

Syllabus for Technician Grade - I

GENERAL SECTION

- 1) General Knowledge :** Current affairs-India, Indian History, Indian Geography, Indian Economic, Indian Constitution, General Science, Current World events, sports, Indian Music, Dance & Culture.
- 2) Logic & Reasoning :** Coding and decoding – Small & Capital letters/numbers, Coding, Decoding and classification, Analogies- Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Similarities and Differences, Word building, Arithmetic Number Series, Non-verbal Series, Visual memory, Observation, Relationship Concepts, Space Visualization.
- 3) Numerical Ability :** Decimals and Fractions, Computation of Whole Numbers, Ratio and Time, Interest & Discounts, Time and Distance, Profit and Loss, Percentage, Ratio & Proportion, Number System, Fundamental Arithmetical Operations, Time and Work, Averages, The Relationship between Numbers.
- 4) Technical :** Basic Electricity & Electronics, Laws of Electricity, Different types of Cells/Battery, Principle & Working of DC Motors , AC Motors, DG Set, Alternator & Transformer, Electrical Cable & Joints, Electrical/ Mechanical Measuring Instruments, Electrical Wiring and Distribution, Electronic Instruments & Measurement, Electronic Devices and Circuits, Maintenance of DG Set, Alternator, AC Motor & DC Motor, Converter/Inverter, Electrical Networks, Industrial Safety.
- 5) General English :** Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) Marathi :** Basic Marathi Grammar of 10th Standard (Maharashtra State Board)

Syllabus for Technician (Civil) - I

GENERAL SECTION

- 1) General Knowledge :** Current affairs-India, Indian History, Indian Geography, Indian Economic, Indian Constitution, General Science, Current World events, sports, Indian Music, Dance & Culture.
- 2) Logic & Reasoning :** Coding and decoding – Small & Capital letters/numbers, Coding, Decoding and classification, Analogies- Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Similarities and Differences, Word building, Arithmetic Number Series, Non-verbal Series, Visual memory, Observation, Relationship Concepts, Space Visualization.
- 3) Numerical Ability :** Decimals and Fractions, Computation of Whole Numbers, Ratio and Time, Interest & Discounts, Time and Distance, Profit and Loss, Percentage, Ratio & Proportion, Number System, Fundamental Arithmetical Operations, Time and Work, Averages, The Relationship between Numbers.
- 4) Technical :** Introduction & Safety, Measurement and Measuring Tools, Marking and Marking Tools, Hand Tools, Cutting Tools, Screw Thread and Fasteners, Precision Instruments, Gauge and Template, Limits and Fits, Surface Finish, Lubricant and Coolant, Jigs and Fixtures, Pipe and Pipe Fittings, Lifting Appliances, Welding- Types & Processes, Modern Precision Instruments (Micrometer, Dial Caliper, Universal Bevel Protector), Types of Bridges, Maintenance of Bridges and Buildings, Properties of Concrete, Plastering and Painting Techniques.
- 5) General English :** Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) Marathi :** Basic Marathi Grammar of 10th Standard (Maharashtra State Board)

Syllabus for Technician (Civil) - II

GENERAL SECTION

- 1) General Knowledge :** Current affairs-India, Indian History, Indian Geography, Indian Economic, Indian Constitution, General Science, Current World events, sports, Indian Music, Dance & Culture.
- 2) Logic & Reasoning :** Coding and decoding – Small & Capital letters/numbers, Coding, Decoding and classification, Analogies- Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Similarities and Differences, Word building, Arithmetic Number Series, Non-verbal Series, Visual memory, Observation, Relationship Concepts, Space Visualization.
- 3) Numerical Ability :** Decimals and Fractions, Computation of Whole Numbers, Ratio and Time, Interest & Discounts, Time and Distance, Profit and Loss, Percentage, Ratio & Proportion, Number System, Fundamental Arithmetical Operations, Time and Work, Averages, The Relationship between Numbers.
- 4) Technical :** Introduction & Safety, Measurement and Measuring Tools, Marking & Marking Tools, Hand Tools, Cutting Tools, Screw Thread & Fasteners, Precision Instruments, Gauge and Template, Limits and Fits, Jigs and Fixtures, Pipe and Pipe Fittings, Lifting Appliances, Welding- Types & Processes, Types of Bridges, Maintenance of Bridges and Buildings, Properties of Concrete, Plastering and Painting Techniques.
- 5) General English :** Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) Marathi :** Basic Marathi Grammar of 10th Standard (Maharashtra State Board)

