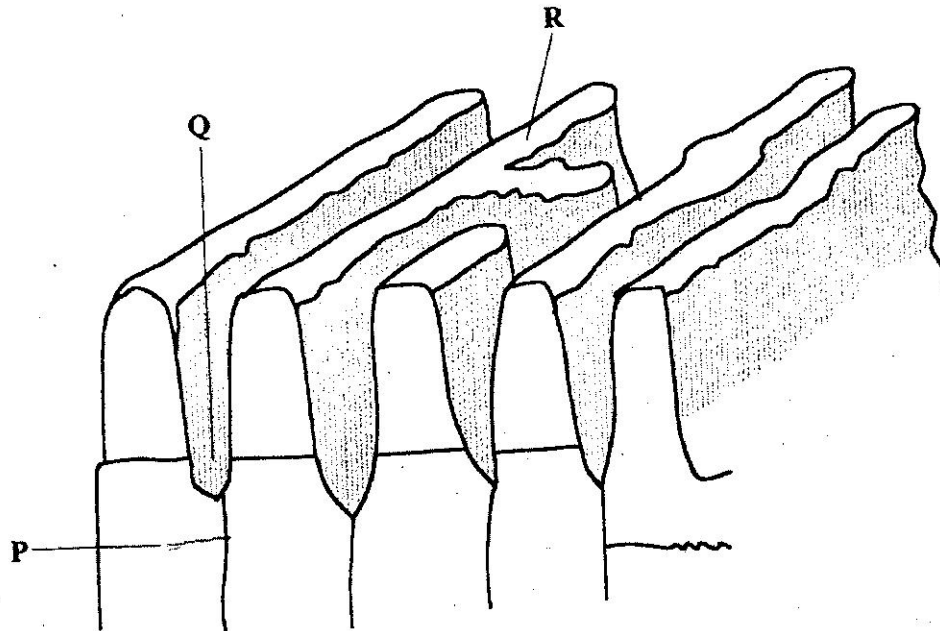


### Question 3

The diagram below shows some features of a Karst scenery. Use it to answer question (a).



- (a) Name the features marked **P**, **Q** and **R**. (3 marks)
- (b) Describe carbonation as a process of chemical weathering. (3 marks)

Candidates were expected to have knowledge of the surface features of a Karst scenery. They were also required to describe the carbonation process of chemical weathering.

#### Weaknesses

Many candidates mixed up the grike and clint. On part (b) many candidates were not sure where the process begins while others had no idea what carbonation was all about.

#### Expected Responses

- a)
- |   |   |            |
|---|---|------------|
| P | - | Rock block |
| Q | - | Grike      |
| R | - | Clint      |
- b)
- Rain water absorbs carbon dioxide to form a weak acid (carbonic acid).
  - The rain falls on jointed limestone rocks.
  - The percolating rain water reacts with limestone along the joints
  - The reaction forms calcium bicarbonate ( $\text{Ca}(\text{HCO}_3)_2$ ) which is not soluble.