

# SAIL Management Trainee Administration Exam Pattern

Part/ Subject Name	Number of Questions	Time Duration
Part - I • Domain Knowledge Test	100	40 Minutes
<ul> <li>Part - II</li> <li>Quantitative Aptitude</li> <li>Reasoning</li> <li>English</li> <li>General Awareness.</li> </ul>	100	80 Minutes
Total	200	120 Minutes
Exam Type: Online Objective MCQ's		

Steel Authority of India Limited Management Trainee Administration Syllabus

## **Domain Test**

Mechanical

• Calculus.



- Vector Calculus.
- Thermodynamics.
- Engineering Materials.
- Numerical Methods.
- Probability & Statistics.
- Differential Equations.
- Theory of Machines.
- Engineering Mechanics.
- The Strength of Materials.
- Fluid Mechanics.
- The design of Machine Elements.
- Refrigeration and air-conditioning.
- Operations.
- Tool Engineering.
- Operations Research.
- Joining Processes.
- Turbomachinery.
- Forming Processes
- Metal Casting.

#### Chemical

- Process Calculations and Thermodynamics.
- Heat Transfer.
- Plant Design and Economics.
- Instrumentation and Process Control.
- Fluid Mechanics and Mechanical Operations.
- Chemical Reaction Engineering.
- Mass Transfer.
- Chemical Technology.

#### Metallurgy

- Thermodynamics & Rate Process.
- Physical Metallurgy.
- Extractive Metallurgy.



- Laws of thermodynamics.
- Mechanical Metallurgy.
- Manufacturing Processes.

#### Instrumentation and Mining

- Basics of Circuits and Measurement Systems.
- Transducers
- Biomedical Instrumentation.
- Control Systems and Process Control.
- Systems and Communications.
- Signals.
- Analog Electronics.
- Digital Electronics.
- Optical Instrumentation.
- Electrical and Electronics Measurements.
- Analytical Instrumentation
- Industrial Instrumentation.
- Mechanical Measurement.

### Electrical

- Network Theory.
- Basic Electrical Engineering Concepts.
- Utilization of Electrical Energy.
- Analog and Digital Electronics.
- Power Systems.
- Power Electronics & Drives.
- AC Fundamentals.
- Measurement and measuring instruments.
- Estimation and costing.
- Magnetic Circuit.
- Electrical Machines.
- Basic Electronics.

### **Quantitative Aptitude**



- Indices and Surds.
- Percentages.
- Numbers and Ages.
- Ratio and Proportion.
- Probability.
- Problems on L.C.M and H.C.F.
- Time and Distance.
- Compound Interest.
- Profit and Loss.
- Mixtures and Allegations.
- Simple Equations.
- Averages.
- Quadratic Equations.
- Mensuration.
- Permutations and Combinations.
- Pipes and Cisterns.
- Simple Interest.
- Time and Work Partnership.
- Simplification and Approximation.
- Problems on Trains.
- Areas.
- Volumes.
- Races and Games.
- Boats and Streams.
- Problems on Numbers.
- Odd Man Out.

### Reasoning

- Number Series.
- Letter and Symbol Series.
- Verbal Classification.
- Essential Part.
- Logical Problems.
- Statement and Conclusion.



- Theme Detection.
- Cause and Effect.
- Analogies.
- Artificial Language.
- Matching Definitions.
- Making Judgments.
- Verbal Reasoning.
- Statement and Argument.
- Logical Deduction.

### **General English**

- Verb.
- Articles.
- Comprehension.
- Fill in the Blanks.
- Vocabulary.
- Grammar.
- Unseen Passages.
- Idioms & Phrases.
- Tenses.
- Subject-Verb Agreement.
- Adverb.
- Error Correction.
- Sentence Rearrangement.
- Synonyms.
- Antonyms.

#### **General Awareness**

- Tourism.
- Artists.
- Famous Places in India.
- Biology.
- Famous Days & Dates.
- Indian Economy.



- Heritage.
- Civics.
- Indian Parliament.
- Current Affairs.
- Rivers, Lakes and, Seas.
- Sports.
- Indian Politics.
- https://www.freshersnow.com/syllabus/
- Inventions and Discoveries.
- Countries and Capitals.
- Famous Books & Authors.
- Geography.
- Indian History.
- General Science.
- Literature.
- Environmental Issues.