

NMDC Maintenance Assistant (Mech, Electrical) (Trainee) Syllabus, Exam Pattern 2018

NMDC Maintenance Assistant Exam Pattern 2018

Type of Exam	Subjects	Total No. of Marks	Time Duration
Written Test	Subject Knowledge (on specific trade)	30	2 hours
	General Knowledge	50	
	Numerical & Reasoning Ability	20	
Total		100 Marks	

Numerical Ability:

- Data Interpretation
- Quadratic Equations
- Number Series
- Approximation and Simplification
- Data Sufficiency
- Profit and Loss
- SI& CI
- Problem on Ages
- Work and Time
- Speed Distance and Time
- Probability
- Mensuration
- Permutation and Combination
- Average
- Ratio and Proportion
- Partnership
- Boats and Stream
- Problems on Trains
- Mixture and Allegation
- Pipes and Cisterns
- Problems on L.C.M and H.C.F.
- Compound Interest.
- Numbers and Ages
- Boats and Streams.
- Indices and Surds.
- Simplification and Approximation.
- Problems on Numbers.
- Odd Man Out.
- Compound Interest.
- Simple Equations.

- Numbers and Ages.
- Ratio and Proportion.
- Quadratic Equations.
- Bar & Graphs,
- Line charts, Tables
- Pipes and Cisterns.
- Simple Interest.
- Time and Work Partnership
- Simplification and Approximation.

Reasoning Ability

- Puzzles
- Seating Arrangements
- Direction Sense
- Blood Relation
- Syllogism
- Order and Ranking
- Coding-Decoding
- Machine Input-Output
- Inequalities
- Alpha-Numeric-Symbol Series
- Data Sufficiency
- Logical Reasoning (Passage Inference, Statement and Assumption, Conclusion, Argument)
- Data Sufficiency.
- Non-Verbal Reasoning.
- Verbal Reasoning.
- Logical Reasoning.
- Data Interpretation.
- Analytical Reasoning.
- Number Series.
- Letter and Symbol Series.
- Verbal Classification.
- Essential Part.
- Analogies.
- Artificial Language.
- Matching Definitions
- Making Judgments
- Logical Problems
- Statement and Conclusion
- Theme Detection
- Cause and Effect
- Statement and Argument
- Logical Deduction
- Verbal Reasoning

- Analogy, Classification
- Word formation
- Statement and conclusions Syllogism
- Statement and assumptions
- Statement and arguments
- Coding Decoding
- Blood Relations
- Passage and conclusions
- Alphabet test
- Series Test
- Ranking and time sequence
- Direction sense Test
- Decision making test
- Figure series
- Input/output
- Assertion and reasoning
- Sitting Arrangement
- Non-Verbal Reasoning
- Series test
- Odd figure Out
- Analogy

NMDC Maintenance Trainee (Mech) Syllabus 2018

- Fluid Mechanics
- Thermodynamics
- Heat Engines.
- Automobile Engineering.
- Manufacturing Technology.
- The Strength of Materials.
- Theory of Machines.
- Structural Engineering.
- Hydraulics.
- Industrial Engineering & Management
- Hand & Power Tools.
- Systems of Measurement.
- Fasteners.
- Cutting tools.
- Limits, Fits & Tolerances.
- Drilling machine.
- Taps and Dies.
- Sheet Metal.
- Welding processes.
- Introduction to Hydraulics & Pneumatics.
- Introduction to Engine.

- Diesel Engine Components.
- Valves & Valve Trains.
- Engine Assembly.
- Need for Cooling systems.
- Basic cooling system components.
- Need for lubrication system.
- Intake & exhaust systems.
- Intake system components.
- Exhaust system components.
- Diesel Fuel Systems.
- Diesel fuel system components.
- Electronic Diesel control.
- Marine & Stationary Engine.
- Emission Control.
- Troubleshooting.
- Prepare profile with an appropriate accuracy as per drawing.
- Manufacture different hand tools by forging and heat treat the same.
- Manufacture simple sheet metal items and join by soldering.
- Join MS sheet by riveting.
- Join mechanical components/metal parts by Arc welding.
- Cut and join M.S. parts with Gas welding.
- Repair and assemble simple machine parts from the blueprint and rectify faults of assembly.
- Join MS sheets by Gas welding in different positions.
- Weld different types of MS pipe joints by SMAW.

NMDC Maintenance Assistant Syllabus 2018– Electrical (Trainee)

- Implementation in shop floor of the various safety measures.
- Visit different sections of the Institute Demonstration on elementary first aid.
- Artificial Respiration.
- Demonstration of Trade hand tools.
- Identification of simple types- screws, nuts & bolts, chassis, clamps, rivets etc.
- Use, care & maintenance of various hand tools.
- Practice in soldering Measurement of Resistant and Measurement of specific Resistant.
- Routine care & Maintenance of Batteries.
- Types of drills description & drilling machines, proper use, care and maintenance.
- Description of taps & dies, types in rivets & riveted joints.
- Use of thread gauge.
- Connection of Calling Bell, Buzzer, Alarms, Electric Iron, Heater, Light.
- Rewinding /assembly of different electrical appliances.
- Study, maintenance and repair of domestic equipment –Electric Kettle, Heater /Immersion Heater, Hot Plate, Geysers, Washing machine, Cooking range, Pump set.