



ACE[®]
Engineering Academy
Leading Institute for ESE/GATE/PSUs



AP TRANSCO/GENCO Assistant Engineer *Online* Test Series

Electrical Engineering - Schedule

No.of Tests : 12 + (12 <i>free</i> practice tests)		
	AP TRANSCO/GENCO Test Series	Practice Tests
Subject Wise Tests	9	9
Full Length Mock Tests	3	3
Total Tests - 24		

Note:

- ❖ The Syllabus considered as per previous notification of AP TRANSCO. ACE Engineering Academy does not take any responsibility for deviations in syllabus in the final exam.
- ❖ The dates of above tests may change according to the AP-TRANSCO/GENCO exam schedule.
- ❖ Tests will be activated at 6:00 pm on scheduled day.
- ❖ All tests will be active up to the forthcoming AP-TRANSCO/GENCO examination.
- ❖ Test series available in ENGLISH medium only.

Subject-wise Tests

(No. of Questions: 30, Time duration: 36 Minutes and Marks: 30 M)

Test No	Name of the Test	Date of Activation
Test-01	Electric circuits: Network graph, KCL, KVL, node and mesh analysis, star/ delta transformation; electromagnetic induction; mutual induction; ac fundamentals; harmonics, transient response of dc and ac networks; sinusoidal steady-state analysis, resonance, ideal current and voltage sources, Thevenin's, Norton's, Superposition and Maximum Power Transfer theorems, two-port networks, three phase circuits, power measurement.	20-11-2025
Test-02	Control Systems: Principles of feedback; transfer function; block diagrams; steady-state errors; Routh and Nyquist techniques; Bode plots; root loci; lag, lead and lead-lag compensation.	24-11-2025
Test-03	Electrical Machines: Single phase transformer - equivalent circuit, phasor diagram, tests, regulation and efficiency; three phase transformers - connections, parallel operation; auto-transformer; DC machines - types, windings, generator/ motor 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.	28-11-2025
Test-04	Measurements: Bridges and potentiometers; PMMC, moving iron, dynamometer and induction type instruments; measurement of voltage, current, power, energy and power factor; digital voltmeters and multi-meters; phase, time and frequency measurement; Q-meters; oscilloscopes;	02-12-2025
Test-05	Analog Electronics: Characteristics of diodes, BJT, FET; amplifiers - biasing, equivalent circuit and frequency response; oscillators and feedback amplifiers.	06-12-2025
Test-06	Digital & Microprocessors: Combinational and sequential logic circuits; multiplexer; Schmitt trigger; A/D and D/A converters; 8-bit microprocessor basics, architecture, programming and interfacing.	10-12-2025
Test-07	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; basic concepts of adjustable speed dc and ac drives.	14-12-2025
Test-08	Power Systems: Basic power generation concepts; transmission line models and performance; underground cable, string insulators; corona; 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; protection of alternator, transformer, transmission lines neutral earthing, solid state relays and digital protection; circuit breakers; system stability concepts, swing curves and equal area criterion Utilization: Heating - resistance, induction, dielectric; Welding – spot, seam and butt; Electric traction – speed-time curves, tractive effort;	18-12-2025
Test-09	Analytical Aptitude	22-12-2025

Test No	Name of the Test	Date of Activation
Full Length Mock Test Series <i>(No.of Questions: 100, Time duration: 120 Minutes and Marks: 100 M)</i>		
Test-10	Full Length Mock Test-1	25-12-2025
Test-11	Full Length Mock Test-2	01-01-2026
Test-12	Full Length Mock Test-3	08-01-2026

Subject-wise Tests

(No. of Questions: 30, Time duration: 36 Minutes and Marks: 30 M)

Test No	Name of the Test	Date of Activation
Test-01	Electric circuits: Network graph, KCL, KVL, node and mesh analysis, star/ delta transformation; electromagnetic induction; mutual induction; ac fundamentals; harmonics, transient response of dc and ac networks; sinusoidal steady-state analysis, resonance, ideal current and voltage sources, Thevenin's, Norton's, Superposition and Maximum Power Transfer theorems, two-port networks, three phase circuits, power measurement.	25-08-2025
Test-02	Control Systems: Principles of feedback; transfer function; block diagrams; steady-state errors; Routh and Nyquist techniques; Bode plots; root loci; lag, lead and lead-lag compensation.	
Test-03	Electrical Machines: Single phase transformer - equivalent circuit, phasor diagram, tests, regulation and efficiency; three phase transformers - connections, parallel operation; auto-transformer; DC machines - types, windings, generator/ motor 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.	
Test-04	Measurements: Bridges and potentiometers; PMMC, moving iron, dynamometer and induction type instruments; measurement of voltage, current, power, energy and power factor; digital voltmeters and multi-meters; phase, time and frequency measurement; Q-meters; oscilloscopes;	
Test-05	Analog Electronics: Characteristics of diodes, BJT, FET; amplifiers - biasing, equivalent circuit and frequency response; oscillators and feedback amplifiers.	
Test-06	Digital & Microprocessors: Combinational and sequential logic circuits; multiplexer; Schmitt trigger; A/D and D/A converters; 8-bit microprocessor basics, architecture, programming and interfacing.	
Test-07	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; basic concepts of adjustable speed dc and ac drives.	
Test-08	Power Systems: Basic power generation concepts; transmission line models and performance; underground cable, string insulators; corona; 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; protection of alternator, transformer, transmission lines neutral earthing, solid state relays and digital protection; circuit breakers; system stability concepts, swing curves and equal area criterion Utilization: Heating - resistance, induction, dielectric; Welding - spot, seam and butt; Electric traction - speed-time curves, tractive effort;	
Test-09	Analytical Aptitude	

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Test-11	Full Length Mock Test-2	
Test-12	Full Length Mock Test-3	