

There will be one question paper in the written examination, which will contain 100 questions and the total time duration will be two hours. The questions of the examination will be objective and multiple-choice type. Each question will be of one mark. There is a provision of negative marking for each wrong answer for the examination, which will be 25 percent i.e. $\frac{1}{4}$ of the marks prescribed for that question.

Examination Plan

The parts of examination, subjects, number of questions, total marks and time period will be as per the details given below-

Part	Subject	Number of Questions	Total Marks	Time Period
Part-1	(1) Basic Electrical Engineering	05	05	Two Hours (120 Minutes)
	(2) Magnetic Circuits and Electromagnetism	05	05	
	(3) AC Fundamentals and AC Machines	05	05	
	(4) Electrical Measurement and Measuring Instruments	05	05	
	(5) DC Machines and Transformers	05	05	
	(6) Alternators and Synchronous Machines	05	05	
	(7) Electrical Generation, Transmission, and Distribution	05	05	
	(8) Estimation and Costing	05	05	
	(9) Electrical Installation and Earthing	05	05	
	(10) Power Systems and Economics	05	05	
	(11) Cables, Switchgear and Protection Systems	05	05	

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	(12) Utilization of Electrical Energy	05	05	
	(13) Basic Electronics	05	05	
Part-2	Knowledge of concepts of Computer and Information Technology and contemporary technological development and innovation in this field	15	15	
Part-3	General information related to the state of Uttar Pradesh	20	20	
Total		100	100	

Note- There is a provision of negative marking for each wrong answer for the above examination, which will be 25 percent i.e. $\frac{1}{4}$ of marks prescribed for that question.

SYLLABUS

Part-1

(Subject related Knowledge)

(1) Basic Electrical Engineering-

Concepts of current, voltage, power, and energy; resistance, inductance, capacitance; simple electric circuits; circuit laws

(2) Magnetic Circuits and Electromagnetism-

Types of magnetic materials; flux and MMF; magnetic circuit calculations; electromagnetic induction; self and mutual induction

(3) AC Fundamentals and AC Machines -

Basic concepts of alternating current; polyphase systems; star and delta connections; three-phase power; average value of AC waveforms, 3-phase induction motors; effect of voltage and frequency changes on speed; fractional kilowatt motors; single-phase induction motors; characteristics and applications

(4) Electrical Measurement and Measuring Instruments-

Measurement of power and energy; measurement of frequency and phase angle; ammeters and voltmeters (Moving Coil and Moving Iron); wattmeters; multimeters; CRO; signal generators; earth fault detection

(5) DC Machines and Transformers-

Construction of DC machines; principles of DC motors and generators; methods of motor braking, Construction and working principles; voltage regulation; autotransformers

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(6) Alternators and Synchronous Machines-

3-phase EMF Generation, armature reaction, voltage regulation, parallel operation of two alternators

(7) Electrical Generation, Transmission, and Distribution-

Electrical generation, transmission and distribution systems, types of power stations, power station interconnection

(8) Estimation and Costing-

Electrical estimation and costing, estimation of lighting schemes

(9) Electrical Installation and Earthing-

Electrical installation of machines, IE Rules, earthing practices, safety rules

(10) Power Systems and Economics-

Load factor, diversity factor, demand factor, generation cost, power factor improvement, various types of tariffs

(11) Cables, Switchgear and Protection Systems-

Types of cables, cable rating and derating factors, switchgear, circuit breaker ratings, Types of faults, short circuit, earth leakage protection, over-current protection

(12) Utilization of Electrical Energy-

Illumination (lighting), electric heating, electric welding, electroplating, electric drives and motors

(13) Basic Electronics-

Working principles of various electronic devices, simple electronic circuits

Part-2

(Knowledge of Concepts of Computer and Information Technology and Contemporary Technological Development and Innovation in this field)

- History, Introduction and Application of Computer, Information Technology, Internet and World Wide Web (WWW).
- General Knowledge related to:
 - ✓ Hardware and Software.
 - ✓ Input and Output.
 - ✓ Internet Protocol/IP Address.
 - ✓ IT gadgets and their application.
 - ✓ Creation of e-mail ID and use/operation of e-mail.
 - ✓ Operation of Printer, Tablet and Mobile.

