

**Switch Board Operator General Knowledge Syllabus**

- Geography of India
- Economic issues in India
- National news (current)
- International issues
- Tribes
- Indian Culture
- Political Science
- Scientific observations
- About India and it's neighboring countries
- National current affairs
- International current affairs
- New inventions
- Countries and capitals
- Science and innovations
- World organizations
- Famous Places in India
- Books And Author
- Handicrafts
- Important Dates
- Music & Literature
- National Dance
- Famous Places
- Artists
- Tourism spots of Historical Importance
- Sculptures
- Musical Instruments etc

**દાદરા અને નગર હવેલીના યુટી એડમિનિસ્ટ્રેશન Accounts Assistant Syllabus - Hindi**

- तत्सम एवं तद्भव देशज विदेशी (शब्द भंडार)
- वाक्यसंशोधन- लिंग, वचन, कारक, काल, वर्तनी, त्रुटि से संबंधित
- क्रियाएँ
- विलोम शब्द
- पर्यायवाची शब्द
- रस
- वर्तनी
- हिंदी भाषा के प्रयोग में होने वाली अशुद्धियाँ
- मुहावरे एवं लोकोक्तियाँ
- संधि समास
- अर्थबोध

## UT Administration of Dadra and Nagar Haveli, Staff Selection Board

- अनेकार्थी शब्द
- वाक्यांशों के लिये एक शब्द निर्माण
- लोकोक्तियां एवं मुहावरे
- अलंका
- शब्द-रूप
- शब्द रचना वाक्य रचना अर्थ
- हिंदी वर्णमाला विराम चिन्ह

### dnh.nic.in Forest Guard Syllabus 2018 - General English

- Idioms and Phrases
- Sentence Improvement
- Synonyms
- Sentence Arrangement
- Spotting Errors
- Passage Completion
- Spelling Test
- Substitution
- Prepositions
- Antonyms
- Active and Passive Voice
- Substitution
- Fill in the blanks
- Sentence
- Joining Sentences
- Para Completion
- Completion
- Error Correction (Underlined Part)
- Transformation
- Error Correction (Phrase in Bold)

### Staff Selection Board Forest Guard Aptitude Syllabus

- Probability
- Time and Distance
- Quadratic Equations
- Odd Man Out
- Races and Games
- Simplification and Approximation
- Mixtures and Allegations
- Averages
- Mensuration
- Boats and Streams

## UT Administration of Dadra and Nagar Haveli, Staff Selection Board

- Simple Interest
- Problems on L.C.M and H.C.F
- Profit and Loss
- Problems on Numbers
- Numbers and Ages
- Pipes and Cisterns
- Indices and Surds
- Simple Equations
- Permutations and Combinations
- Compound Interest
- Time and Work Partnership
- Problems on Trains
- Ratio and Proportion
- Areas
- Volumes
- Percentages

### Accounts Assistant Reasoning Syllabus

- Visual Memory
- Clocks
- Discrimination
- Space Visualization
- Odd man out
- Symbolic/ Number Classification
- Analytical Reasoning
- Letter series
- Shapes and Mirror
- Arithmetical Reasoning
- Venn diagrams
- Non-Verbal Test
- Semantic Analogy
- Figural Classification
- Arithmetical Number Series
- Relationship Concepts
- Similarities
- Coding-Decoding
- Number series
- Problem Solving

## UT Administration of Dadra and Nagar Haveli, Staff Selection Board

### Dadra and Nagar Haveli Topics For General Intelligence

- Numerical Operations
- Symbolic Operations
- Space Visualization
- Analogies
- Similarities & Differences
- Space Visualization
- Spatial Orientation
- Coding and Decoding
- Figural Series
- Venn Diagrams
- Syllogisms
- Figural Classification
- Data Sufficiency
- Statement conclusion
- Number Series
- Problem Solving

### SSB Junior Engineer Basic Concepts of Electrical Engineering Syllabus

#### 1. Basic Concepts

- Concepts of resistance, inductance, capacitance, and various factors affecting them.
- Concepts of current, voltage, power, energy and their units.
- Circuit law: Kirchhoff's law, Simple Circuit solution using network theorems.

