

**Indian Institute of Information Technology,
Design and Manufacturing, Kancheepuram**

Ref : Advt: IIITDM/NT/R/02/2025 dated 10.07.2025

IIITDM/NT/R/02/2025/JT(Phy)

03.09.2025

**SYLLABUS FOR THE POST OF
JUNIOR TECHNICIAN (PHYSICS)**

Levels	Details
Level 1	General Ability Test (Multiple Choice Test)
Level 2	Technical Knowledge Test (Multiple Choice Test)
Level 3	Skill/Trade Test

Candidates securing minimum qualifying marks as laid down by the selection committee in Level 1 shall be shortlisted for Level 2 and Level 3. Final selection shall be based on aggregate marks obtained from Level 1, Level-2 and Level 3 with weightage of 10%, 50% and 40% respectively.

Level 1

Arithmetic & numerical ability, Quantitative aptitude, Data Interpretation, Logical reasoning, General English, General knowledge and Current affairs.

Level 2

Mathematical Physics: Vector algebra, vector differentiation, vector integration, Curl, Divergence and Gradient, Stokes Theorem, Divergence Theorem

Waves and Optics: Simple Harmonic Oscillation, Damped and Forced Oscillator, Geometrical optics, Interference, Diffraction and Polarization, Lasers

Electricity and Magnetism: Electrostatics, electric potential, dielectric properties of matter, Magneto statics, Para magnetism, Dia magnetism, Ferro magnetism, Hysteresis loop, electromagnetic, Faraday's law, Induction, Electro motive force, Electrical Circuits (LC, LR, RC, LCR etc.)

Properties of matter: Surface tension, Viscosity, elasticity, stress, strain, Modulus of elasticity

Heat and Thermodynamics: Kinetic theory of gases, Equipartition theory, Maxwell Velocity distribution, Laws of Thermodynamics, Entropy, Heat engines

Basic Data processing using Computer.

Level 3

Measurement of acceleration due to gravity

Finding rigidity modulus of a string.

Experiments related to diffraction of light.

Air Wedge/Newton ring experiments.

Experiments performed using Prism-table.

Finding Magnetic susceptibility of a material.



Registrar