

MRPL Apprentice Syllabus| Check Apprentice Graduate and Technician Apprentice Exam Pattern

MRPL Apprentice Exam Pattern

| Name of the Subjects Concerned Discipline/ Domain/ Subject | Number of Questions | Marks | Time Duration |
|---|---------------------|-------|---------------|
| | 50 | 50 | 90 Minutes |

MRPL Apprentice Syllabus

Chemical Engineering Topics

- Applied Chemistry
- Basic Chemical Engineering
- Chemical Engineering Thermodynamics
- Chemical Process Calculations
- Engineering Material
- Environmental Engineering
- Fluid Flow
- Heat Transfer
- Industrial Management
- Industrial Stoichiometry
- Instrumentation and Process Control
- Mass Transfer I
- Mass Transfer II
- Mechanical Operations
- Momentum Transfer
- Inorganic Chemistry
- Professional Ethics and Indian Constitution

Civil Engineering Topics

- Building Code
- Town Planning
- GIS
- Building Planning

- Valuation
- Professional practice
- Transportation Engineer 1 & 2 (Road)
- Quantity Estimation
- Structural Analysis
- Soil Mechanics
- Hydraulic Structure

Electrical & Electronic Engineering

- Measurement of Electrical Power
- Present Power Sector scenario in India and others Electrical
- Power Engineering
- Analysis of Dist Transformers, Meters & Testing
- Non-conventional Energy sources like Wind, Solar, Biomass
- Engineering topics
- Switchgear & protection (MC/LV) & LT Switchgear design and testing
- Distribution HT/LT Line parameters
- Performance of line fault analysis
- Distribution Network Installation & load studies
- Functions of capacitors & reactors
- Low Voltage constraint & resolving

Electronics & Communication Engineering

- Electronic Devices and Circuits
- Electrical Circuits and Instrumentation
- Industrial Electronics
- Digital Electronics
- Linear Integrated Circuits
- Microcontroller
- Computer Hardware and Network
- Networks and Systems
- Physics: Circuits
- Computing devices
- Analog & Digital
- Signal processing
- Communications
- Semiconductor Devices & Optical Systems
- Computers: Microprocessors
- VLSI and Embedded systems

Instrumentation Engineering

- Analog Electronics
- Engineering Mathematics

- Principles of Instrumentation Engineering
- Principles of Automatic Control
- Transducers
- Transducers and Signal Conditioning Circuits
- Industrial Electronics
- Process Control & Instrumentation
- Electrical Circuits
- Measurements
- Sensors and Industrial Instrumentation
- Signals and Systems
- Control Systems
- Communication and Optical Instrumentation
- Digital Electronics

Mechanical Engineering

- Thermodynamics
- The Strength of Materials
- Machine Design
- Industry Safety
- Inventory Control
- Machining and Machine Tool Operations
- Metal Casting
- Fluid Machines
- Engineering Materials
- Meteorology and Inspection
- Product Design and Development
- Engineering Materials
- Meteorology and Inspection
- Product Design and Development
- Production Planning and Control
- Computer Integrated Manufacturing Design
- Inventory Control
- Management Information System
- Machining and Machine Tool Operations