

RPSC ACF And Forest Range Officer ELECTRICAL ENGINEERING Syllabus 2022

Introduction:-

हमारे द्वारा Rajasthan Public Service Commission (RPSC) ACF And Forest Range Officer भर्ती के बारे में विस्तार से जानकारी दी गई अगर आप राजस्थान RPSC ACF And Forest Range Officer परीक्षा की तैयारी कर रहे हो तो पोस्ट आपके लिए अति महत्वपूर्ण है इस आर्टिकल में RPSC RPSC ACF And Forest Range Officer के सिलेबस के बारे में जानकारी दी गई है साथ ही आप अपने सब्जेक्ट के अनुसार नीचे दी गई लिंक के द्वारा PDF डाउनलोड कर सकते हैं वे उम्मीदवार जिन्होंने इसका ऑनलाइन आवेदन किया है उनके लिए निवनतम एग्जाम पैटर्न दिया गया है जो आपके लिए तैयारी करने में काम आएगा।

| | |
|-------------------------|-------------------------------------|
| NAME OF SELECTION BOARD | Rajasthan Public Service Commission |
| POSTS NAME | RPSC ACF And Forest Range Officer |
| OFFICIAL WEBSITE | Rpsc.rajasthan.gov.in/ |
| Category | Latest Syllabus |
| EXAM DATE | Coming soon |

RPSC ACF And Forest Range Officer Exam Pattern:-

| Paper | Subjects | Question Number | Marks |
|-------|-----------------------|-----------------|-------|
| 1 | General Knowledge | 100 | 100 |
| 2 | General English | 100 | 100 |
| 3 | OPTIONAL SUBJECT - I | 120 | 200 |
| 4 | OPTIONAL SUBJECT - II | 120 | 200 |

| | | |
|---|-----------|----|
| 5 | Interview | 75 |
|---|-----------|----|

RPSC ACF And Forest Range Officer ELECTRICAL ENGINEERING Syllabus 2021 Topc Wise

OPTIONAL SUBJECT – ELECTRICAL ENGINEERING

1. Electrical Circuits :

- Circuit elements and their characteristics, steady state analysis of DC and AC network, network theorems, network functions,
- Laplace transforms and their applications, Response of networks to standard input signals, Steady state response with sinusoidal input, network graphs,
- poly phase circuits, two port network, network synthesis, transient response: Transient analysis of RL, RC and RLC circuits, inductively coupled circuits, Resonant circuits and applications.

2. Electrical Machines:

- Basic concept of rotating machines- e.m.f and torque equation, principle of energy conversion.
- DC Machines- characteristics, armature reaction, commutation, speed control of DC Motor, testing of DC Machine. Single phase and three phase transformers- phasor diagram, losses, regulation and efficiency, parallel operation of transformer, poly phase connection of transformers,
- Three phase induction machine- torque slip characteristics, efficiency, tests, applications, single phase induction motor- principle, starting methods, characteristics, applications, special machines.
- Synchronous machine -phasor diagram, voltage regulation, V-curves, synchronizing power, starting of synchronous motor, parallel operation and application.

3. Power Electronics:

- Power semiconductor devices, Thyristor, triac, GTO, MOSFET, Static characteristics and triggering circuits.
- A.C. to D.C. Converters, choppers. Controlled and uncontrolled power rectifiers, Bridge converters.

4. Control System:

- Open and closed loop systems.
- Block diagrams and signal flow graphs. Transfer function, transient and steady state response, time domain analysis,
- frequency domain analysis; steady state error analysis. Root locus technique, bode plots, Routh-Hurwitz, and Nyquist criteria of stability, Compensating network, State variable representation and analysis of control systems.

5. Power systems:

- conventional and non conventional generating plants, Supply system, modelling of transmission lines, Distribution system, Neutral earthing.

- Underground Cables, Corona, power system stability, Line insulators, introduction to HVDC transmission, protective devices and schemes for power system equipment, per unit quantities,
- Symmetrical components, fault analysis, bus admittance and impedance matrix, load flow study, voltage control and power factor correction, economic operation of power system, grid substation.

6. Microprocessor systems and computer:

- Microprocessor architectures, Instruction set and simple assembly language programming, interfacing memory and I/O devices. Applications of microprocessors.
- Basic layout of digital computers, input-output devices, memory organisations, algorithms, flowcharts, Basic concepts of C++ programming.

