## Online Test Series Details for GATE 2025 - 26 Branch : Electrical Engineering

### **Online Test Series Details for GATE 2025 - 26**

**Branch: Electrical Engineering** 

#### **Test Name**

**Topic Wise Tests** 

Total 28 tests

**Subject Wise Tests (Basic Level)** 

Total 12 tests

**Subject Wise Test (Advance Level)** 

Total 12 tests

**Multiple Subjects Tests** 

Total 14 tests

**Full Length Mock GATE** 

Total 10 tests

### **Topic-wise Tests**

# Each test carries 30 marks and 45 minutes duration. Test consists of 10 one mark questions and 10 two marks questions.

	Topic	Subject
Test 1	<b>Transformer :</b> Single Phase & Three Phase Transformer, Auto Transformer	
Test 2	DC Machine: DC Generator & Motor	
Test 3	<b>Synchronous Machine :</b> Armature Winding, Synchronous Generator & Motor, Salient Pole Machine, Parallel operation of generators, Starting of Synchronous Motors	Electrical Machines
Test 4	<b>Induction Machine :</b> Induction Motor & Generator, Starting and Speed control of induction Machine, Single Phase Induction Motor, 3-Phase Induction Machine	Macillies
Test 5	Transformer + DC Machine	
Test 6	Synchronous + Induction Machine	

	Topic	Subject
Test 1	Single phase AC to DC Converters, Three phase AC to DC Converters, Electric Drives	_
Test 2	Chopper & Inverters, Sinusoidal PWM	Power
Test 3	Power Semiconductor, Switching Devices, AC voltage Controllers	Electronics

	Topic	Subject
Test 1	Logic Gates, Boolean Algebra, K-Maps,	
lest 1	Combinational circuits	Digital
Test 2	Sequential Circuits, DAC & ADC, Sample	Electronics
1681 2	and Hold Circuit	

	Topic	Subject
	Basics of Control Systems, Block	
Test 1	Diagram & Signal Flow Graph, Time	
lest 1	Response Analysis, Routh Stability	
	Criterion, Root Locus Diagram	Control
	Polar Plot & Nyquist Stability Criterion,	Systems
Test 2	Bode Plot, Frequency Response of	
	Second Order System, State Space	
	Analysis, Controllers & Compensators	

	Topic	Subject
Test 1	Basic Concept of Network, Source Transformation, Power Dissipation, Star to delta Transformation, Network Theorem, Two Port Network	
Test 2	RMS & Average Value, Transient & Steady State Response, Resonance, Coupling Circuit, Power Triangle, Network Synthesis, Complex Power and Power Factor in AC Circuit, Balanced 3-Phase Circuits	Network Analysis

	Topic	Subject
Test 1	Property & classification of signals and systems, LTI Systems, Convolution, Continuous time Fourier transform and Laplace transform & DTFT	Signals & Systems
Test 2	Continuous & Discrete time Fourier Series, Z-Transform, Sampling	

	Topic	Subject
Test 1	Diode Family: Characteristics of Diode, Diode Equivalent Circuit, Clipping Clamping & Voltage Regulator Circuits, Rectifier BJT Biasing, Low Frequency BJT Amplifier & BJT Current Mirror Circuit	Analog Electronics
Test 2	Operational Amplifier, MOSFET Biasing, MOSFET Amplifier, Feedback Amplifier & Oscillators	

	Topic	Subject
Test 1	Linear Algebra, Differential Equation, Limits and Series expansion, Probability, Statistics, Vector Calculus	En gin e enin g
Test 2	Differential Calculus, Integral Calculus, Mean Value Theorem,	Engineering Mathematics
	Complex Variable, Maxima and Minima	

	Topic	Subject
	Coulomb's Law, Electric Flux Density, Divergence, Faraday's	
	Law Gauss Theorem, Electric Field & Potential due to point,	
Test 1	Line, Plane and Spherical charge distributions, Ampere's and	Electromagnetic Field
	Biot-Savart's laws, Inductance, Dielectrics and Capacitance,	
	Magneto-motive Force, Reluctance, Magnetic Circuit	

	Topic	Subject
	Parameters and Performance of transmission line,	
To at 1	Power factor and Voltage Control, Corona, Distribution	
Test 1	System, Cable and Insulators, Power flow equations,	
	Series and Shunt Compensation	
	Symmetrical Faults, Symmetrical Components	Power
	Unsymmetrical Faults, Load Flow Studies, Power	Systems
Т ?	System Stability, Circuit Faults, Power System	
Test 2	Protection, Economic Load Dispatch (With and Without	
	consider Transmission line losses), Bus Admittance,	
	Gauss Seidel and Newton Raphson Load Flow Method	

	Topic	Subject
Test 1	AC Bridges, Basic Instruments, Measurement of resistance and Potentiometer, Error Analysis	Electrical &
Test 2	Measurement of Energy and Power, CRO, Q-meter, Digital Voltmeter (DVM), Instrument Transformer	Electronics Measurement

	Topic	Subject
Test 1	Quantitative Aptitude	General
Test 2	Verbal Aptitude and Spatial Aptitude	Aptitude

**Topic-wise Tests** 

Each test carries 30 marks and 45 minutes duration.

Test consists of 10 one mark questions and 10 two marks questions (MSQ/MCQ/NAT).

Subjects	No. of Tests
Network Analysis	02
Control Systems	02
Engineering Mathematics	02
Signals & Systems	02
General Aptitude	02
Electrical Machines	06
Digital Electronics	02
Analog Electronics	02
Electromagnetic Field	01
Power Systems	02
Electrical & Electronics Measurement	02
Power Electronics	03

### **Basic Level Subject-wise Tests**

Each test carries 50 marks and 90 minutes duration.

Test consists of 10 one mark questions and 20 two marks questions.

Subjects	No. of Tests
Electrical Machines	01
Power Electronics	01
Signals & Systems	01
Digital Electronics	01
Analog Electronics	01
Electromagnetic Field	01
Engineering Mathematics	01
Power Systems	01
Electrical & Electronics Measurement	01
Network Analysis	01
Control Systems	01
General Aptitude	01

### **Advance Level Subject-wise Tests**

Each test carries 50 marks and 90 minutes duration. Test consists of 10 one mark questions and 20 two marks questions.

Subjects	No. of Tests
Electrical Machines	01
Power Electronics	01
Signals & Systems	01
Digital Electronics	01
Analog Electronics	01
Electromagnetic Field	01
Engineering Mathematics	01
Power Systems	01
Electrical & Electronics Measurement	01
Network Analysis	01
Control Systems	01
General Aptitude	01

### **Combined Subjects Tests**

Each test carries 50 marks and 90 minutes duration. Test consists of 10 one mark questions and 20 two marks questions.

Subjects	No. of Tests
Machines + PSA + EMT	Moderate Level 1 Advance Level 1
Machine + PE	Moderate Level 1 Advance Level 1
PSA + PE	Moderate Level 1 Advance Level 1
Machines + PSA + PE	Moderate Level 1 Advance Level 1
Network Analysis + Control Systems	Moderate Level 1 Advance Level 1
Digital + Signals + Analog Elecx.	Moderate Level 1 Advance Level 1
Maths + Aptitude	Moderate Level 1 Advance Level 1

## Full Length Mock GATE (Tentative Details)

(Each test carries 100 marks and 3 hours duration) as per GATE Pattern.

Subjects
Full Length Mock - 1
Full Length Mock - 2
Full Length Mock - 3
Full Length Mock - 4
Full Length Mock - 5
Full Length Mock - 6
Full Length Mock - 7
Full Length Mock - 8
Full Length Mock - 9
Full Length Mock - 10