

**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(ME)

03.09.2025

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

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**

**Safety:** Concepts of Safe working practices, environmental regulation and housekeeping.

**Engineering Drawing:** Principles of dimensioning, symbols, application of the first angle and third angle projection, geometrical construction of shapes, orthographic projection, and sectioning.

**Materials:** Behaviour and Properties of engineering materials; Stress, Strain, and Hooke's law; Testing methods like tensile, compression, bending, and torsion; Iron and Steel, non-ferrous metals and alloys, heat treatment, stress-strain diagrams for engineering materials. Fluids and fluid properties.

**Manufacturing Processes:** Different types of castings, design of patterns, moulds and cores; solidification and cooling. Fundamentals of hot and cold working processes; forging, rolling, extrusion, drawing and sheet metal forming processes. Principles of welding, brazing and soldering, Arc & Gas welding. Hand tools and measurement tools,

**Machine Tools:** Basic machine tools - Constructional features, Specifications, types, working principles and mechanisms in lathe, drilling machine, milling machine, boring machines, shapers, gear hobbing. single and multi-point cutting tools, tool geometry and materials, tool life and wear; principles of non-traditional machining processes; principles of jigs and fixtures.

**Basic Data processing using Computer.**

**Level 3**

Lathe, milling, drilling, tapping and grinding operations

Operating Metal joining equipment

Measuring tools

Piping and plumbing, sheet metal works

Material Testing / Thermal devices or systems performance testing

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Registrar