Syllabus for Technician (S & T) - I

GENERAL SECTION

- 1) General Knowledge :** Current affairs-India, Indian History, Indian Geography, Indian Economic, Indian Constitution, General Science, Current World events, sports, Indian Music, Dance & Culture.
- 2) Logic & Reasoning :** Coding and decoding – Small & Capital letters/numbers, Coding, Decoding and classification, Analogies- Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Similarities and Differences, Word building, Arithmetic Number Series, Non-verbal Series, Visual memory, Observation, Relationship Concepts, Space Visualization.
- 3) Numerical Ability :** Decimals and Fractions, Computation of Whole Numbers, Ratio and Time, Interest & Discounts, Time and Distance, Profit and Loss, Percentage, Ratio & Proportion, Number System, Fundamental Arithmetical Operations, Time and Work, Averages, The Relationship between Numbers.
- 4) Technical :** Basic Gates – Introduction to Digital Electronics, SMPS – Concept and Block Diagrams of Manual Automatic and Servo Voltage Stabilizer, UPS – Concept of UPS , Difference between UPS and Inverter, Cells and Batteries – Types and application, Basic Components – Ohm’s Law and its applications, Transformer & Rectifier – Working Principle and Types, Measuring Instruments AC and DC measurements, LCR Meter, CRO, Frequency Meter, etc. Transistor– Working Principle and application, Opto Electronics – Working and application of LED, Photo Diode, Photo Transistor & LASER Diodes, Protection Devices – Fuse, MCB’s, SPDS.
Communication Electronics – Radio Wave Propagation – Principle, Fading, Need for Modulation, Types of Modulation, Demodulation Techniques. Fundamentals of Antenna, Various Parameters, Types of Antennas & Application, GPS Clocks – Principle and working, Public Address System and working, Type of Telecom Cables and Testing of Cables.
- 5) General English :** Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) Marathi :** Basic Marathi Grammar of 10th Standard (Maharashtra State Board)

Syllabus for Technician (S & T) - II

GENERAL SECTION

- 1) General Knowledge :** Current affairs-India, Indian History, Indian Geography, Indian Economic, Indian Constitution, General Science, Current World events, sports, Indian Music, Dance & Culture.
- 2) Logic & Reasoning :** Coding and decoding – Small & Capital letters/numbers, Coding, Decoding and classification, Analogies- Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Similarities and Differences, Word building, Arithmetic Number Series, Non-verbal Series, Visual memory, Observation, Relationship Concepts, Space Visualization.
- 3) Numerical Ability :** Decimals and Fractions, Computation of Whole Numbers, Ratio and Time, Interest & Discounts, Time and Distance, Profit and Loss, Percentage, Ratio & Proportion, Number System, Fundamental Arithmetical Operations, Time and Work, Averages, The Relationship between Numbers.
- 4) Technical :** Basic Gates – Introduction to Digital Electronics, Cells and Batteries – Types and Application, Basic Components – Ohm’s Law and its Applications, Transformer & Rectifier– Working Principle and Types, Measuring Instruments AC and DC measurements, LCR Meter , CRO, Frequency Meter, etc, Transistor– Working Principle and Application, Opto Electronics – Working and Application of LED, Photo Diode, Photo Transistor & LASER Diodes, Protection Devices – Fuse, MCB’s, SPDS, Communication Electronics – Radio Wave Propagation – Principle, Fading, Need for Modulation, Types of Modulation, Demodulation Techniques, Fundamentals of Antenna, Various Parameters, Types of Antennas & Application.
- 5) General English :** Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) Marathi :** Basic Marathi Grammar of 10th Standard (Maharashtra State Board)

