

UNIT 2

Lithosphere – II Exogenetic Processes

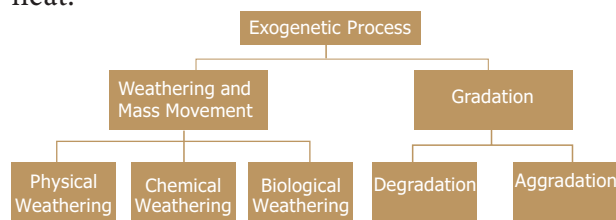
Learning Objectives

- To comprehend the various external processes of the Earth
- To study the different types of weathering and the resultant features
- To learn how the weathered materials are transported by different agents.
- To study about the features formed by erosion transportation and deposition of natural agents



Introduction

The Earth is a dynamic system that undergoes various changes due to internal and external processes. The continuous interaction of these two processes controls the structure of the earth's surface. The external processes are the consequence of solar energy and gravitational forces, whereas the internal processes are an outcome of the earth's internal heat.



2.1 Weathering

Weathering is the breaking, disintegration and decomposition of materials of the earth's crust by their exposure to atmosphere.

There are three types of weathering

- Physical weathering,
- Chemical weathering and
- Biological weathering

Physical weathering

It is the breakdown of rocks without changing their chemical composition, through the action of physical forces. The constant freezing and thawing of rocks during the night and day leads to the expansion and contraction of rocks. Cracks are formed and disintegration occurs eventually. **Exfoliation, block disintegration, granular disintegration,** are the Major types of physical weathering.

Exfoliation

The alternate heating and cooling on rounded rock surfaces leads to the peeling of rocks, layer by layer like an onion. This is called **exfoliation, sheeting** and **shattering** are the other forms of exfoliation.

