

Syllabus for JT – Structural Eng. Laboratory

Exam: Level II

Duration: 90 minutes

Marks: 100

Type of Question paper: MCQs & Short Answer Type questions

Syllabus

Mechanics: Equilibrium of forces, Analysis of beams and trusses, Bending moment and shear force diagrams. Stress and Strain, Hooke's law

Electrical: Current, Ohm's law, resistance, resistivity and conductivity, resistors – series and parallel, Kirchhoff's law, Wheatstone's Bridge, Metre bridge, Potentiometer, Strain gauge

Electronics: Semiconductors; P-N Junction diode; Zener diode; Junction transistors; Logic gates; Laws and theorems of Boolean's algebra, feedback, amplifier, Modulation, Analog digital conversion