

SYLLABUS
JUNIOR LAB ASSISTANT
(METALLURGICAL & MATERIALS ENGINEERING)

- Basic crystal structures
- Fe-C phase diagram
- Jominy end-quench test and hardenability
- Introductory ideas of iron and steel making
- Dislocations, Creep, fatigue, mechanical testing of materials including hardness, tensile and impact tests
- Welding, casting, forging, rolling and extrusion
- Heat treatment and furnaces
- Metallography
- Basics of corrosion
- Ultrasound probes and testing
- Basics of machining including high speed precision saws, turning operations on lathes
- General English, Quantitative Aptitude, Analytical Reasoning & General Knowledge / Current Affairs.