Syllabus for Technician (E & M) - I

GENERAL SECTION

- 1) General Knowledge :** Current affairs-India, Indian History, Indian Geography, Indian Economic, Indian Constitution, General Science, Current World events, sports, Indian Music, Dance & Culture.
- 2) Logic & Reasoning :** Coding and decoding – Small & Capital letters/numbers, Coding, Decoding and classification, Analogies- Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Similarities and Differences, Word building, Arithmetic Number Series, Non-verbal Series, Visual memory, Observation, Relationship Concepts, Space Visualization.
- 3) Numerical Ability :** Decimals and Fractions, Computation of Whole Numbers, Ratio and Time, Interest & Discounts, Time and Distance, Profit and Loss, Percentage, Ratio & Proportion, Number System, Fundamental Arithmetical Operations, Time and Work, Averages, The Relationship between Numbers.
- 4) Technical :** Basic Electricity, Laws of Electricity, Different types of Cells/Battery, Principle & Working of DC Motors, AC Motors, DG Set, Alternator & Transformer, Compressors and Pumps, Electrical Cable & Joints, Refrigeration & Air Conditioning , Electrical/ Mechanical Measuring Instruments, Machines Tools (Lathe , Drill, Cutting Machines), Electrical Wiring and Distribution, Different types of Welding, Instruments & Measurement, Electronic Devices, Maintenance of Centralized Air Conditioners, Pump Set, DG Set, Alternator, AC Motor & DC Motor, Converter/ Invertors.
- 5) General English :** Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) Marathi :** Basic Marathi Grammar of 10th Standard (Maharashtra State Board)

Syllabus for Technician (E & M) - II

GENERAL SECTION

- 1) General Knowledge :** Current affairs-India, Indian History, Indian Geography, Indian Economic, Indian Constitution, General Science, Current World events, sports, Indian Music, Dance & Culture.
- 2) Logic & Reasoning :** Coding and decoding – Small & Capital letters/numbers, Coding, Decoding and classification, Analogies- Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Similarities and Differences, Word building, Arithmetic Number Series, Non-verbal Series, Visual memory, Observation, Relationship Concepts, Space Visualization.
- 3) Numerical Ability :** Decimals and Fractions, Computation of Whole Numbers, Ratio and Time, Interest & Discounts, Time and Distance, Profit and Loss, Percentage, Ratio & Proportion, Number System, Fundamental Arithmetical Operations, Time and Work, Averages, The Relationship between Numbers.
- 4) Technical :** Basic Electricity, Laws of Electricity, Different types of Cells/Battery, Principle & Working of DC Motors , AC Motors, DG Set, Alternator & Transformer, Compressors and Pumps, Electrical Cable & Joints, Air Conditioning , Electrical/ Mechanical Measuring Instruments, Machines Tools (Lathe, Drill, Cutting Machines), Electrical Wiring and Distribution, Different types of Welding, Instruments & Measurement, Electronic Devices, Safety in Working.
- 5) General English :** Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) Marathi :** Basic Marathi Grammar of 10th Standard (Maharashtra State Board)

Syllabus for Train Operator (Shunting)

GENERAL SECTION (10th Level)

- 1) General Knowledge :** Current affairs-India, Indian History, Indian Geography, Indian Economic, Indian Constitution, General Science, Current World events, sports, Indian Music, Dance & Culture.
- 2) Logic & Reasoning :** Coding and decoding – Small & Capital letters/numbers, Coding, Decoding and classification, Analogies- Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Similarities and Differences, Word building, Arithmetic Number Series, Non-verbal Series, Visual memory, Observation, Relationship Concepts, Space Visualization.
- 3) Numerical Ability :** Decimals and Fractions, Computation of Whole Numbers, Ratio and Time, Interest & Discounts, Time and Distance, Profit and Loss, Percentage, Ratio & Proportion, Number System, Fundamental Arithmetical Operations, Time and Work, Averages, The Relationship between Numbers.
- 4) Technical :** Basic Electricity & Electronics, Laws of Electricity, Electrical Machines, Network Analysis, Electronic Devices, Electromagnetic Theory, Analog and Digital Electronics, Measurement & Instrumentation, Power System Analysis & Control, Utilization of Electrical Energy, Power System, Protection Control Systems, Electrical Machines including Pump Sets & DG Set, Switch Gear and Protection. Power Electronics & Drives, Analog Electronics, Microprocessors & Microcontrollers, Cost Estimation.
- 5) General English :** Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) Marathi :** Basic Marathi Grammar of 10th Standard (Maharashtra State Board)

