

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT
THEORY OF MACHINES AND MACHINE DESIGN

SEMESTER -IV

TEACHING SCHEME	L=3; P/D=4; TA=1
EXAMINATION SCHEME	Theory = 3hours; marks= 100
PRACTICAL / DRAWING	Internal evaluation Marks: 40 External evaluation Marks: 60 Total Marks: 100

[A] THEORY OF MACHINES (40% Weightage):

- i)** Introduction to machines and mechanisms : four bar and slider crank mechanisms, Cams and cam followers, cam profiles.
- ii)** Friction: Screw, bearings, lubrication, clutches, brakes, Belt drives.
- iii)** Gear drives : Types gears, gear nomenclature, applications.

[B] MACHINE DESIGN [60% Weightage]:

- i)** Design process, Material selection, factor of safety, types failures and their causes.
- ii)** Design of joints: pin joints, threaded fasteners, welded joints
- iii)** Design of power transmission elements.