

RRB SSE Syllabus

RRB SSE exam aims to assess the technical knowledge and aptitude of candidates aspiring to work as Senior Section Engineers in the Indian Railways. The exam consists of various sections, each focusing on different aspects of engineering and related topics. Here is the breakdown of the **RRB SSE Syllabus** :

RRB SSE Syllabus	
Section	Syllabus
General Intelligence & Reasoning	<ul style="list-style-type: none">• Analytical reasoning• Verbal and non-verbal reasoning• Number series• Coding and decoding• Analogies• Decision making• Syllogism• Venn diagrams• Blood relations• Similarities and differences

General Awareness

- Statement-conclusion
- Puzzles
- Data interpretation
- Current affairs
- Indian economy
- History and Culture of India
- Indian Geography
- Sports
- Awards and honors
- Science and technology
- Indian polity
- Books and authors
- Important dates
- Number system
- Ratio and proportion
- Percentage, Average
- Time and work
- Time and distance

Arithmetic

Technical Ability

- Simple and compound interest
- Profit and loss
- Simplification
- Data interpretation
- Algebra, Geometry
- Mensuration
- Electrical engineering
- Electronics and communication engineering
- Mechanical engineering
- Civil engineering
- Computer science engineering
- Instrumentation and control engineering
- Information technology

General Science

- Physics
- Chemistry

General Engineering

- Biology
- Environmental science
- Scientific laws
- Inventions and discoveries
- Basic principles of science.
- Engineering drawing
- Engineering Mechanics
- Engineering materials
- Engineering thermodynamics
- Strength of materials
- Fluid mechanics, Machine design
- Theory of machines
- Industrial engineering
- Manufacturing technology

RRB SSE Syllabus 2024 PDF

RRB SSE Syllabus 2024 PDF is as follows:

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RRB SSE Syllabus 2024 for Technical Ability

RRB SSE syllabus 2024 covers the major areas of focus for each field in the Technical Ability section of the [**RRB SSE recruitment 2024**](#) . Given below is the **RRB SSE syllabus 2024** for technical ability. However, candidates should refer to the official syllabus and study materials provided by the Railway Recruitment Board for a more comprehensive understanding of the subject matter.

RRB SSE Syllabus 2024 for Technical Ability	
Field	Topics Covered
Electrical Engineering	<ul style="list-style-type: none">• Electrical circuits and measurements• Electrical machines• Power Systems• Control systems• Power Electronics• Analog and digital electronics• Utilization of electrical energy• Electrical and electronic measurements

Electronics and
Communication
Engineering

- Electric traction
 - Basics of electronics engineering
 - Electronic devices and circuits
 - Network analysis, Analog, and digital communication systems
 - Control systems
 - Computer organization and architecture
 - Microprocessors and microcontrollers
 - Digital signal processing
 - Microwave engineering
 - Antennas and wave propagation
 - Satellite communication
- Mechanical
Engineering
- Mechanics
 - Engineering materials

- Strength of materials
- Theory of machines
- Machine design
- Fluid mechanics and hydraulic machinery
- Thermodynamics
- Heat transfer
- Power engineering
- Refrigeration and air conditioning
- Manufacturing technology
- Industrial engineering
- Building materials
- SurveyingApplied mechanics
- Structural analysis
- Design of concrete structures
- Design of steel structures

Civil Engineering

Computer Science Engineering

- Construction planning and management
- Fluid mechanics
- Soil mechanics and foundation engineering
- Environmental engineering
- Transportation engineering.
- Computer organization and architecture
- Data structures and algorithms
- Programming languages
- Operating systems
- Database management systems
- Computer networks
- Web technologies
- Software engineering
- Digital logic

Instrumentation and
Control Engineering

Information
Technology

- Theory of computation
- Artificial intelligence
- Basics of measurement systems
- Process control
- Analytical instrumentation
- Transducers and their applications
- Industrial Instrumentation
- Control systems and process control
- Communication and optical instrumentation
- Biomedical instrumentation
- Control valves and actuators
- Industrial automation
- Computer organization and architecture
- Data structures and algorithms

- Programming languages
- Operating systems
- Database management systems
- Computer networks
- Web technologies
- Software engineering
- Digital logic
- System Security
- Information systems and software engineering

RRB SSE Exam Pattern

Railway Recruitment Board (RRB) conducts the Senior Section Engineer (SSE) exam to recruit qualified candidates for various technical positions in the Indian Railways. The SSE exam is a highly competitive examination that assesses the technical knowledge and aptitude of candidates. Below is the **RRB SSE Exam pattern** presented in tabular form: A computer-based test (CBT) is the first part of the RRB SSE exam, and it is

followed by a document check and a physical. Stage 1 and Stage 2 are the other two divisions of the CBT.

Stage 1 of CBT:

Stage 1 of CBT consists of multiple-choice questions (MCQs) from various subjects such as Mathematics, General Intelligence & Reasoning, General Awareness, and General Science.

RRB SSE Exam Pattern 2024 CBT 1				
Section	Number of Questions	Marks per Question	Total Marks	Time Allotted
Mathematics	30	1	30	90 minutes
General Intelligence & Reasoning	25	1	25	
General Awareness	15	1	15	
General Science	30	1	30	

Total	100	100
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Stage 2 of CBT:

Stage 2 of CBT also includes MCQs, but the subjects are slightly different. It includes sections such as General Awareness, Physics & Chemistry, Basics of Computers and Applications, Basics of Environment and Pollution Control, and Technical Abilities.

RRB SSE Exam Pattern 2024 CBT 2				
Section	Number of Questions	Marks per Question	Total Marks	Time Allotted
General Awareness	15	1	15	120 minutes
Physics & Chemistry	15	1	15	
Basics of Computers and Applications	10	1	10	

Basics of Environmen t and Pollution Control	10	1	10
Technical Abilities	100	1	100
Total	150		150

Document Verification

After qualifying for the CBTs, candidates are called for a document verification process, where their eligibility and documents are verified. Those who clear the document verification stage undergo a medical examination before the final selection.

Stream/ Specialization	Reference Books	Author/ Publisher
Electrical Engineering	Electrical Engineering: Concepts and Applications Electrical	S.A. Nasar A. Handa, M. Handa.

	Engineering: Objective Type	
Electronics and Communication Engineering	Electronic Devices and Circuit Theory Electronic Devices and Circuits	Robert L. Boylestad, Louis Nashelsky David A. Bell.
Mechanical Engineering	Mechanical Engineering: Objective Type Strength of Materials Theory of Machines	R.S. Khurmi & J.K. Gupta R.K. Bansal R.S. Khurmi & J.K. Gupta
Civil Engineering	Civil Engineering: Conventional and Objective Type Design of Reinforced Concrete Structures	R.S. Khurmi & J.K. Gupta M.L. Gambhir.
Computer Science Engineering	Computer Science: A Structured Approach Using C++ Computer	Behrouz A. Forouzan

Instrumentation and Control Engineering	Organization and Architecture	William Stallings.
	Process Control: Modeling, Design, and Simulation Control Systems Engineering	B. Wayne Bequette Norman S. Nise