GATE-2025

Online Test Series

Electronics and Communication Engineering Schedule

No.of Tests : 54 + 54 free practice tests of GATE-2024 Online Test Series		
	GATE - 2025 Test Series	Practice Tests GATE - 2024 OTS
Topic wise Tests	23	23
Grand Tests (Subject Wise Tests + Multi-Subject Wise Tests)	19	19
Full Length Mock Tests	12	12
Total Tests - 108		

Note:

★ The Syllabus considered as per Previoues year Notification of GATE. ACE Engineering Academy does not take any responsibility for deviations in syllabus in the final exam.

★ The Dates of Tests may Change according to the GATE-2025 Exam schedule.

★ Tests will be activated at 06:00 pm on the scheduled day.

★ All tests will be active till GATE-2025 Exam.

Topic wise Tests

(No.of Questions: 15, Time duration: 42 Minutes and Marks: 25 M)

Test No	Name of the Test	Date of Activation
Test-01	**Engineering Mathematics-1:** Linear Algebra: Vector space, basis, linear dependence and independence, matrix algebra, eigenvalues and eigenvectors, rank, solution of linear equations- existence and uniqueness. Calculus**:** Mean value theorems, theorems of integral calculus, evaluation of definite and improper integrals, partial derivatives, maxima and minima, multiple integrals, line, surface and volume integrals, Taylor series. Vector Analysis : Vectors in plane and space, vector operations, gradient, divergence and curl, Gauss's, Green's and Stokes' theorems.	15-04-2024
Test-02	**Engineering Mathematics-2:** Differential Equations: First order equations (linear and nonlinear), higher order linear differential equations, Cauchy's and Euler's equations, methods of solution using variation of parameters, complementary function and particular integral, partial differential equations, variable separable method, initial and boundary value problems. Complex Anaysis: Analytic functions, Cauchy's integral theorem, Cauchy's integral formula, sequences, series, convergence tests, Taylor and Laurent series, residue theorem. Probability and Statistics: Mean, median, mode, standard deviation, combinatorial probability, probability distributions, binomial distribution, Poisson distribution, exponential distribution, normal distribution, joint and conditional probability.	
Test-03	**Control Systems-1:** Basic control system components; Feedback principle; Transfer function; Block diagram representation; Signal flow graph; Transient and steady-state analysis of LTI systems; Routh – Hurwitz stability criteria, root-locus plot.	22-04-2024
Test-04	**Control Systems-2:** Frequency response; Nyquist stability criteria; Bode Plot, Lag, lead and lag-lead compensation; State variable model and solution of state equation of LTI systems.	
Test-05	**Signals and Systems -1:** Introduction to signals, LTI systems: definition and properties, causality, stability, impulse response, convolution. Fourier series and Fourier transform representations. sampling theorem and applications. Frequency response, group delay and phase delay.	
Test-06	**Signals and Systems -2:** Laplace transform, discrete-time Fourier transform (DTFT), DFT, Z-transform, poles and zeros, discrete-time processing of continuous-time signals.	

Test No	Name of the Test	Date of Activation
Test-07	**Networks-1:** Circuit analysis: Node and mesh analysis, superposition, Thevenin's theorem, Norton's theorem, reciprocity, maximum power transfer, wye-delta transformation	29-04-2024
Test-08	**Networks-2:** Sinusoidal steady state analysis: phasors, complex power, Time and frequency domain analysis of linear circuits: RL, RC and RLC circuits, solution of network equations using Laplace transform. Linear 2-port network parameters.	
Test-09	**Digital Circuits-1:** Binary, integer and floating-point numbers, Combinatorial circuits: Boolean algebra, minimization of functions using Boolean identities and Karnaugh map, logic gates, arithmetic circuits, code converters, multiplexers, decoders.	06-05-2024
Test-10	**Digital Circuits-2:** Sequential circuits: latches and flip-flops, counters, shift-registers, finite state machines, propagation delay, setup and hold time, critical path delay. logic gates and their static CMOS implementations, Semiconductor memories: ROM, SRAM, DRAM. Data converters: sample and hold circuits, ADCs and DACs.	
Test-11	**Digital Circuits-3:** Computer organization: Machine instructions and addressing modes, ALU, data-path and control unit, instruction pipelining.	
Test-12	**Analog Circuits-1:** Diode circuits: clipping, clamping and rectifiers. BJT and MOSFET amplifiers: biasing, ac coupling, small signal analysis, frequency response, Current mirrors.	13-05-2024
Test-13	**Analog Circuits-2:** Op-amp circuits: Amplifiers, summers, differentiators, integrators, active filters, Schmitt triggers and oscillators. Differential amplifiers.	
Test-14	**Electronic Devices-1:** Energy bands in intrinsic and extrinsic silicon; Carrier transport: diffusion current, drift current, mobility and resistivity; Generation and recombination of carriers; Poisson and continuity equations; P-N junction, Zener diode, BJT. Direct and Indiect band-gap semiconductor.	20-05-2024
Test-15	**Electronic Devices-2:** MOS capacitor, MOSFET, LED, photo diode and solar cell.	

