

Advertisement No. IITH/2023/NF/15 dated 22.10.2023.

Post Number	Post Name
12.7	Junior Technical Superintendent-Mechanical and Aerospace Engineering

Selection process consists of Written test and Skill Test

Syllabus for written and /or Skill Test

(These topics are mentioned for illustrative purpose only)

1. Junior Technical Superintendent-Mechanical and Aerospace Engineering (Mechanical)

"Syllabus for various trades will be based on syllabus of the curriculum of "The Craftsmen Training Scheme (CTS)", Central Staff Training and Research Institute, Directorate General of Training, Ministry of Skill Development and Entrepreneurship. The detailed syllabus can be accessed through the following link: https://dgt.gov.in/cts_details In addition to the above, the following will also be included Differentiation, integration, differential equations, matrices, analytical geometry Engineering and machine drawing Stress, strain, axial loading of structures, material characterization, beam bending, shaft torsion Thermodynamics, heat engine cycles Design of bolted and welded joints Manufacturing process, machine tools, Jigs and fixtures, metrology Fluid mechanics transducers for pressure, distance, velocity, force, temperature and strain measurement; CNC coding "

2. Junior Technical Superintendent-Mechanical and Aerospace Engineering (Electrical)

"Basic maths: Differentiation, integration, differential equations, matrices, analytical geometry Engineering and assembly drawing; basic workshop calculations, electrical, mechanical and electronic measuring devices; electrical and electronic components; electromagnetism; AC and DC power supplies; DC and AC circuit analysis and design; voltage, current and charge amplification and filtering; transducers for pressure, distance, velocity, force, temperature and strain measurement; PLC; transformers; microcontrollers; PCB design, printing and assembly; circuit simulations; inverters, UPS and computer hardware troubleshooting; AC and DC drives and their control; data acquisition, control systems;"
