

# HAL Assistant Syllabus

## HAL Assistant Syllabus - Civil Engineering

- Flow of Fluids, Hydraulic Machines, and Hydro Power
- Fluid Mechanics, Open Channel Flow, Pipe Flow
- Hydraulic Machines and Hydropower
- Hydrology and Water Resources Engineering
- Environmental Engineering
- Water Supply Engineering
- Building Materials
- Structural Analysis
- Design of Steel Structures
- Design of Concrete and Masonry structures
- Construction Practice
- Planning and Management
- Waste Water Engineering
- Solid Mechanics
- Solid Waste Management
- Air, Noise pollution, and Ecology
- Geotechnical Engineering and Foundation Engineering
- Surveying and Geology
- Transportation Engineering
- Highways
- Tunneling
- Railways Systems
- Harbours
- Airports

## HAL Operator Syllabus - Mechanical Engineering

- Engineering Mechanics
- Engineering Materials
- Mechanisms and Machines
- Fluid Mechanics
- IC Engines, Refrigeration and Air conditioning
- Turbo Machinery
- Thermodynamics and Heat transfer
- Power Plant Engineering
- Renewable Sources of Energy
- Design of Machine Elements
- Manufacturing
- Industrial and Maintenance Engineering
- Mechatronics and Robotics

# HAL Assistant Syllabus

## Hindustan Aeronautical Ltd. Asst. Syllabus - English

- Spellings/Detecting Mis-spelt words
- Antonyms and its correct usage
- Common Error
- Active/Passive Voice of Verbs
- Comprehension Passage
- Spot the Error
- Cloze Passage
- Fill in the Blanks
- Shuffling of Sentence parts
- Conversions
- Sentence Rearrangement
- Grammar
- Shuffling of Sentences in a passage
- Improvement of Sentences
- Synonyms/Homonyms
- Antonyms
- Vocabulary
- Idioms & Phrases
- One word substitution

## HAL operator Syllabus - Computer Knowledge

- MS Word, Microsoft OneNote
- Microsoft Access
- Introduction to Computer Science
- Boolean Algebra
- Computer Networks
- Emerging Technologies and Web Publishing
- PC Software and Office Automation
- Database Management System
- Data Structures
- MS PowerPoint
- MS Visio and MS Excel
- Microsoft Outlook
- The Internet
- Workplace Productivity Tools
- MS Project, Microsoft Publisher

## HAL Asst. & Operator Syllabus - Reasoning

- Mirror Images
- Grouping Identical Figures
- Figure Matrix Questions
- Problem on Age Calculation

## HAL Assistant Syllabus

- Decision Making
- Inference
- Analogy
- NonVerbal Series
- Test of Direction Sense
- Number Series
- Alphabet Series
- Arguments
- Ven Diagram
- Blood Relations
- Coding and Decoding
- Number Ranking
- Arithmetical Reasoning

### Verbal reasoning

- Analogy
- Series Completion
- Verification of truth of the Statement
- Situation Reaction Test
- Direction Sense Test
- Classification
- Data Sufficiency
- Alpha- Numeric Sequence Puzzle
- Puzzle Test
- Blood Relations
- Coding- Decoding
- Assertion and Reasoning
- Arithmetical Reasoning
- Operations of Mathematics
- Venn Diagrams
- Word Sequence
- Missing Characters
- Sequential Output training
- Directions
- Test on Alphabets
- Eligibility Test

### Non-Verbal Reasoning

- Dot Situation
- Identical figure groupings
- Forming figures and analysis
- Construction of squares and Triangles
- Series
- Analytical Reasoning
- Paper Folding

## HAL Assistant Syllabus

- Paper Cutting
- Cubes and Dice
- Water Images
- Mirror Images
- Figure Matrix
- Completion Incomplete Pattern
- Spotting embedded figures
- Classification
- Rules Detection

### Hindustan Aeronautics Limited Asst, Syllabus - General Awareness

- Finance Commissions
- Taxes on Income and Expenditure
- Financial and Railway Budget
- Revenue of Central Government
- Economic Planning
- Inflation
- National Income
- Public Finance
- Bills
- Concept of Budget
- Schemes and Policies implemented by Government
- Indian Banking Industry History
- Functions of Banks
- Types of Banks
- RBI and its Monetary Policy
- Capital market in India
- Money Market in India
- Role of Banking.
- National Dance
- Music & Literature
- Indian Culture
- Scientific observations
- Political Science
- World organizations
- Countries and Capitals
- Famous Places in India
- Books and Authors
- Important Dates
- About India and it's neighboring countries
- Science and innovations
- New inventions
- Economic problems in India
- Geography of India
- National and International current affairs