APPSC
ASSISTANT EXECUTIVE ENGINEERS
Online Test Series

Electrical Engineering - Schedule

No.of Tests : 35			
	Paper-I	**Paper-II**	**Paper-III**
Subject Wise Tests	**11**	**9**	**9**
Full Length Mock Tests	**2**	**2**	**2**

Note:

- ❖ The syllabus is based on the APPSC-AEE-2026 notification. ACE Engineering Academy does not take responsibility for any changes or deviations in the final APPSC-AEE examination syllabus.
- ❖ As per the previous APPSC-AEE notification, each question carries 1 mark and each wrong answer will be penalized with 1/3rd of the marks prescribed for the question.
- ❖ The test dates may change depending on the APPSC-AEE-2026 examination schedule.
- ❖ Tests will be activated at 6:00 PM on the scheduled day.
- ❖ All tests will remain active until the APPSC-AEE -2026 examination.
- ❖ The test series is available only in English medium.

Paper-I

Subject wise Tests

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

Test No	Name of the Test	Date of Activation
Test-01	**General Studies and Mental Ability-1:** General Science and its applications to the day to day life Contemporary developments in Science & Technology and Information Technology.	Activated
Test-02	**General Studies and Mental Ability-2:** History of India – emphasis will be on broad general understanding of the subject in its social, economic, cultural and political aspects with a focus on Indian National Movement.	
Test-03	**General Studies and Mental Ability-3:** Geography of India	
Test-04	**General Studies and Mental Ability-4:** Indian Polity and Governance: constitutional issues, public policy, reforms and e-Governance initiatives.	
Test-05	**General Studies and Mental Ability-5:** Indian Economy and Planning	
Test-06	**General Studies and Mental Ability-6:** Sustainable Development and Environmental Protection	
Test-07	**General Studies and Mental Ability-7:** Disaster Management: vulnerability profile, prevention and mitigation strategies, Application of Remote Sensing and GIS in the assessment of Disaster.	
Test-08	**General Studies and Mental Ability-8:** Andhra Pradesh- Economy, Geography and History	
Test-09	**General Studies and Mental Ability-9:** Major Current Events and Issues pertaining to International, National and State of Andhra Pradesh.	
Test-10	**General Studies and Mental Ability-10:** Logical reasoning, analytical ability and logical interpretation.	
Test-11	**General Studies and Mental Ability-11:** Data Analysis: Tabulation of data Visual representation of data Basic data analysis (Summary Statistics such as mean, median, mode and variance) and Interpretation.	

Full Length Mock Tests

(No.of Questions: 150, Time duration: 150 Minutes and Marks: 150 M)

Test-12	Full Length Mock Test-1	02-11-2026
Test-13	Full Length Mock Test-2	16-11-2026

Paper-II

Subject wise Tests

(No.of Questions: 20, Time duration: 20 Minutes and Marks: 20 M)

Test No	Name of the Test	Date of Activation
Test-14	**Electric Circuits:** Active and passive network elements – dependent and independent sources – response of passive elements to arbitrary excitations – energy stored in inductance and capacitance – Kirchoff's loss – formation of mesh and Nodel Integro differential equations – their solutions by classical and Laplace transformation methods – Transient and steady state response of RL, RC elements to impulse, step, ramp and sinusoidal inputs – single phase AC circuits – methods of solutions – poly phase circuits – analysis of balanced and unbalanced circuits – measurements of three phase power.	Activated
Test-15	**Electrical Measurements and Instruments:** Absolute and secondary instrument types – Principle of operation of different type of instrument – extension of instrument ranges – measurement of voltage, current, power and energy – localization of cable faults – Murray loop and Varley loop tests – Cathode ray Oscilloscope.	
Test-16	**Illumination:** Solid angle, luminous flux, luminous intensity – Illumination and candle power – laws of Illumination – flood lighting, street lighting – electric lamps.	
Test-17	**DC Generators and Motors:** Types of DC generators – EMF equation – constructional details – characteristics of shunt, series and compound generators – Armature reaction – types of DC motors – Torque developed in a DC motor – speed controls of DC motors and starters.	
Test-18	**Transformers:** Constructional details – Principle of operati9on – vector diagrams on no load and load – regulation and efficiency – equivalent circuits and tests for the determination of parameters of equivalent circuits – types of three phase transformers and their applications – Scott connection of transformers.	
Test-19	**3-Phase Induction Motors:** Principle of operation – Cage and Slip ring motors – torque slip characteristics – methods of speed control.	
Test-20	**3-Phase Alternators:** Principle of operation and constructional details – types of Alternators – synchronous impedance – voltage regulation – short circuit ratio and its importance – Phasor diagrams of round rotor and salient pole machines – synchronization– behaviour of an alternator connected to infinite bus – effect of varying excitation current and mechanical torque – power angle curves – control of active and reactive powers.	
Test-21	**3-Phase Synchronous Motors:** Principle of operation – torque developed and methods of starting – V and Inverted V curves – effects of variations of excitation – synchronous condensers.	
Test-22	**Single phase induction Motors:** Types of single phase motors – Types of Single phase induction motors – characteristics and methods of starting – shaded pole induction motor.	

