



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



AP-GENCO-TRANSCO- DISCOM's (EPDCL, SPDCL, CPDCL) Assistant Executive Engineer

Online Test Series

Electrical Engineering - Schedule

No. of Tests : 15 + (15 <i>free</i> practice tests)		
	New Tests	Practice Tests
Subject Wise Tests	12	12
Full Length Mock Tests	3	3
Total Tests - 30		

Note:

- ❖ The Syllabus considered as per notification of AP-GENCO-TRANSCO-DISCOM's. 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-GENCO-TRANSCO-DISCOM's exam schedule.
- ❖ Tests will be activated at 6:00 pm on scheduled day.
- ❖ All tests will remain active until the AP-GENCO-TRANSCO-DISCOM's examination.
- ❖ Test series available in ENGLISH medium only.

Subject-wise Tests

(No. of Questions: 30, Time duration: 54 Minutes and Marks: 30 M)

Test No	Name of the Test	Date of Activation
Test-01	Utilization & Control Systems	30-06-2026
Test-02	General Awareness	01-07-2026
Test-03	Electrical Machines	03-07-2026
Test-04	Reasoning and General Intelligence	04-07-2026
Test-05	Measurements	06-07-2026
Test-06	English Language And Comprehension	07-07-2026
Test-07	Electric Circuits	09-07-2026
Test-08	Quantitative Aptitude	10-07-2026
Test-09	Power Systems	12-07-2026
Test-10	Computer Knowledge/Proficiency	13-07-2026
Test-11	Analog and Digital Electronics	15-07-2026
Test-12	Power Electronics and Drives	18-07-2026

Full Length Mock Test Series

(No. of Questions: 100, Time duration: 180 Minutes and Marks: 100 M)

Test-13	Full Length Mock Test-1	25-07-2026
Test-14	Full Length Mock Test-2	01-08-2026
Test-15	Full Length Mock Test-3	08-08-2026

Free Practice Tests

Subject-wise Tests

(No.of Questions: 30, Time duration: 54 Minutes and Marks: 30 M)

Test No	Name of the Test	Date of Activation
Test-01	Utilization & Control Systems	04-07-2026
Test-02	General Awareness	
Test-03	Electrical Machines	
Test-04	Reasoning and General Intelligence	
Test-05	Measurements	
Test-06	English Language And Comprehension	
Test-07	Electric Circuits	
Test-08	Quantitative Aptitude	
Test-09	Power Systems	
Test-10	Computer Knowledge/Proficiency	
Test-11	Analog and Digital Electronics	
Test-12	Power Electronics and Drives	

Full Length Mock Test Series

(No.of Questions: 100, Time duration: 180 Minutes and Marks: 100 M)

Test-13	Full Length Mock Test-1	06-07-2026
Test-14	Full Length Mock Test-2	
Test-15	Full Length Mock Test-3	

Syllabus

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.

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.

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 & 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; Heating – resistance, induction, dielectric; Welding spot, seam and butt, Electric traction – speed-time curves, tractive effort;

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;

Analog and Digital Electronics: Characteristics of diodes, BJT, FET; amplifiers – biasing, equivalent circuit and frequency response; oscillators and feedback amplifiers; Combinational and sequential logic circuits; multiplexer, Schmitt trigger, 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 basic concepts of adjustable speed dc and ac drives.