

IOCL Syllabus

In the following section, we have provided IOCL Exam syllabus. Aspirants who applied for IOCL Recruitment can go through below prepared page and get the proper IOCL syllabus and IOCL exam pattern for their better preparation.

IOCL Junior Engineering Assistant Syllabus

IOCL Exam Syllabus For Mechanical Engineering – IOCL JEA Syllabus:

- Applied Thermodynamics.
- Manufacturing Planning & Control.
- Fluid Mechanics.
- CAD/CAM/CIM.
- Measurement & Metrology.
- Balancing of Reciprocating Masses.
- Internal Combustion Engines.
- Industrial Engineering & Enterprise Resources Planning.

IOCL JEA Syllabus For Electrical Engineering – IOCL Syllabus :

- Electromagnetic Theory.
- Power System Analysis & Control
- Electrical Instrumentation.
- Utilization of Electrical Energy.
- Electrical Machines.
- Network Analysis.
- Control Systems.
- Electronics Devices.
- Power Systems.
- Analog and Digital Electronics.
- Switch Gear and Protection etc.
- Power Electronics & Drives.

IOCL Exam Syllabus For Instrumentation – Indian Oil JEA Syllabus :

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

IOCL Junior Engineering Assistant Syllabus
Syllabus:

For General Knowledge – IOCL JEA



- Environmental Issues.
- Geography.
- Indian Politics.
- Rivers, Lakes and, Seas.
- Indian Parliament.
- Literature.
- Biology.
- Current Affairs.
- Civics.
- Indian History.
- Countries and Capitals.
- Sports.
- Famous Days & Dates.
- Famous Books & Authors.
- Tourism.
- Famous Places in India.
- Indian Economy.
- Artists.
- General Science.
- Inventions and Discoveries.
- Heritage.

IOCL JEA Exam Syllabus For English Language – Indian Oil JEA Syllabus:

- Sentence Improvement.
- Joining Sentences.
- Fill in the blanks.
- Passage Completion.
- Active Voice and Passive Voice.
- Error Correction (Underlined Part).
- Sentence Completion.
- Idioms and Phrases.
- Error Correction (Phrase in Bold).
- Antonyms.
- Spotting Errors.
- Substitution.
- Synonyms.
- Prepositions.
- Sentence Arrangement.
- Para Completion.

IOCL Technician/ Trade Apprentice Syllabus

IOCL Technician Apprentice Syllabus for Reasoning Ability

- Similarities and Differences.
- Problem Solving.
- Space Visualization.
- Judgment.
- Analysis.
- Visual Memory.

- Decision Making.
- Relationship Concepts.
- Discriminating Observation.
- Figure Classification.
- Arithmetical Number Series etc.

IOCL Technician Apprenticeship Training Syllabus for Numerical Ability

- Percentages.
- Averages.
- Simplification.
- Problems on Ages.
- Profit and Loss.
- Interest.
- Time & Work.
- Time & Distance.
- Boats & Streams.
- Pipes & Cisterns.
- Data Interpretation etc.

IOCL Trade Apprentice Syllabus for General Awareness

- Sports.
- Culture.
- History.
- Economic Scene.
- Geography.
- Indian Constitution.
- General Polity.
- Scientific Research.
- Current Events – International & National etc.

IOCL Technician Apprentice Syllabus – Mechanical Engineering

- The Strength of Materials.
- Heat Transfer,
- Machine Design.
- Theory Of Machines.
- Refrigeration & Air Conditioning.
- Fluid Mechanics.
- Fluid Machinery & Steam Generators.
- Thermodynamics.
- Engineering Materials.
- Industrial Engineering etc.

IOCL Technical Apprentice Syllabus – Electrical Engineering

- Network Analysis.
- Electrical Instrumentation.
- Electromagnetic Theory.
- Switch Gear and Protection.
- Power Electronics & Drives.

- Electronics Devices.
- Control Systems.
- Analog and Digital Electronics.
- Electrical Machines.
- Power System Analysis & Control.
- Power System Protection.
- Utilization of Electrical Energy.
- Power Systems etc.

IOCL Apprentice Syllabus – Instrumentation Engineering

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

Trade Apprentice Syllabus – Mathematics

- Number Systems.
- Computation of Whole Numbers.
- Decimals and Fractions.
- Relationship Between Numbers.
- Fundamental Arithmetical Operations.
- Percentage.
- Ratio & Proportion.
- Profit & Loss.
- Simple Interest.
- Average.
- Discount.
- Partnership.
- Time & Work.
- Time & Distance.
- Use of Tables and Graphs.
- Mensuration.

IOCL Junior Operator Syllabus

IOCL Exam Syllabus – Aptitude:

- Areas.
- Time and Work.
- Discounts.
- Averages.
- Problems on Trains.
- Problems on Ages.