#### 2. Magnetic Circuit

- Concepts of flux, MMF, reluctance, Different kinds of magnetic materials.
- Magnetic calculations for conductors of different configuration e.g. straight, circular, solenoidal, etc.
- Electromagnetic induction, self, and mutual induction.

#### 3. AC Fundamentals

- Instantaneous, peak, R.M.S. and average values of alternating waves.
- Representation of sinusoidal waveform, simple series and parallel AC Circuits consisting of R.L. and C, Resonance, Tank Circuit.
- Poly Phase system – star and delta connection, 3 phase power, DC and sinusoidal response of R-Land R-C circuit.

#### 4. Measurement and measuring instrument

- Measurement of power (1 phase and 3 phase, both active and reactive) and energy, 2 Wattmeter method of 3 phase power measurement.

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- Measurement of frequency and phase angle. Ammeter and voltmeter (both moving oil and moving iron type).
- Extension of range watt-meter, Multi-meters, Megger, Energy meter AC Bridges.
- Use of CRO, Signal Generator, CT, PT and their uses. Earth Fault detection.

### 5. Electrical Machines

#### (A) D.C. Machine

- Construction, Basic Principles of D.C. motors and generators, their characteristics, speed control and starting of D.C. Motors.
- Method of braking motor, Losses, and efficiency of D.C. Machines.

#### (B) 1 phase and 3 phase transformers

- Construction, Principles of operation, equivalent circuit, voltage regulation, O.C., and S.C. Tests, Losses, and efficiency.
- Effect of voltage, frequency, and waveform on losses.
- Parallel operation of 1 phase /3 phase transformers.
- Autotransformers.

#### (C) Single Phase Induction Motors - Characteristics and applications.

#### (D) 3 phase Induction Motors

- Rotating magnetic field, the principle of operation, equivalent circuit.
- torque-speed characteristics, starting and speed control of 3 phase induction motors.
- Methods of braking, the effect of voltage and frequency variation on torque-speed characteristics.
- Fractional Kilowatt Motors.

#### (E) Synchronous Machines

- Generation of 3-phase e.m.f. armature reaction, voltage regulation.
- parallel operation of two alternators, synchronizing, control of active and reactive power.
- Starting and applications of synchronous motors.

### 6. Generation, Transmission, and Distribution

- Different types of power stations, Load factor, diversity factor, demand factor, cost of generation, inter-connection of power stations.
- Power factor improvement, various types of tariffs, types of faults, short circuit current for symmetrical faults.
- Switchgear & Protection Scheme– rating of circuit breakers, Principles of arc extinction by oil and air, H.R.C. Fuses, Protection against earth leakage / over current, etc.
- Buchholtz relay, Merz-Price system of protection of generators & transformers, protection of feeders and bus bars.
- Lightning arresters, various transmission and distribution system, comparison of conductor materials, the efficiency of the different system.
- Cable – Different type of cables, cable rating and derating factor.

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### **7. Estimation and costing**

- Estimation of lighting scheme, electric installation of machines and relevant IE rules.
- Earthing practices and IE Rules.
- Utilization of Electrical Energy: Illumination, Electric heating, Electric welding, Electroplating, Electric drives, and motors.

### **8. Basic Electronics**

Working with the various electronic devices e.g. P N Junction diodes, Transistors (NPN and PNP type), BJT and JFET. Simple circuits using these devices.

### **Switch Board Operator Topics For General Awareness**

- Inventions and Discoveries
- Sports
- General Science
- Current Affairs
- Famous Days & Dates
- Countries and Capitals
- Indian Parliament
- Artists
- Famous Books & Authors
- Indian Politics
- Indian History
- Tourism
- Indian Economy
- Rivers, Lakes, and Seas
- Famous Places in India
- Culture

### **Computer Knowledge - UT Administration of Dadra and Nagar Haveli Forest Guard Syllabus**

- MS Word, Microsoft OneNote
- Microsoft Access
- Introduction to Computer Science
- Microsoft Outlook
- Workplace Productivity Tools
- MS Project, Microsoft Publisher
- MS PowerPoint
- MS Visio and MS Excel
- PC Software and Office Automation
- Computer Networks
- Database Management System

## UT Administration of Dadra and Nagar Haveli, Staff Selection Board

- Data Structures
- Boolean Algebra
- The Internet
- Emerging Technologies and Web Publishing