# **NTPC Engineer Exam Pattern**

Part Names	Subject Names	Questions Count	Number of Marks	Time Duration
Part I	Concerned Subjects	70	70	
Part II	Verbal Ability/ General English	50	50	120
	Quantitative Aptitude			Minutes
	Reasoning Ability			S
	Total	120	120	

# NTPC Engineer Syllabus - Subject Wise

# **Quantitative Aptitude**

- Simplification
- Simple & Compound Interest
- Percentages
- Trigonometry
- Pictorial Graph
- Pie Chart
- Time & Work
- Area
- Profit & Loss
- Average
- Statistical Charts
- Bar Graph
- Geometry
- Time & Speed
- Investment
- HCF & LCM
- Number Systems
- Problem On Ages
- Mensuration
- Data Interpretation
- Fundamental Arithmetical operations

• Algebra

## **General English**

- Grammar
- Sentence structure
- Spot the error
- Shuffling of sentence parts
- Idioms and phrases
- Fill in the blanks
- English Language
- Synonyms/ Homonyms
- Vocabulary
- Antonyms
- Detecting Mis-spelt words
- Cloze passage
- One word substitutions
- Improvement
- Comprehension passage
- Spellings
- Shuffling of Sentences in a passage

### **Reasoning Ability**

- Decision Making
- Non-Verbal Series
- Alphabet Series
- Blood Relations
- Analogies
- Clocks & Calendars
- Problem Solving
- Mirror Images
- Syllogistic Reasoning
- Number Series
- Coding-Decoding
- Directions
- Arithmetical Reasoning
- Number Ranking
- Visual Memory
- Arrangements
- Cubes and Dice
- Judgment
- Embedded Figures etc.

## **Electrical**

- Electrical Basics.
- Microprocessor.
- Electrical Measurements & Measuring.
- DC Machine, AC Machine & Transformer.
- Control System.
- Circuit Theory.
- Analog Circuits/ Electronics.
- Instruments.
- Digital Electronics.
- Generation, Transmission & Distribution of Electrical Power.
- Power Electronics & Drives.
- Network theory.
- Electrical Engineering Materials.

### Mechanical

- Mechanics.
- Engineering Drawing & Design/Design Calculation.
- Production Design.
- Pneumatics & Hydraulics.
- Thermal Engineering/ Power Plant Engineering.
- Manufacturing Processes(Drilling, Milling, Boring)/ Manufacturing Technology.
- Manufacturing Processes/ Heat & Surface Treatment, Heat & Mass Transfer.
- Theory of Machine.
- Metrology and Measurements/Tolerance Limits, Fits.
- Mechanical Measuring Instruments.

### Civil

- Concrete/ Construction Technology.
- Soil Mechanics.
- Engineering Mechanics.
- Survey estimating.
- Civil Engineering Materials.
- Structural Engineering/Steel/ Reinforced Cement Concrete
- Transportation Engineering.
- Structural Engineering/RCC design. The Strength of Materials.
- Fluid Mechanics.
- Environmental Engineering.

### **Electronics**

- Measurement & Instrumentation.
- Control valves and on/off valves.
- Cabling.
- Open/Closed/Cascade loop control.

- Field instrumentation system.
- Analog Electronics.
- PID controlling & tuning.
- Basic Data Acquisition Systems.
- Networking/ computer networks.
- Power Electronics & Drives.
- Circuit Theory/ Digital Electronics.
- PLC/DCS/SCADA.
- Pneumatic control.