Test No	Name of the Test	Date of Activation
Test-16	**Communications-1:** Analog communications: amplitude modulation and demodulation, angle modulation and demodulation, spectra of AM and FM, superheterodyne receivers.	27-05-2024
Test-17	**Communications-2:** Random processes: autocorrelation and power spectral density, properties of white noise, filtering of random signals through LTI systems. Information theory: entropy, mutual information and channel capacity theorem.	
Test-18	**Communications-3:** Digital communications: PCM, DPCM, digital modulation schemes (ASK, PSK, FSK, QAM), bandwidth, inter-symbol interference, MAP, ML detection, matched filter receiver, SNR and BER. Fundamentals of error correction, Hamming codes, CRC.	
Test-19	**Electromagnetics-1:** Maxwell's equations: differential and integral forms and their interpretation, boundary conditions, wave equation, Poynting vector; Plane waves and properties: reflection and refraction, polarization, phase and group velocity, propagation through various media, skin depth.	03-06-2024
Test-20	**Electromagnetics-2:** Transmission lines: equations, characteristic impedance, impedance matching, impedance transformation, S-parameters, Smith chart; Rectangular and circular waveguides, light propagation in optical fibers, dipole and monopole antennas, linear antenna arrays.	
Test-21	**Verbal Ability:** Basic English grammar: tenses, articles, adjectives, prepositions, conjunctions, verb-noun agreement, and other parts of speech. Basic vocabulary: words, idioms, and phrases in context. Reading and comprehension. Narrative sequencing.	10-06-2024
Test-22	**Quantitative Aptitude:** Data interpretation: data graphs (bar graphs, pie charts, and other graphs representing data), 2- and 3-dimensional plots, maps, and tables. Numerical computation and estimation: ratios, percentages, powers, exponents and logarithms, permutations and combinations, and series Mensuration and geometry. Elementary statistics and probability.	
Test-23	**Analytical Aptitude:** Logic: deduction and induction, Analogy, Numerical relations and reasoning **Spatial Aptitude:** Transformation of shapes: translation, rotation, scaling, mirroring, assembling, and grouping Paper folding, cutting, and patterns in 2 and 3 dimensions	

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Test No	Name of the Test	Date of Activation
Subject Wise Grand Tests *(No.of Questions: 30, Time duration: 83 Minutes and Marks: 50 M)*		
Test-24	Engineering Mathematics	24-06-2024
Test-25	Control Systems	
Test-26	Signals and Systems	01-07-2024
Test-27	Digital Circuits	
Test-28	Networks	08-07-2024
Test-29	Electronic Devices	
Test-30	Analog Circuits	15-07-2024
Test-31	Communications	
Test-32	Electromagnetics	22-07-2024
Test-33	General Aptitude	29-007-2024

Test No	Name of the Test	Date of Activation
Full Length Mock Test - 1st Series *(No.of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)*		
Test-34	Full Length Mock Test-1	12-08-2024
Test-35	Full Length Mock Test-2	19-08-2024
Test-36	Full Length Mock Test-3	26-08-2024
Test-37	Full Length Mock Test-4	02-09-2024
Test-38	Full Length Mock Test-5	09-09-2024
Test-39	Full Length Mock Test-6	16-09-2024

