



S. N. Patel Institute of Technology & Research Centre, Umrahk

(A Vidyabharti Trust Institution)

Civil Engineering Department

Subject Name: Mechanics of Solids

Subject Code: 3130608

Sr.No.	Experiment
1	Equilibrium of coplanar concurrent forces Equilibrium of coplanar non-concurrent forces
2	Equilibrium of coplanar parallel forces: Determination of reactions of simply supported beam
3	Determination of member force in a triangular truss
4	Verification of principle of moment: Bell crank lever
5	Determination of parameters of machines (Any two) (a) Wheel and differential axles (b) Single purchase crab (c) Double purchase crab (d) System of pulleys
6	Determination of hardness of metals: Brinell /Vicker/Rockwell hardness test
7	Determination of impact of metals: Izod/Charpy impact test
8	Determination of compression test on a. Metals – mild steel and cast iron b. Timber – along and parallel to the grains
9	Determination of shear strength of metals
10	Determination of tensile strength of metals