





ACE
Engineering Academy
(Leading institute for ESE/GATE/PSUs)

AP TRANSCO-AEE

Online Test Series

No. of Tests : 12

 Subject Wise Tests	9
 Full Length Mock Tests	3

All tests will be available till 19th May 2019.

TEST SERIES HIGHLIGHTS

- ★ Rank will be given for each test.
- ★ Test wise and overall statistics.
- ★ Comparison with toppers.
- ★ Question wise and test wise time analysis & comparison with toppers on time management.

Subject-wise Tests

Tests will be activated at 6:00 pm on scheduled day

Test No	Subject Name	No. of Questions	Max Marks	Duration	Date of Activation
Test-01	Electric circuits	30	30	36 Min	15-04-2019
Test-02	Control Systems	30	30	36 Min	17-04-2019
Test-03	Electrical Machines	30	30	36 Min	19-04-2019
Test-04	Measurements	30	30	36 Min	21-04-2019
Test-05	Analog Electronics	30	30	36 Min	23-04-2019
Test-06	Digital & Microprocessors	30	30	36 Min	25-04-2019
Test-07	Power Electronics	30	30	36 Min	27-04-2019
Test-08	Power Systems & Utilization	30	30	36 Min	29-04-2019
Test-09	Aptitude	30	30	36 Min	01-05-2019

Full Length Mock Tests

Test No	Mock	No. of Questions	Max Marks	Duration	Date of Activation
Test-10	Full Length Mock Tests -1	100	100	2 Hours	04-05-2019
Test-11	Full Length Mock Tests -2	100	100	2 Hours	08-05-2019
Test-12	Full Length Mock Tests -3	100	100	2 Hours	12-05-2019

Note: The Syllabus considered as per Notifications of AP Transco. ACE Engineering Academy does not take any responsibility for deviations in syllabus in the final AP Transco exam. As per Notification of AP Transco each question carries '1' mark.

Syllabus for Electrical Engineering

Subject Name	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; perunit 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.