

HAL Exam Pattern | Management Trainee, Design Trainee

Parts	Subjects	No Of Question	Time Duration
Part I	General Awareness	20	2 and Half Hours
Part II	English & Reasoning	40	
Part III	Concerned subject	100	

HAL Syllabus - MT, Design Trainee

General Awareness Syllabus

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- Geography
- Books
- Sports and Games
- Important Days
- Budget and Five Year Plans
- Indian Constitution
- History
- Current Affairs National & International
- Abbreviations
- Abbreviations
- General Policy
- Indian History
- Books and Authors
- Awards and Honors
- Capitals of India
- Indian Economy
- Culture
- Important Financial & Economic News
- Science Invention & Discoveries
- Politics Economic Science
- Current Events
- Current Affairs National and International
- Countries and Capitals
- International and National Organizations https://www.freshersnow.com/syllabus/



- Science and Technology
- Science Inventions & Discoveries
- Indian National Movement
- Sports
- Awards and Honors
- Important Days

English And Reasoning Syllabus

- Vocabulary
- Precise Writing
- Odd Man Out
- Antonyms
- Essay Writing
- Synonyms
- Fill in the Blanks
- Indices and Surds
- Pipes and Cisterns
- Simplification and Approximation
- Averages
- H.C.F. and L.C.M.
- Time and Distance.
- Problems on Trains.
- Average.
- Time and Work Partnership
- Simple & Compound Interest.
- Profit and Loss.
- Mixture and Alligation
- Percentages.
- Number Systems.
- Coding and Decoding
- Input & Output Devices
- Idioms & Phrases
- Comprehensions
- Boats and Streams.
- Data Interpretation.
- Ratio and Proportion.
- Simplification.
- Problems on Ages.
- Time and Work.
- Discounts
- Areas https://www.freshersnow.com/syllabus/



- Percentages
- Boats and Streams
- Probability
- Drafting
- English Grammar
- Numbers and Ages

Mechanical Engineering Syllabus

- Tool Engineering.
- Thermodynamics and Statistical Mechanics.
- Vector Calculus.
- Numerical Methods.
- Differential Equations.
- Calculus.
- Forming Processes.
- Metal Casting.
- Fluid Mechanics.
- Operations.
- Engineering Materials.
- The Strength of Materials.
- Operations Research.
- Joining Processes.
- The design of Machine Elements.
- Refrigeration and air-conditioning.
- Thermodynamics.
- Theory of Machines.
- Engineering Mechanics.
- Probability & Statistics.
- Turbomachinery.

Electrical Engineering Syllabus

- Basic Electronics Engineering
- Electric Circuits and Fields
- Power Electronics and Drives
- Electrical Machines
- Power Systems
- Electrical and Electronic Measurements
- Electrical Materials
- Computer Fundamentals
- Control Systems https://www.freshersnow.com/syllabus/



- Analog and Digital Electronics
- Systems and Signal Processing

Electronics Syllabus

- Transducers, Mechanical Measurement, and Industrial Instrumentation.
- Signals, Systems, and Communications
- Control Systems and Process Control.
- Analytical, Optical Instrumentation.
- Basics of Circuits and Measurement Systems.
- Digital Electronics.
- Analog Electronics
- Electrical and Electronic Measurements.

Metallurgy Syllabus

- Manufacturing Processes
- Mechanical Metallurgy
- Extractive Metallurgy
- Thermodynamics and Rate Processes
- Physical Metallurgy

Computer Science Syllabus

- Database Management System
- Mobile Communications
- Operating System
- Microprocessor
- Computer Software
- Cryptography and Network Security
- Performance Evaluation
- Design and Analysis of Algorithm
- Programming Languages, etc. https://www.freshersnow.com/syllabus/