Test No	Name of the Test	Date of Activation
Full Length Mock Tests *(No.of Questions: 150, Time duration: 150 Minutes and Marks: 150 M)*		
Test-23	Full Length Mock Test-1	18-11-2026
Test-24	Full Length Mock Test-2	25-11-2026

Paper-III

Subject wise Tests

(No.of Questions: 15, Time duration: 15 Minutes and Marks: 15 M)

Test No	Name of the Test	Date of Activation
Test-25	**Transmission & Distribution:** Line constants – Inductance and Capacitance calculations – Representation of over head Lines – Short, Medium and Long lines – ABCD constants – Mechanical Design – Sag, Tension Calculations, Tuned Power Lines.	26-10-2026
Test-26	**Over Head Line Insulators:** Types of Insulators – Potential distributions over a string of suspension insulators – string efficiency – Methods of improving string efficiency.	28-10-2026
Test-27	**Underground Cables:** Insulation of cables – Grading of cables – Capacitance Measurement in cables – Testing of Cables – Power frequency withstand tests.	30-10-2026
Test-28	**Fault Calculations:** Balanced Fault calculations on systems – Symmetrical components – Types of faults – Analysis of unbalanced faults.	01-11-2026
Test-29	**Generating Stations:** Location and types, types of hydroelectric power stations, layout of a hydro-power plant, types of turbines used – Pumped storage installations – Layout of thermal electric power stations, types of turbines used, condensers, cooling towers, boiler feed pump; energy flow diagram of steam power plant. Nuclear power generation; nuclear fission – types of nuclear power reactors – Principle of a fast breeder reactor.	03-11-2026
Test-30	**Protection:** Characteristic of Relays – Over current, directional and distance protection of lines. Protection of Alternators against stator faults, rotor faults, loss of excitation, unbalanced loading, overloading, failure of prime-mover. Over speeding and over voltage. Protection of transformers against winding faults, overloads and external short circuits.	05-11-2026
Test-31	**Circuit Breakers:** Air-blast, oil, minimum oil, vacuum – sulphur hexafluoride and d.c. circuit breakers – Relative merits and demerits.	07-11-2026

Test No	Name of the Test	Date of Activation
Test-32	**Economic Aspects:** Generation costs and their classification, load curve, load utilization and plant capacity factors. Load sharing between base load and peak-load stations. Load forecasting. Economical distribution of load between unit within a plant and between plants. Modeling of fuel costs for thermal generation. Optimal operation of an all thermal generating system and of a hydro-thermal system. Consideration of transmission losses.	09-11-2026
Test-33	**Utilization of Electrical Energy:** Industrial drives – Motors for various drives – Estimating and Rating – Testing of D.C. and A.C. motors – Neutral Earthing.	11-11-2026
Full Length Mock Tests *(No.of Questions: 150, Time duration: 150 Minutes and Marks: 150 M)*		
Test-34	Full Length Mock Test-1	18-11-2026
Test-35	Full Length Mock Test-2	25-11-2026