

DMRC Junior Engineer Exam Pattern

DMRC JE Exam Pattern – Paper I

Section	No of questions	Total Marks	Time Duration
General Intelligence and Reasoning	15	15	2 Hours
General Awareness	15	15	
Quantitative Aptitude	15	15	
Knowledge of discipline/trade	75	75	
Total	120	120	

DMRC JE Exam Pattern – Paper II

Section	Number of questions	Total Marks	Time Duration
General English	60	60	45 minutes

DMRC Asstt Manager Syllabus 2020-Topics Wise

Logical Reasoning

1. Spatial Visualization.
2. Coding and Decoding
3. Visual Memory.
4. Non-verbal series.
5. Analogies.
6. Arithmetic Number Series.
7. Arithmetical Reasoning.
8. Observation.
9. Figures Classification.
10. Relationship concepts.
11. Discrimination.
12. Spatial Orientation.
13. Similarities and Differences

General Knowledge

1. Current Affairs
2. Events related to India and its neighboring countries.
3. Indian Constitution.
4. General Polity.
5. Indian Culture & Heritage.
6. Indian Economy.
7. Indian History.
8. Science & Technology
9. Indian & World Geography

Computer Application

1. MS Excel.
2. MS Word.
3. Internet Usage
4. Computer Software.
5. Operating System.
6. MS Power-Point.
7. Computer Hardware.

Concerned Subjects:

Civil

1. Irrigation Engineering
2. Hydraulics
3. Soil Mechanics
4. Transportation Engineering
5. Building Materials
6. Environmental Engineering
7. Surveying
8. Estimating, Costing and Valuation

Electrical

1. Circuit law
2. Generation, Transmission, and Distribution
3. Estimation and Costing

4. Utilization of Electrical Energy
5. Basic concepts
6. Magnetic Circuit
7. Basic Electronics
8. Single Phase Induction Motors
9. AC Fundamentals
10. Electrical Machines
11. Fractional Kilowatt Motors
12. Measurement and Measuring Instruments
13. Synchronous Machines

Electronics

1. Power Electronics & Drives.
2. Measurement & Instrumentation.
3. Basic Electronics/ Power Electronics.
4. Digital Communications.
5. Analog Electronics.
6. Circuit Theory/ Digital Electronics.
7. Analog Communications.
8. Microprocessors & Microcontrollers.

Mechanical

1. Dynamics of ideal fluids
2. Measurement of Flow rate Basic Principles
3. Hydraulic Turbines
4. Fluid Kinematics
5. Centrifugal Pumps
6. Production Engineering
7. Properties of Pure Substances
8. Classification of Steels
9. Theory of Machines and Machine Design
10. Nozzles & Steam Turbines
11. Measurement of Fluid Pressure
12. Engineering Mechanics and Strength of Materials
13. Thermal Engineering
14. 1st and 2nd Law of Thermodynamics
15. Air standard Cycles for IC Engines
16. IC Engine Performance

17. Rankine cycle of steam
18. IC Engine Combustion
19. Boilers; Classification Specification; Fittings & Accessories
20. Air Compressors & their cycles
21. Properties & Classification of Fluid
22. Refrigeration cycles
23. Principle of a Refrigeration Plant
24. IC Engine Cooling & Lubrication
25. Fluid Mechanics & Machinery
26. Fluid Statics

Jobschat.in