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- ✓ Important elements of Word Processing (MS-Word) and Excel Processing (MS-Excel).
- ✓ Operating System, Social Networking, e-Governance.
- Digital Financial Tools and Applications.
- Future Skills and Cyber Security.
- Technological Development and Innovation in the field of Computer and Information Technology (Artificial Intelligence, Big Data Processing, Deep Learning, Machine Learning, Internet of Things) and India's achievements in this field etc.

Part-3

(General Information related to The State of Uttar Pradesh)

In this part of the question paper, questions based on History, Culture, Art, Architecture, Festivals, Folk Dance, Literature, Regional Languages, Heritage, Social Customs and Tourism, Geographical Landscape and Environment, Natural Resources, Climate, Soil, Forest, Wildlife, Mines and Minerals, Economy, Agriculture, Industry, Business and Employment, Polity, Administration of Uttar Pradesh and Current Events and Achievements of Uttar Pradesh State in various fields etc. will be asked from the candidates.

10-लिखित परीक्षा के सम्बन्ध में विशेष नोट -

विज्ञापन संख्या-25-परीक्षा/2026, सम्मिलित अवर अभियंता (विद्युत) मुख्य परीक्षा (प्रा0अ0प0-2025)/25 की लिखित परीक्षा हेतु अभ्यर्थियों की शार्टलिस्टिंग उनके प्रारम्भिक अर्हता परीक्षा-2025 के नार्मलाइज्ड स्कोर के आधार पर की जाएगी। प्रश्नगत विज्ञापन के अंतर्गत विज्ञापित पदों के सापेक्ष श्रेणीवार 15 गुना अभ्यर्थियों को [अंतिम कटऑफ अंक तक नार्मलाइज्ड स्कोर (दशमलव के 02 स्थान तक) धारित करने वाले समस्त अभ्यर्थियों को सम्मिलित करते हुए] लिखित परीक्षा हेतु शार्टलिस्ट किया जायेगा।

यदि परीक्षा एक से अधिक पालियों/ दिवस में आयोजित की जाती है तो अभ्यर्थियों के तुलनात्मक मूल्यांकन हेतु स्कोर के नार्मलाइजेशन की प्रक्रिया दिनांक 22 मई, 2019 को प्रकाशित आवश्यक सूचना संख्या-42/05/विज्ञा0 अनु0 (ग्यारह)/2019 में उल्लिखित प्रावधानों के अनुसार होगी।

11-अभ्यर्थियों के लिए महत्वपूर्ण अनुदेश-

- 11.01- उत्तर प्रदेश के आरक्षित श्रेणी के सभी अभ्यर्थी आवेदन में अपनी श्रेणी अवश्य अंकित करें।
- 11.02- एक से अधिक आरक्षित श्रेणी का दावा करने वाले अभ्यर्थियों को केवल एक छूट, जो अधिक लाभकारी होगी, अनुमन्य होगी।
- 11.03- अभ्यर्थी, जो उ०प्र० राज्य के मूल निवासी नहीं हैं, उन्हें आरक्षण का लाभ अनुमन्य नहीं है। ऐसे अभ्यर्थी अनारक्षित श्रेणी के माने जाएंगे।
- 11.04- सैन्य वियोजित/भूतपूर्व सैनिकों (Ex-Servicemen) (जो आवेदन की अंतिम तिथि अर्थात् दिनांक 27-11-2026 तक सेवा निवृत्त हो चुके हों) को आरक्षण उत्तर प्रदेश लोक सेवा (शारीरिक रूप से विकलांग, स्वतंत्रता संग्राम सेनानियों के आश्रित और भूतपूर्व सैनिकों के लिए आरक्षण) अधिनियम,

राजकी

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