



**ACE**<sup>®</sup>  
Engineering Academy  
Leading Institute for ESE/GATE/PSUs



**TGPSC**  
**ASSISTANT EXECUTIVE ENGINEERS**  
**Online Test Series**

**Electrical Engineering - Schedule**

No. of Tests : 22 + 22 <i>free</i> practice tests		
	TGPSC-AEE-2026	Practice Tests
Subject Wise Tests	18	18
Full Length Mock Tests	4	4
<b>Total Tests - 44</b>		

**Note:**

- ★ The syllabus is based on the previous TGPSC-AEE notification. ACE Engineering Academy does not take responsibility for any changes or deviations in the final APPSC-AEE examination syllabus.
- ★ The test dates may be changed according to the TGPSC-AEE examination schedule.
- ★ All tests will remain active until the TGPSC-AEE examination.
- ★ Tests will be activated at 6:00 PM on the scheduled date.
- ★ The test series is available in English medium only.

## Subject wise Tests

*(No. of Questions: 30, Time duration: 30 Minutes)*

Test No	Name of the Test	Max Marks	Date of Activation
Test-01	<b>Electric Circuits and Fields:</b> Network graph, KCL, KVL, node and mesh analysis, transient response of dc and ac networks; sinusoidal steady-state analysis, resonance, basic filter concepts; ideal current and voltage sources, Thevenin's, Norton's, Superposition, Maximum Power Transfer and Reciprocity theorems; two-port networks, three phase circuits; Star, Delta connections, Measurement of power in 3-phase by two-wattmeter method; Fourier, Laplace and Z transforms; Gauss Theorem, electric field and potential due to point, line, plane and spherical charge distributions; Ampere's and Biot-Savart's laws; inductance; dielectrics; capacitance.	60	15-06-2026
Test-02	<b>Electrical Machines-1:</b> <b>Transformer:</b> Single phase transformer - equivalent circuit, phasor diagram, tests, regulation and efficiency; three phase transformers - connections, parallel operation; auto-transformer. <b>DC machines:</b> Energy conversion principles; DC machines - types, windings, generator and motor characteristics, losses and efficiency, armature reaction and commutation, starting and speed control of motors, tests.	60	20-06-2026
Test-03	<b>General Studies and General Abilities-1:</b> Society, Culture, Heritage, Arts and Literature of Telangana. Policies of Telangana State.	30	21-06-2026
Test-04	<b>Electrical Machines-2:</b> <b>Induction motors:</b> Three phase induction motors - principles, types, performance characteristics, starting and speed control; single phase induction motors. <b>Synchronous machines:</b> Synchronous machines - performance, regulation and parallel operation of alternators, motor starting, characteristics and applications; servo motors.	60	25-06-2026
Test-05	<b>Power Systems-1:</b> Basic power generation concepts, Economic aspects, per-unit quantities; bus impedance and admittance matrices; load flow study; symmetrical components; symmetrical & unsymmetrical fault analysis; Power system stability concepts, swing equation, power angle curve, solution of swing equation, equal area criterion.	60	30-06-2026
Test-06	<b>General Studies and General Abilities-2:</b> Economic and Social Development of India and Telangana. Socio-economic, Political and Cultural History of Telangana with special emphasis on Telangana Statehood Movement and formation of Telangana state.	30	01-07-2026
Test-07	<b>Power Systems-2:</b> Types of Tariffs; transmission line models and performance; cable performance, insulators, Sag and Tension; corona and radio interference; distribution systems; voltage control; power factor correction. Economic operation; Load Frequency Control; principles of over-current, differential and distance protection; Generator protection, Transformer protection, Feeder protection, static relays; circuit breakers.	60	05-07-2026
Test-08	<b>General Studies and General Abilities-3:</b> Physical, Social and Economic Geography of India. Physical, Social and Economic Geography and Demography of Telangana.	30	06-07-2026
Test-09	<b>Control Systems:</b> Principles of feedback; transfer function; block diagrams; steady-state errors; Routh and Nyquist techniques; Bode plots; root loci; lag, lead and lead-lag compensation; state space model; state transition matrix, controllability and observability.	60	10-07-2026
Test-10	<b>General Studies and General Abilities-4:</b> General Science; India's Achievements in Science and Technology. Environmental issues; Disaster Management- Prevention and Mitigation Strategies.	30	11-07-2026
Test-11	<b>Electrical and Electronic Measurements:</b> DC, AC Bridges, potentiometers; PMMC, moving iron, dynamometer and induction type instruments; measurement of voltage, current, power, energy and power factor; shunts, multipliers; instrument transformers; digital voltmeters, CRO; phase, time and frequency measurements using lissajous patterns; error analysis.	60	15-07-2026
Test-12	<b>General Studies and General Abilities-5:</b> Socio-economic, Political and Cultural History of Modern India with special emphasis on Indian National Movement. Indian Constitution; Indian Political System; Governance and Public Policy.	30	16-07-2026
Test-13	<b>Analog Electronics:</b> Characteristics of p-n junction diode, Zener diode, BJT, FET; amplifiers - biasing, equivalent circuit and frequency response; oscillators and feedback amplifiers; operational amplifiers - characteristics and applications; simple active filters; VCOs and timers.	60	20-07-2026
Test-14	<b>General Studies and General Abilities-6:</b> Current affairs – Regional, National and International. International Relations and Events.	30	21-07-2026
Test-15	<b>Digital Electronics and Microprocessor:</b> Boolean Algebra, minimization of switching functions combinational and sequential logic circuits; Schmitt trigger, multi-vibrators Flip flops, counters and registers, sample and hold circuits; A/D and D/A converters; microprocessor basics.(8085 & 8086), architecture, programming and interfacing, 8051 mc BASICS (Architectures. Addressing modes and instruction set).	60	25-07-2026

