[Railway RRB Technician Exam Syllabus]

Technician Gr I Signal

Subject-wise break-up of questions and marks for CBT of Technician Gr I Signal		
Subjects	**No of Questions**	**Marks for each Section**
General Awareness	10	10
General Intelligence and Reasoning	15	15
Basics of Computers and Applications	20	20
Mathematics	20	20
Basic Science and Engineering	35	35
Total	**100**	**100**
The subject-wise distribution given above is merely indicative. The question papers may vary.		

- There will be a separate CBT for each pay level.
- (A) Pattern & Syllabus of CBT for Pay Level- 5 post i.e., Technician Gr I Signal
- (I) **Total Duration:** 90 min & Total Questions: 100
- (ii) There shall be negative marking @1/3rd marks for each wrong answer.
- (III) Normalization of marks will be done for CBT held in multiple shifts.
- (iv) Minimum percentage of marks for eligibility in various communities: UR–40%, EWS–40%, OBC (Non-Creamy Layer)-30%, SC-30% and ST-25%. This is also applicable to Ex. Servicemen category candidates, as per their community. These percentages of marks for eligibility may be relaxed by 2% marks for PwBD candidates in case of shortage of PwBD candidates against vacancies reserved for them.
- (v) **The marks scored in CBT shall be used for shortlisting of candidates for further stages of this recruitment process**
- (iv) **Syllabus for CBT of Technician Gr I Signal:** Questions will be of objective type with multiple choice answers and are likely to cover topics pertaining to the following syllabus

- **General Awareness**: Knowledge of Current affairs, Indian geography, culture and history of India including freedom struggle, Indian Polity and constitution, Indian Economy, Environmental issues concerning India and the World, Sports, General scientific and technological developments, etc.
- **General Intelligence and Reasoning**: Analogies, Alphabetical and Number Series, Coding and Decoding, Mathematical operations, Relationships, Syllogism, Jumbling, Venn Diagram, Data Interpretation and Sufficiency, Conclusions and decision making, Similarities and differences, Analytical reasoning, Classification, Directions, Statement – Arguments and Assumptions, etc.

- **Basics of Computers and Applications**: Architecture of Computers; input and Output devices; Storage devices, Networking, Operating System like Windows, Unix, Linux; MS Office; Various data representation; Internet and Email; Websites & Web Browsers; Computer Virus.
- **Mathematics**: Number system, Rational and irrational numbers, BODMAS rule, Quadratic Equations, Arithmetic Progression, Similar Triangles, Pythagoras Theorem, Co-ordinate Geometry, Trigonometrical Ratios, Heights and distances, Surface area and Volume; Sets: Sets and their representations, Empty set, Finite and Infinite sets, Equal sets, Subsets, Subsets of a set of real numbers, Universal set, Venn diagrams, Union and Intersection of sets, Difference of sets, Complement of a set, Properties of Complement; Statistics: Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data; probability occurrence of events, exhaustive events, mutually exclusive events.

- **Basic Science and Engineering:** Physics fundamentals- Units, Measurements, Mass, Weight, Density, Work, Power, and Energy, Speed and Velocity, Heat and Temperature; Electricity and Magnetism- Electric Charge, Field, and Intensity, Electric Potential and Potential Difference, Simple Electric Circuits, Conductors, Non- conductors/Insulators, Ohm's Law and its Limitations, Resistances in Series and Parallel of a Circuit and Specific Resistance, Relation between Electric Potential, Energy, and Power (Wattage), Ampere's Law, Magnetic Force on Moving Charged Particle and Long Straight Conductors, Electromagnetic Induction, Faraday's Law, and Electromagnetic Flux, Magnetic Field, Magnetic Induction; Electronics and Measurements- Basic Electronics, Digital Electronics, Electronic Devices and Circuits, Microcontroller, Microprocessor, Electronic Measurements, Measuring Systems and Principles, Range Extension Methods, Cathode Ray Oscilloscope, LCD, LED Panel, Transducers.