



**MOHANLAL SUKHADIA UNIVERSITY:  
UDAIPUR**

**NAME OF THE FACULTY: SCIENCE**

**REVISED SYLLABUS w.e.f. 2012 - 2013**

**M. Sc. Tech. (Applied Geology)**

**SEMESTER - I**

**PAPRE- I (Code – Geol 01): STRUCTURAL GEOLOGY AND TECTONICS**

**Time: 3hrs**

**MM 100**

**UNIT – I**

Analysis of deformation. Mechanics of deformation. Strain ellipsoid. Homogeneous and inhomogeneous deformation. Progressive strains, strain paths, deformation paths, determination of strain in deformed rocks.

**UNIT- II**

Microstructures of deformed rocks and crystallographic preferred orientation in deformed rocks developed by slip, rotation and recrystallization.

**UNIT-III**

Principles of structural analysis. Structural diagrams- Methods and Interpretations. Criteria of recognition of polyphase deformation. Analysis of areas with simple and complex structures.

**UNIT-IV**

Ductile Shear zones- geometry and Fabric development. Thrusts tectonic mélangé.

**UNIT- V**

Major Earth Structures, plate tectonics, Geological structures and plate tectonics.

