current, differential and distance protection; solid state relays and digital protection; circuit breakers; system stability concepts, swing curves and equal area criterion; HVDC transmission and FACTS concepts.

Control Systems: Principles of feedback; transfer function; block diagrams; steady-state errors; Routh and Niquist techniques; Bode plots; root loci; lag, lead and lead-lag compensation; state space model; state transition matrix, controllability and observability.

Electrical and Electronic Measurements: Bridges and potentiometers; PMMC, moving iron, dynamometer and induction type instruments; measurement of voltage, current, power, energy and power factor; instrument transformers; digital voltmeters and multimeters; phase, time and frequency measurement; Q-meters; oscilloscopes; potentiometric recorders; error analysis.

Analog and Digital Electronics: Characteristics of diodes, BJT, FET; amplifiers – biasing, equivalent circuit and frequency response; oscillators and feedback amplifiers; operational amplifiers – characteristics and applications; simple active filters; VCOs and timers; combinational and sequential logic circuits; multiplexer; Schmitt trigger; multi-vibrators; sample and hold circuits; A/D and D/A converters; 8-bit microprocessor basics, architecture, programming and interfacing.

Power Electronics and Drives: Semiconductor power diodes, transistors, thyristors, triacs, GTOs, MOSFETs and IGBTs – static characteristics and principles of operation; triggering circuits; phase control rectifiers; bridge converters – fully controlled and half controlled; principles of choppers and inverters; basis concepts of adjustable speed dc and ac drives.

Application/Utilization of Electrical Energy

Electric Traction: Railway Traction Systems in India, Train dynamics, Type of train services, characteristic of rolling stock for different type of services, traction power demand, traction power distribution system, control and traction power; reactive power compensation.
Characteristics/properties of electrical systems/equipment/devices used in institutional buildings/ commercial complexes/residential complexes/workshops/engineering industry etc

Planning & Design of Electrical Works – Internal & External works. Estimation, installation, testing and commissioning of such works. Maintenance of Electrical Equipment and Installations.

Inspection and testing of electrical equipment, components, fittings. type of tests; sampling of components; test methods for different electrical equipment, components, cables, wires, insulators etc.
IEC Rules, Indian Electrical act, & Electrical clearance etc.