

# CSIR-Central Road Research Institute (CRRI) Syllabus

## CSIR-CRRI Technician Syllabus - Mental Ability

### 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

# **CSIR-Central Road Research Institute (CRRI) Syllabus**

## **CSIR-Central Road Research Institute (CRRI) General Awareness Syllabus**

- 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.

## **www.crridom.gov.in Technician, Technical Assistant English Syllabus**

- 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

## **केंद्रीय सड़क अनुसंधान संस्थान Electronics Syllabus**

- Analog and Digital Communication Systems

## **CSIR-Central Road Research Institute (CRRRI) Syllabus**

- Control Systems
- Computer Organization and Architecture
- Electro Magnetics
- Advanced Electronics Topics
- Basic Electrical Engineering
- Materials Science
- Advanced Communication Topics
- Basic Electronics Engineering
- Electronic Measurements and Instrumentation
- Network Theory
- Analog and Digital Circuits

### **CSIR-CRRRI Technician Syllabus - Instrumentation**

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

### **CSIR-Central Road Research Institute (CRRRI) Electrical Syllabus**

- Non-conventional Energy sources like Wind, Solar, Biomass
- Measurement of Electrical Power
- Present Power Sector scenario in India and others Electrical
- Power Engineering
- Distribution Network Installation & load studies
- Functions of capacitors & reactors
- Low Voltage constraint & resolving thereof
- Analysis of Dist. Transformers, Meters & Testing
- Engineering topics
- Switchgear & protection (MC/LV) & LT Switchgear design and testing
- Distribution HT/LT Line parameters
- Performance of line fault analysis

### **www.crridom.gov.in Technician, Technical Assistant Mechanical Syllabus**

- Engineering Mechanics
- Engineering Materials
- Mechanisms and Machines
- Fluid Mechanics

## **CSIR-Central Road Research Institute (CRRI) Syllabus**

- 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

### **केंद्रीय सड़क अनुसंधान संस्थान Computer Syllabus**

- Knowledge of C++
- Operating Systems – DOS
- PHP
- MS SQL Server
- Oracle PL\_SQL Architecture
- ASP.NET
- ADO.NET
- Java & JavaScript
- Manageable switch/router & wireless LAN with the network security
- Firewall & anti virus
- UML
- Object-Oriented designing
- Proposing and creating architecture and re-usable libraries in.NET
- JavaScript
- Networking with LAN/WAN
- Novel
- Window OS client & server & Linux OS-client & server.
- Web Services
- Window Services
- JSON
- The query will be an added plus
- Grid Computing, Distributed
- OS
- Image processing, Digital signal processing
- Image processing
- VLSI
- Embedded System

### **CSIR-CRRI Technician Syllabus - Civil**

- A 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

## **CSIR-Central Road Research Institute (CRRI) Syllabus**

- 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
- Harbors
- Airports