- Compound Interest.
- Time and Discount.
- Square Root and Cube Root.
- Surds and Indices.
- Volume and Surface Area.
- Percentages.
- Boats and Streams.
- Profit and Loss.
- Allegation and Mixture.
- Pipes and Cisterns.
- HCF and LCM.
- Partnership.
- Ratio and Proportion.

Reasoning Syllabus for IOCL Exam:

- Inserting The Missing Character.
- Analogy.
- Eligibility Test.
- Number, Ranking, and Time Sequence.
- Alpha Numeric Sequence Puzzle.
- Puzzle Test.
- Classification.
- Arithmetical Reasoning.
- Clocks and Calendars.
- Data Sufficiency.
- Situation Reaction Tests.
- Alphabet Test.
- Coding and Decoding.
- Statements and Conclusions.
- Logical Sequence of Words.
- Logical Venn Diagrams.

IOCL Jr Operator Syllabus – English

- Articles.
- Phrase Replacement.
- Para Jumbles.
- Reading Comprehension.
- Subject-Verb Agreement.
- Adjectives.
- Cloze Test.
- Error Spotting.
- Word Formations.
- Missing Verbs.
- Unseen Passages.
- Synonyms.
- Verb.
- Idioms & Phrases.
- Sentence Corrections.
- Antonyms.

- Grammer.
- Fill in the Blanks.
- Meanings.
- Adverb.
- Sentence Rearrangement.

IOCL Exam Syllabus – Mechanical

- Applied Mathematics – I.
- Applied Chemistry.
- Communication Skills -I.
- Applied Mathematics -II.
- Production Management.
- Theory of Machines.
- Applied Physics.
- Electrical and Electronic Engineering.
- Mechanical Engineering Drawing -I.
- Engineering Drawing.
- Workshop Practice.
- The strength of Material.
- Thermodynamics.
- Introduction To IT.
- Computer Application -I.
- Applied Machines.
- Material Science.
- Computer Application -II.

Electrical IOCL Syllabus:

- Basic Electrical & Electronics.
- DC Machines.
- Electric circuits.
- Electrical Utilisation.
- A.C.Machines.
- Power Systems.
- Industrial Drives.
- Electrical & Electronic Measuring Instruments.
- Electronics-I.
- General Mechanical Engineering.
- A.C. Machines.
- Electrical Engineering Materials.
- Basic Electrical Engineering.
- Digital Electronics.
- Maintenance of Electrical Systems.
- Power Systems – I (Generation).
- Electrical Installation and Estimation.
- Electronics -II.
- Power Electronics.
- Micro Controllers and Applications.
- Industrial Automation.
- Industrial Management.

- Electric Traction.

Indian Oil Corporation Ltd Syllabus – Civil:

- Water Resources and Hydraulic Engineering.
- Environmental Engineering.
- Building Materials and Building Construction.
- Estimation, Construction, Planning and Management.
- Solid Mechanics.
- Structural Analysis.
- Geotechnical Engineering.
- Transportation Engineering.
- Design of Concrete Structures.
- Design of Steel Structures.
- Surveying.

Instrumentation IOCL Junior Operator Exam Syllabus:

- Digital Electronic Circuits.
- Electrical Measurements.
- Electronics Instruments.
- Analog Electronics.
- Instrumentation.
- Signals & Systems.
- Analytical, Optical & Bio-Medical Instrumentation.
- Control Systems.
- Electronics Circuits.
- Fundamentals.
- Microprocessors and Micro Computers.

IOCL ECE Exam Syllabus:

- Electronics Devices.
- Electronics Measurement & Measuring Inst.
- Digital Circuits.
- Electromagnetic.
- Control Systems.
- Power Electronics.
- Network Analysis.
- Analog Circuits.
- Communications.
- Signals & Systems.

IOCL Exam Pattern

Before starting the preparation you must know the proper structure of written exam. In the below section IOCL Exam Pattern is provided. You can have a look on weightage of each section from there.

Indian Oil Corporation JE Exam Pattern

<u>Exam Type</u>	<u>Subject Name</u>	<u>Marks</u>	<u>Duration</u>
Written Exam (Objective)	English	100 marks.	3 hours.

	General Studies		
	Technical		

IOCL Syllabus & Exam pattern – Technician, Trade Apprentice

<u>Topics</u>	<u>No of Questions</u>
Concerned Discipline of Diploma Level	60
General Aptitude & Reasoning	25
General English	
Numerical Aptitude and General Knowledge Etc.	
Total	85

Indian Oil Corporation Limited Junior Operator Exam Pattern Junior Operator:

<u>Subjects Name</u>	<u>Questions</u>	<u>Marks</u>	<u>Exam Duration</u>
Technical Knowledge in Relevant Disciplines	40	40	90 Minutes
Generic Aptitude and Quantitative Aptitude	20	20	
Reasoning Abilities	20	20	
Basic English Language Skills	20	20	
Total	100	100	