Syllabus for Jr. Engineer (Stores)

GENERAL SECTION (10th Level)

- 1) General Knowledge :** Current affairs-India, Indian History, Indian Geography, Indian Economic, Indian Constitution, General Science, Current World events, sports, Indian Music, Dance & Culture.
- 2) Logic & Reasoning :** Coding and decoding – Small & Capital letters/numbers, Coding, Decoding and classification, Analogies- Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Similarities and Differences, Word building, Arithmetic Number Series, Non-verbal Series, Visual memory, Observation, Relationship Concepts, Space Visualization.
- 3) Numerical Ability :** Decimals and Fractions, Computation of Whole Numbers, Ratio and Time, Interest & Discounts, Time and Distance, Profit and Loss, Percentage, Ratio & Proportion, Number System, Fundamental Arithmetical Operations, Time and Work, Averages, The Relationship between Numbers.
- 4) Technical :** Strength of Materials, Engineering Mechanics, Engineering Materials, Measurement and Instrumentation, Basic Electricity, Electrical Machines, Construction Materials, Fluid Mechanics, Inventory Control, Transportation, Material Handling, Materials' Management in Industries.
- 5) General English :** Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) Marathi :** Basic Marathi Grammar of 10th Standard (Maharashtra State Board)

Syllabus for Traffic Controller

GENERAL SECTION (10th Level)

- 1) General Knowledge :** Current affairs-India, Indian History, Indian Geography, Indian Economic, Indian Constitution, General Science, Current World events, sports, Indian Music, Dance & Culture.
- 2) Logic & Reasoning :** Coding and decoding – Small & Capital letters/numbers, Coding, Decoding and classification, Analogies- Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Similarities and Differences, Word building, Arithmetic Number Series, Non-verbal Series, Visual memory, Observation, Relationship Concepts, Space Visualization.
- 3) Numerical Ability :** Decimals and Fractions, Computation of Whole Numbers, Ratio and Time, Interest & Discounts, Time and Distance, Profit and Loss, Percentage, Ratio & Proportion, Number System, Fundamental Arithmetical Operations, Time and Work, Averages, The Relationship between Numbers.
- 4) Technical :** Basic Electricity & Electronics, Laws of Electricity, Electrical Machines, Network Analysis, Electronic Devices, Electromagnetic Theory, Analog and Digital Electronics, Measurement & Instrumentation, Power System Analysis & Control, Utilization of Electrical Energy, Power System, Protection Control Systems, Electrical Machines including Pump Sets & DG, Switch Gear and Protection. Power Electronics & Drives, Analog Electronics, Microprocessors & Microcontrollers, Cost Estimation.
- 5) General English :** Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) Marathi :** Basic Marathi Grammar of 10th Standard (Maharashtra State Board)

Syllabus for Helper

- 1) **General Intelligence & Reasoning (8th Level)** : Non-Verbal series, Coding & Decoding, Alphabetical & Number Series, Mathematical Operations, Relationships, Similarities & Differences, Analytical Reasoning, Decision Making, Analogies, Statement- Arguments and Assumptions.
- 2) **Numerical Ability** : Number System, Decimals and Fractions, LCM, HCF, Ratio and Proportion, Time and Work, Time & Distance, Profit and Loss, Percentages, Averages, Simple & Compound Interest, Algebra, Square Root, Age Calculations, Calendar & Clock.
- 3) **General Knowledge & Current Affairs** : Current Events, Sports, Personalities, Economics, Politics, Indian History, Indian Geography, Indian Music, Dance & Culture.
- 4) **General Science** : The syllabus under this shall cover Physics (7 Questions), Chemistry (7 Questions) and Life Sciences (6 Questions) of 8th Standard and ITI Standard. (Maharashtra State Board)
- 5) **General English** : Grammar, Articles, Phrase Replacement, Reading Comprehension, Para Jumbles, Sentence Rearrangement, Synonyms, Sentence Corrections, Adjectives, Fill in the blanks, Error spotting/Phrase replacement, Antonyms, Meanings, Word formation, Idioms & Phrases, Verb, Adverb, Missing Verbs, Unseen Passages.
- 6) **Marathi** : Basic Marathi Grammar of 8th Standard (Maharashtra State Board)