

KPTCL Syllabus 2022 (Junior Engineer)

KPTCL Exam Pattern 2022

Junior Engineer (Electrical)

Subject	Marks
Diploma syllabus Electrical/ Electrical & Electronics discipline of Department of Technical Education, Government of Karnataka	75 marks
General Awareness & Aptitude	25 marks
Total	100 Marks

Junior Engineer (Civil)

Subject	Marks
Diploma syllabus Civil Engineering discipline of Department of Technical Education, Government of Karnataka	75 marks
General Awareness & Aptitude	25 marks
Total	100 Marks

KPTCL Syllabus 2022 - (Subject Wise)

General Awareness and Aptitude

- Indian History.
- Indian Culture & Heritage.
- Current Events – National & International.
- Indian Polity.
- Indian Constitution.
- Science & Technology.
- Indian Geography.
- IT & Space
- Indian Economy
- Karnataka GK such as polity, geography
- Administrative Structure
- Games and Sports
- Geography

- Natural Resources
- Energy Resources
- Human Resources
- Planning and Evaluation
- Rural and Urban Administrative Structure
- Industries
- Environment
- Culture, Literature, Music, Dance, Arts, and History

Electronics/ Electrical

- Network-Analysis
- Electrical and Electronic Measurements and Instrumentation
- Logic Design
- Digital System Design with VHDL
- Artificial Neural Networks
- Power System Planning
- Engineering Physics and Chemistry
- Mathematics related to Engg.
- Introduction to Computer Programming
- Electronic Circuits
- Basic Electronics
- Electric Power Generation
- Computer-Aided Electrical Drawing
- Digital Signal Processing
- Computer Techniques- in-Power-System-Analysis
- High Voltage Engineering
- Electrical Power Utilization
- Signals and Systems
- DC Machines and Synchronous Machines
- Transmission and Distribution
- Linear ICs and Applications
- Computer Control of Electrical Drives
- Industrial Drives and Applications
- Control Theory
- Switchgear and Protection
- Power System Analysis and Stability
- Microcontrollers
- Signals and Systems
- Physics
- Introduction to Computer Programming
- Electronic Circuits

- Basic Electronics
- Transformers and Induction Machines
- Power System Analysis and Stability
- Computer Techniques in Power System Analysis
- Electrical Machine Design
- Renewable Energy Sources
- Digital Signal Processing
- Energy Auditing & Demand Side Management
- Electrical Distribution Systems
- Electrical Power Quality
- Chemistry
- Industrial Drives and Applications
- Computer-Aided Electrical Drawing
- Power System Operation and Control
- Electrical Design, Estimation, and Costing

Civil

- Air Pollution and Control
- Engineering Physics
- Hydraulic Structures and Irrigation Design – Drawing
- Design and Drawing of RC structures
- Alternative Building Materials and Technologies
- Building Planning and Drawing
- Computer-Aided Design
- Water Resources Engineering
- Geotechnical Engineering
- Engineering Mathematics
- Structural Dynamics
- Hydrology and Irrigation Engineering
- Environmental Engineering
- Design of Pre–Stressed Concrete Structures
- Design and Drawing of Steel Structures
- Construction Management & Engineering Economics
- Pavement Materials and Construction
- Geographic Information System
- Strength of Materials
- Urban Transport Planning
- Earthquake Resistant Design of Structures
- Building Materials Testing Laboratory
- Hydrology and Irrigation Engineering
- Fluid Mechanics

- Basic Surveying
- Engineering Geology
- Building Materials and Construction
- Basic Surveying Practice
- Analysis of Determinate Structures
- Applied Hydraulics
- Computer-Aided Building Planning and Drawing
- Concrete and Highway Materials Laboratory
- Highway Engineering
- Concrete Technology
- Basic Geotechnical Engineering
- Advanced Surveying
- Design of RC Structural Elements
- Analysis of Indeterminate Structures
- Construction Management and Entrepreneurship
- Design of Steel Structural Elements
- Water Supply and Treatment Engineering
- Design of RCC and Steel Structures
- Quantity Surveying and Contracts Management
- Design of Pre Stressed Concrete Elements