Test No	Name of the Test	Date of Activation
Multi-Subject Wise Grand Tests *(No.of Questions: 30, Time duration: 83 Minutes and Marks: 50 M)*		
Test-40	Networks & Electromagnetics	30-09-2024
Test-41	Control Systems & Signals and Systems	
Test-42	Electronic Devices & Analog Circuits	07-10-2024
Test-43	Communications & Digital Circuits	
Test-44	Engineering Mathematics & General Aptitude	14-10-2024
Test-45	Networks & Signals and Systems	21-10-2024
Test-46	Analog Circuits & Digital Circuits	
Test-47	Electromagnetics & Electronic Devices	28-10-2024
Test-48	Communications &Control Systems	

Test No	Name of the Test	Date of Activation
Full Length Mock Test - 2nd Series *(No.of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)*		
Test-49	Full Length Mock Test-7	04-11-2024
Test-50	Full Length Mock Test-8	11-11-2024
Test-51	Full Length Mock Test-9	18-11-2024
Test-52	Full Length Mock Test-10	25-11-2024
Test-53	Full Length Mock Test-11	30-12-2024
Test-54	Full Length Mock Test-12	06-01-2025

Free Practice Tests

Topic wise Tests

(No.of Questions: 15, Time duration: 42 Minutes and Marks: 25 M)

Test No	Name of the Test	Date of Activation
Test-01	**Engineering Mathematics-1:** Linear Algebra: Vector space, basis, linear dependence and independence, matrix algebra, eigenvalues and eigenvectors, rank, solution of linear equations- existence and uniqueness. Calculus**:** Mean value theorems, theorems of integral calculus, evaluation of definite and improper integrals, partial derivatives, maxima and minima, multiple integrals, line, surface and volume integrals, Taylor series. Vector Analysis : Vectors in plane and space, vector operations, gradient, divergence and curl, Gauss's, Green's and Stokes' theorems.	
Test-02	**Engineering Mathematics-2:** Differential Equations: First order equations (linear and nonlinear), higher order linear differential equations, Cauchy's and Euler's equations, methods of solution using variation of parameters, complementary function and particular integral, partial differential equations, variable separable method, initial and boundary value problems. Complex Anaysis: Analytic functions, Cauchy's integral theorem, Cauchy's integral formula, sequences, series, convergence tests, Taylor and Laurent series, residue theorem. Probability and Statistics: Mean, median, mode, standard deviation, combinatorial probability, probability distributions, binomial distribution, Poisson distribution, exponential distribution, normal distribution, joint and conditional probability.	**25-03-2024**
Test-03	**Control Systems-1:** Basic control system components; Feedback principle; Transfer function; Block diagram representation; Signal flow graph; Transient and steady-state analysis of LTI systems; Routh – Hurwitz stability criteria, root-locus plot.	
Test-04	**Control Systems-2:** Frequency response; Nyquist stability criteria; Bode Plot, Lag, lead and lag-lead compensation; State variable model and solution of state equation of LTI systems.	
Test-05	**Signals and Systems -1:** Introduction to signals, LTI systems: definition and properties, causality, stability, impulse response, convolution. Fourier series and Fourier transform representations. sampling theorem and applications. Frequency response, group delay and phase delay.	
Test-06	**Signals and Systems -2:** Laplace transform, discrete-time Fourier transform (DTFT), DFT, Z-transform, poles and zeros, discrete-time processing of continuous-time signals.	
Test-07	**Networks-1:** Circuit analysis: Node and mesh analysis, superposition, Thevenin's theorem, Norton's theorem, reciprocity, maximum power transfer, wye-delta transformation	