Test No	Name of the Test	Max Marks	Date of Activation
Test-16	<p><b>Power Electronics:</b> Semiconductor power diodes, transistors, thyristors, triacs, GTOs, MOSFETs and IGBTs - static characteristics and principles of operation; triggering circuits commutation circuits; phase control rectifiers; bridge converters - fully controlled and half controlled; dual converters, principles of choppers, inverters, cyclo-converters and ac voltage controllers.</p> <p><b>Electric Drives:</b> Four quadrant operation, Types of loads, Energy loss during starting and braking of dc and ac motors, Types of braking in dc &amp; ac motors, Basis concepts of converter and chopper fed dc drives; V/f control, static rotor resistance control and slip power recovery scheme of 3-phase induction motor drives.</p>	60	30-07-2026
Test-17	<p><b>General Studies and General Abilities-7:</b> Logical Reasoning; Analytical Ability and Data Interpretation. Basic English. (10th Class Standard)</p>	30	31-07-2026
Test-18	<p><b>Utilization:</b> High frequency eddy current heating, dielectric heating, Arc furnace, electric arc welding &amp; electric resistance welding, Illumination: Laws of illumination, MSCP, SV &amp; MV lamps, Factory, street &amp; flood lighting, Electric traction and track electrification, Speed-time curves, Tractive effort, Specific energy consumption, Mechanism of train movement, adhesive weight and coefficient of adhesion. DC motor series parallel control, energy saving.</p>	60	04-08-2026

### Full Length Mock Test

*(No. of Questions: 150, Time duration: 150 Minutes)*

Test-19	Mock-1 PAPER-I (General Studies & General Abilities)	150	13-08-2026
Test-20	Mock-1 PAPER-II (Engineering Discipline)	300	14-08-2026
Test-21	Mock-2 PAPER-I (General Studies & General Abilities)	150	20-08-2026
Test-22	Mock-2 PAPER-II (Engineering Discipline)	300	21-08-2026

# Free Practice Tests

## Subject wise Tests

(No. of Questions: 30, Time duration: 30 Minutes)

Test No	Name of the Test	Max Marks	Date of Activation
Test-01	<b>Electric Circuits and Fields:</b> Network graph, KCL, KVL, node and mesh analysis, transient response of dc and ac networks; sinusoidal steady-state analysis, resonance, basic filter concepts; ideal current and voltage sources, Thevenin's, Norton's, Superposition, Maximum Power Transfer and Reciprocity theorems; two-port networks, three phase circuits; Star, Delta connections, Measurement of power in 3-phase by two-wattmeter method; Fourier, Laplace and Z transforms; Gauss Theorem, electric field and potential due to point, line, plane and spherical charge distributions; Ampere's and Biot-Savart's laws; inductance; dielectrics; capacitance.	60	10-06-2026
Test-02	<b>Electrical Machines-1:</b> <b>Transformer:</b> Single phase transformer - equivalent circuit, phasor diagram, tests, regulation and efficiency; three phase transformers - connections, parallel operation; auto-transformer. <b>DC machines:</b> Energy conversion principles; DC machines - types, windings, generator and motor characteristics, losses and efficiency, armature reaction and commutation, starting and speed control of motors, tests.	60	
Test-03	<b>General Studies and General Abilities-1:</b> Society, Culture, Heritage, Arts and Literature of Telangana. Policies of Telangana State.	30	
Test-04	<b>Electrical Machines-2:</b> <b>Induction motors:</b> Three phase induction motors - principles, types, performance characteristics, starting and speed control; single phase induction motors. <b>Synchronous machines:</b> Synchronous machines - performance, regulation and parallel operation of alternators, motor starting, characteristics and applications; servo motors.	60	
Test-05	<b>Power Systems-1:</b> Basic power generation concepts, Economic aspects, per-unit quantities; bus impedance and admittance matrices; load flow study; symmetrical components; symmetrical & unsymmetrical fault analysis; Power system stability concepts, swing equation, power angle curve, solution of swing equation, equal area criterion.	60	
Test-06	<b>General Studies and General Abilities-2:</b> Economic and Social Development of India and Telangana. Socio-economic, Political and Cultural History of Telangana with special emphasis on Telangana Statehood Movement and formation of Telangana state.	30	
Test-07	<b>Power Systems-2:</b> Types of Tariffs; transmission line models and performance; cable performance, insulators, Sag and Tension; corona and radio interference; distribution systems; voltage control; power factor correction. Economic operation; Load Frequency Control; principles of over-current, differential and distance protection; Generator protection, Transformer protection, Feeder protection, static relays; circuit breakers.	60	
Test-08	<b>General Studies and General Abilities-3:</b> Physical, Social and Economic Geography of India. Physical, Social and Economic Geography and Demography of Telangana.	30	
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Test-16	<b>Power Electronics:</b> Semiconductor power diodes, transistors, thyristors, triacs, GTOs, MOSFETs and IGBTs - static characteristics and principles of operation; triggering circuits commutation circuits; phase control rectifiers; bridge converters - fully controlled and half controlled; dual converters, principles of choppers, inverters, cyclo-converters and ac voltage controllers. <b>Electric Drives:</b> Four quadrant operation, Types of loads, Energy loss during starting and braking of dc and ac motors, Types of braking in dc & ac motors, Basis concepts of converter and chopper fed dc drives; V/f control, static rotor resistance control and slip power recovery scheme of 3-phase induction motor drives.	60	
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Test-20	Mock-1 PAPER-II (Engineering Discipline)	300	
Test-21	Mock-2 PAPER-I (General Studies & General Abilities)	150	
Test-22	Mock-2 PAPER-II (Engineering Discipline)	300	