

# SAIL Rourkela Steel Plant



## SAIL Rourkela Exam Pattern - (OCT, ACT, Executive, and Non-Executive Posts)

Exam Type	Name Of Subject	Number Of Marks
Objective Multiple Choice Questions	<b>Technical Subjects</b> <ul style="list-style-type: none"><li>• Mechanical</li><li>• Metallurgy</li><li>• Electrical</li><li>• Electronics</li><li>• Instrumentation</li></ul>	80
	General Aptitude	20
<b><i>Duration Of Time: 2 Hours</i></b>		

## SAIL Rourkela Syllabus

### Technical Subjects

#### Mechanical

- Engineering Mechanics.
- Engineering Materials.
- Mechanisms and Machines.
- Fluid Mechanics.
- IC Engines, Refrigeration, and Air conditioning.
- Turbo Machinery.
- Thermodynamics and Heat transfer.

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- Power Plant Engineering.
- Renewable Sources of Energy.
- Design of Machine Elements.
- Manufacturing.
- Industrial and Maintenance Engineering.
- Mechatronics and Robotics.

## **Metallurgy**

- General Metallurgy.
- Welding & Corrosion.
- Mechanical Metallurgy.
- Physical Metallurgy.
- Material Science.
- Extractive Metallurgy.
- Foundry Technology.

## **Electrical**

- Basic Electronics Engineering.
- Electrical Materials.
- Power Systems.
- Power Electronics and Drives.
- Analog and Digital Electronics.
- Systems and Signal Processing.
- Control Systems.
- Electrical Machines.
- Electrical and Electronic Measurements.
- Engineering in Mathematics.
- Electric Circuits and Fields.
- Computer Fundamentals.

## **Electronics & Communication Engineering**

- Advanced Communication Topics.
- Basic Electronics Engineering.
- Electronic Measurements and Instrumentation.

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- Network Theory.
- Analog and Digital Circuits.
- Analog and Digital Communication Systems.
- Control Systems.
- Computer Organization and Architecture.
- Electro Magnetics.
- Advanced Electronics Topics.
- Basic Electrical Engineering.
- Materials Science.

## **Instrumentation**

- Digital Electronic Circuits.
- Electrical Measurements.
- Electronics Instruments.
- Analog Electronics.
- Analytical, Optical & Bio-Medical Instrumentation.
- Instrumentation.
- Signals & Systems.
- Control Systems.
- Electronics Circuits.
- Fundamentals.
- Microprocessors and Micro Computers.

## **General Aptitude**

- Square Root and Cube Root.
- Probability.
- Stocks and Share.
- Boats and Streams.
- Simple Interest.
- Surds and Indices.
- Numbers.
- Races and Games.
- Banker's Discount.
- Allegation or Mixture.

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- Chain Rule.
- Time and Distance.
- Simplification.
- Average.
- Time and Work.
- Problems based on H.C.F & L.C.M.
- <https://www.freshersnow.com/syllabus/>
- Compound Interest.
- Volume and Surface Area.
- Decimal Fraction.
- Partnership.
- Logarithm.
- Ratio and Proportion.
- Permutation and Combination.
- Problems on Ages.
- Height and Distance.
- Pipes and Cistern.
- Area.