

# RFCL Junior Engineer Assistant Syllabus

## Ramagundam FCL JEA Syllabus - Chemistry

- General Chemistry
- Structure of Atom
- Electrochemistry
- Periodicity
- Solid State
- Solutions
- Classification of Elements
- Molecular Structure
- Chemical Bonding
- Surface Chemistry
- Redox Reactions
- Chemical Kinetics
- States of Matter
- Equilibrium
- Thermodynamics
- Processes of Isolation of Elements
- Coordination Compounds
- P, D, F Block Elements
- Hydrogen
- D Block Elements
- Alkali and Alkaline earth metals (S Block)
- Haloarenes
- Alcohols
- Haloalkanes
- Aldehydes
- Phenols
- Ketones
- Ethers
- General Organic Chemistry
- Carboxylic Acids
- Biomolecules
- Hydrocarbons
- Environmental Chemistry
- Amines
- Chemistry in Everyday Life

## Ramagundam Fertilizers & Chemicals Limited JE Asst. Syllabus - Physics

- Mathematical Methods
- Classical Mechanics
- Relativity
- Atomic
- Molecular Physics
- Condensed Matter Physics

## **RFCL Junior Engineer Assistant Syllabus**

- Thermodynamics
- Statistical Mechanics
- Nuclear and Particle Physics
- Quantum Theory and its Applications
- Electromagnetic Theory
- Electronics
- Experimental Physics

### **RFCL JEAsst. Syllabus - Chemical Engineering**

- Atoms and Molecules.
- Reaction Dynamics.
- Electrochemistry.
- Stereochemistry.
- Spectroscopic Techniques.
- Organic Reactions.
- Photochemistry.
- Transition Metal Chemistry

### **RFCL Junior Engineer Assistant Syllabus - Aptitude**

- Time and Work Partnership
- Ratio and Proportion
- Boats and Streams
- Simple Interest
- Time and Distance
- Problems on Trains
- Areas
- Races and Games
- Numbers and Ages
- Mixtures and Allegations
- Mensuration
- Permutations and Combinations
- Problems on L.C.M and H.C.F
- Pipes and Cisterns
- Percentages
- Simple Equations
- Problems on Numbers
- Averages
- Indices and Surds
- Compound Interest
- Volumes
- Odd Man Out
- Quadratic Equations
- Probability
- Profit and Loss

## **RFCL Junior Engineer Assistant Syllabus**

- Simplification and Approximation

### **Ramagundam Fertilizers & Chemicals Limited JEA Syllabus - General English**

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

### **RFCL Junior Engineer Assistant Syllabus - Reasoning**

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

# RFCL Junior Engineer Assistant Syllabus

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

# RFCL Junior Engineer Assistant Syllabus

## RFCL JEA Syllabus - General Awareness

- 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

## Ramagundam FCL JE Asst. Syllabus - Mathematics

- Relations and Functions
- Logarithms
- Complex Numbers
- Quadratic Equations
- Sequences and Series
- Trigonometry
- Cartesian System of Rectangular Coordinates
- Statistics
- Differentiation
- Introduction to Three Dimensional Geometry
- Straight Lines
- Circles
- Conic Sections
- Permutations and Combinations
- Vectors
- Exponential and Logarithmic Series
- Sets and Set Theory
- Probability Function
- Limits and Continuity
- Applications of Derivatives
- Indefinite Integrals Binomial Theorem
- Matrices
- Determinants
- Definite Integrals