Test No	Name of the Test	Date of Activation
Test-08	**Networks-2:** Sinusoidal steady state analysis: phasors, complex power, Time and frequency domain analysis of linear circuits: RL, RC and RLC circuits, solution of network equations using Laplace transform. Linear 2-port network parameters.	
Test-09	**Digital Circuits-1:** Binary, integer and floating-point numbers, Combinatorial circuits: Boolean algebra, minimization of functions using Boolean identities and Karnaugh map, logic gates, arithmetic circuits, code converters, multiplexers, decoders.	
Test-10	**Digital Circuits-2:** Sequential circuits: latches and flip-flops, counters, shift-registers, finite state machines, propagation delay, setup and hold time, critical path delay. logic gates and their static CMOS implementations, Semiconductor memories: ROM, SRAM, DRAM. Data converters: sample and hold circuits, ADCs and DACs.	
Test-11	**Digital Circuits-3:** Computer organization: Machine instructions and addressing modes, ALU, data-path and control unit, instruction pipelining.	
Test-12	**Analog Circuits-1:** Diode circuits: clipping, clamping and rectifiers. BJT and MOSFET amplifiers: biasing, ac coupling, small signal analysis, frequency response, Current mirrors.	
Test-13	**Analog Circuits-2:** Op-amp circuits: Amplifiers, summers, differentiators, integrators, active filters, Schmitt triggers and oscillators. Differential amplifiers.	25-03-2024
Test-14	**Electronic Devices-1:** Energy bands in intrinsic and extrinsic silicon; Carrier transport: diffusion current, drift current, mobility and resistivity; Generation and recombination of carriers; Poisson and continuity equations; P-N junction, Zener diode, BJT. Direct and Indiect band-gap semiconductor.	
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Test-19	**Electromagnetics-1:** Maxwell's equations: differential and integral forms and their interpretation, boundary conditions, wave equation, Poynting vector; Plane waves and properties: reflection and refraction, polarization, phase and group velocity, propagation through various media, skin depth.	

Test No	Name of the Test	Date of Activation
Test-20	**Electromagnetics-2:** Transmission lines: equations, characteristic impedance, impedance matching, impedance transformation, S-parameters, Smith chart; Rectangular and circular waveguides, light propagation in optical fibers, dipole and monopole antennas, linear antenna arrays.	
Test-21	**Verbal Ability:** Basic English grammar: tenses, articles, adjectives, prepositions, conjunctions, verb-noun agreement, and other parts of speech. Basic vocabulary: words, idioms, and phrases in context. Reading and comprehension. Narrative sequencing.	
Test-22	**Quantitative Aptitude:** Data interpretation: data graphs (bar graphs, pie charts, and other graphs representing data), 2- and 3-dimensional plots, maps, and tables. Numerical computation and estimation: ratios, percentages, powers, exponents and logarithms, permutations and combinations, and series Mensuration and geometry. Elementary statistics and probability.	25-03-2024
Test-23	**Analytical Aptitude:** Logic: deduction and induction, Analogy, Numerical relations and reasoning **Spatial Aptitude:** Transformation of shapes: translation, rotation, scaling, mirroring, assembling, and grouping Paper folding, cutting, and patterns in 2 and 3 dimensions	

	Subject Wise Grand Tests *(No.of Questions: 30, Time duration: 83 Minutes and Marks: 50 M)*	
Test-24	Engineering Mathematics	
Test-25	Control Systems	
Test-26	Signals and Systems	
Test-27	Digital Circuits	
Test-28	Networks	
Test-29	Electronic Devices	01-04-2024
Test-30	Analog Circuits	
Test-31	Communications	
Test-32	Electromagnetics	
Test-33	General Aptitude	

Test No	Name of the Test	Date of Activation
Multi-Subject Wise Grand Tests _(No.of Questions: 30, Time duration: 83 Minutes and Marks: 50 M)_		
Test-34	Networks & Electromagnetics	
Test-35	Control Systems & Signals and Systems	
Test-36	Electronic Devices & Analog Circuits	
Test-37	Communications & Digital Circuits	
Test-38	Engineering Mathematics & General Aptitude	**01-04-2024**
Test-39	Networks & Signals and Systems	
Test-40	Analog Circuits & Digital Circuits	
Test-41	Electromagnetics & Electronic Devices	
Test-42	Communications &Control Systems	

Test No	Name of the Test	Date of Activation
Full Length Mock Tests _(No.of Questions: 65, Time duration: 180 Minutes and Marks: 100 M)_		
Test-43	Full Length Mock Test-1	
Test-44	Full Length Mock Test-2	
Test-45	Full Length Mock Test-3	
Test-46	Full Length Mock Test-4	
Test-47	Full Length Mock Test-5	
Test-48	Full Length Mock Test-6	
Test-49	Full Length Mock Test-7	**08-04-2024**
Test-50	Full Length Mock Test-8	
Test-51	Full Length Mock Test-9	
Test-52	Full Length Mock Test-10	
Test-53	Full Length Mock Test-11	
Test-54	Full Length Mock Test-12	