# **RITES Engineer Exam Pattern**

#### **Exam Structure**

**Objective Type** 

# Subjects Involved

Reasoning

English

Numerical Ability

General Awareness

Technical Subjects (Civil Engineering, Electrical Engineering, Mechanical Engineering, Structural Engineering)

# **RITES Engineer Syllabus**

**General Topics** 

#### Reasoning

- Number Series.
- Letter and Symbol Series.
- Verbal Classification.
- Essential Part.
- Analogies.
- Artificial Language.
- Matching Definitions.
- Making Judgments.
- Verbal Reasoning.
- Logical Problems.
- Statement and Conclusion.
- Theme Detection.
- Cause and Effect.
- Statement and Argument.
- Logical Deduction.

# English

- Vocabulary.
- Fill in the blanks.
- Grammar.
- Spot the error.
- Antonyms.
- Synonyms/ Homonyms.
- Sentence structure.
- Spellings.

- Detecting Mis-spelt words.
- One word substitutions.
- Idioms and phrases.
- Improvement.
- passage.
- Verbal Comprehension passage.
- Verbs.
- Adjectives.
- Clauses.

#### **Numerical Ability**

- Operations Research & Linear Programming.
- Algebra.
- Differential Geometry.
- Differential Equations.
- Dynamics.
- Statistics.
- Basic Mathematics.
- Analytical Geometry.
- Calculus.
- Statics.
- Percentages.Menstruation.
- Fractions.
- The relationship between Numbers.
- Fundamental arithmetical operations.
- Number Systems.
- Computation of Whole Numbers.

#### **General Awareness**

- Static GK.
- General Science.
- Current Affairs.

# **Topics For Static GK**

- Indian History.
- Politics.
- Geography.
- Arts.
- Culture.

# **Topics For General Science**

• Physics.

- Chemistry.
- Defense.
- Agriculture.
- Space.
- Environment.
- Biology.
- Agriculture.

# **Topics For Current Affairs**

- Economy.
- Banking.
- Awards.
- Sports.
- International Affairs.
- Current Events.

# **Technical Subjects**

# **Civil Engineering**

- Civil Engineering Materials and Construction.
- Solid Mechanics, Structural Analysis.
- Concrete Technology.
- Reinforced Concrete Structures,
- Steel Structures.
- PSC Structures.
- Fluid Mechanics.
- Hydrology & Water Resources Engineering.
- Hydraulic Structures.
- Soil Mechanics and Foundation Engineering.
- Transportation Engineering.
- Environmental Engineering.
- Surveying.
- Bridge Engineering.
- Estimation, Costing, and Specifications.
- Construction and Project Management.
- Environmental Studies etc.

#### **Structural Engineering**

- Theory of Structures
- Concrete Technology
- RCC Design
- Steel Design

#### **Electrical Engineering**

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

# **Mechanical Engineering**

- Calculus
- Vector Calculus
- Differential Equations
- Numerical Methods
- Probability & Statistics
- Engineering Mechanics
- The Strength of Materials
- Theory of Machines
- The design of Machine Elements
- Heat-Transfer
- Fluid Mechanics
- Thermodynamics
- Power Plant Engineering
- Refrigeration and air-conditioning
- Turbomachinery
- Engineering Materials
- Metal Casting
- Forming Processes
- Joining Processes
- Operations
- Metrology and Inspection
- Operations Research
- Inventory Control
- Production Planning and Control
- Manufacturing Analysis
- Tool Engineering
- Metrology and Inspection