



**MOHANLAL SUKHADIA UNIVERSITY:  
UDAIPUR**

**NAME OF THE FACULTY: SCIENCE**

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

**M. Sc. GEOLOGY FIRST SEMESTER**

**Paper – I  
101**

**Tectonics and Geomorphology**

**Code: Geol**

**Unit - I**

Internal Constitution of the Earth, heterogeneity of the earth's crust as determined by seismic, gravity and magnetic characters. Continental drift: - Geological and geophysical evidences, mechanism and present status.

**Unit - II**

Features associated with oceanic crust, mid-oceanic ridges, gravity and magnetic anomalies at mid oceanic ridges, Deep sea trenches, Island arcs and Volcanic arcs, Paleo-magnetism.

**Unit - III**

Theory of Plate Tectonics, Plate Tectonics and Seismicity, seismic belts of the earth, Continental shield areas and mountain chains.

**Unit- IV**

Basic principles of Geomorphology, Weathering, and erosion pathogenesis, mass movement, erosion, transportation and deposition. Geomorphic landforms: fluvial, glacial, aeolian, eolian, coastal and karst.

## Unit- V

Geomorphic mapping and slope analysis, drainage, basin analysis, Applications of geomorphology in mineral prospecting, civil engineering and environmental studies.