7. Electronics and Communication:

- Solid state (semi conductor devices): Diodes, Zener diodes. Transistors (Bipolar, BJT, JFET, MOSFET).
- Biasing and their applications. Analysis of electronic circuits, equivalent circuit. Rectifier, filter and voltage regulators. Single stage and multistage amplifiers-gain and frequency response. Multivibrators, flip-flops and their applications.
- Digital Electronics: Switching circuits and Boolean algebra and logic gates. Memories sample and hold circuits, A/D and D/A converters. Logic circuits including DTL, TTL, ECL, MOS, CMOS, digital IC's (circuits). Communication: generation and detection of AM and FM noise behaviour of AM and FM systems.

8. Electrical Measurement and Instrumentation:

- General principles of measurement: Unit and dimensions. Standards error analysis, Basic methods of measurement, Measurement of circuit parameters by bridge methods.
- Measuring Instrument: Indicating Instruments, Integrating Instruments, Recording instruments. Measurement of voltage, current, power, power factor, energy, resistance, inductance, capacitance and frequency.
- Transducers: strain gauge, LVDT, resistance thermometers, thermistors, piezoelectric. Measurement of non-electrical quantities (Pressure, temperature, flow rate, displacement, velocity, acceleration, strain etc.) Digital measurements: Digital voltmeters, frequency counter, distortion meter.
- Telemetry and data transmission: Data recording and display, Data acquisition.

9. Field Theory: Electrostatic and Magnetostatics :

- Electrostatics and electrical fields, Magnetostatics and magnetic fields, Field in conductors and in magnetic materials, field in dielectrics, Maxwell's equations and time varying fields.
- Electromagnetic wave equations. Plane wave propagation in conducting and dielectric media.

10. Electrical Materials:

- Classification of materials on the basis of permanent magnetic dipoles, Electrical and electronic behaviour of materials, classification on the basis of conductivity.

- Behaviour of dielectrics in static and alternating fields. Phenomenon of polarization. Super conductivity. Applications of magnetic, conducting, dielectric and insulating materials.

Note :- Pattern of Question Paper

1. Objective type paper
2. Maximum Marks : 200
3. Number of Questions : 120
4. Duration of Paper : Three Hours
5. All questions carry equal marks.
6. There will be Negative Marking.

RPSC ACF And Forest Range Officer Syllabus 2021 Subject Wise

| |
|------------------------------|
| GENERAL KNOWLEDGE |
| GENERAL ENGLISH |
| ELECTRICAL ENGINEERING |
| COMPUTER ENGINEERING |
| CHEMISTRY |
| COMPUTER APPLICATION/SCIENCE |
| ELECTRONICS ENGINEERING |
| AGRICULTURAL ENGINEERING |
| ENVIRONMENTAL SCIENCE |
| BOTANY |
| GEOLOGY |
| ZOOLOGY |
| PHYSICS |
| AGRICULTURE |
| STATISTICS |
| MATHEMATICS |
| HORTICULTURE |
| MECHANICAL ENGINEERING |
| CIVIL ENGINEERING |
| FORESTRY |

| |
|----------------------|
| CHEMICAL ENGINEERING |
| VETERINARY SCIENCE |

| |
|--|
| IMPORTANT LINKS |
| RPSC ACF And Forest Range Officer Syllabus PDF |
| Official Website |

इस नोटिफिकेशन से संबंधित कुछ महत्वपूर्ण प्रश्न:-

1. *RPSC ACF And Forest Range Officer कितने अंको का होता है?*

उत्तर: 675

2. *RPSC ACF And Forest Range Officer पेपर में कितने प्रश्न आते हैं?*

उत्तर: 440

3. *RPSC ACF And Forest Range Officer पेपर में कितना समय मिलता है?*

उत्तर: इस नोटिफिकेशन में आप देख सकते हो।

4. *RPSC ACF And Forest Range Officer Syllabus in hindi. ?*

उत्तर: इस नोटिफिकेशन में आप देख सकते हो।

शिक्षा जगत की लेटेस्ट अपडेट पाने के लिए हमारे टेलीग्राम चैनल को
सब्सक्राइब करें



Telegram Channel Link

<https://t.me/helpstudentpoint>

Visit Our Website

www.HelpStudentPoint.com

Download Our Mobile App

<https://bit.ly/appshsp>