

UNDERGROUND WATER

1.
 - a)
 - P – Clint
 - Q - Grike
 - R - Jointed limestone
 - b) Rain water dissolves carbon dioxide in the atmosphere to form weak carbonic acid.

Acid rainwater falls on jointed limestone rocks.

The reaction forms calcium bicarbonate which is soluble and easily disintegrated.
2.
 - The surface rock and the rock beneath should be thick limestone or dolomite
 - The rock should be hard and well jointed
 - The climate should be warm or hot
 - Rainfall should be moderate to high
 - The water table in the rocks should be deep below surface.
3.
 - The rock has thin soils which discourage agriculture
 - Inadequate surface water for domestic use
 - Surface is rugged hindering construction of houses and infrastructure
 - Presence of underground caves which may collapse.
4.
 - Influence formation of spring.
 - Occurrence of permeable rock on top of an aquifer: A spring will develop at the point where the two meet.

- Existence of a well joined rock; water is absorbed through the joints and eventually spring out where the water table meets the surface.
 - Dyke cutting across a layer of permeable rock:
The water on the upper slope of the dyke is impounded which causes the water table to rise and causes springs where the water table meets the surface.
- 5
- a) Effluent streams are underground streams in limestone areas which are fed by a water table above their level while influent streams are underground streams which are fed by the water table lying beneath their bottom.
 - b) Artesian basin is the status in the earth's crust in which one or more aquifers are sandwiched between impermeable rock strata from a permanent water holding facility while an artesian well is a well dug in the basins to tap water.
- 6.
- Grikes
 - Clints
 - Sink holes
 - Dolins
 - Uvalas
- 7.
- Stalactites are finger like underground masses of calcite hanging vertically from the roof of a limestone cave.
- 8.
- Limestone regions are very good for grazing purpose especially for sheep because soil is thin and the surface is dry.
 - The Karst landscape is characterized with intermittent streams or absence of streams leading to scarcity of water supply in these regions.
 - Limestone is extracted for use in industries e.g Building industry,

iron and steel industry.

- The features such as gorges, caves and burns form good tourists attraction.