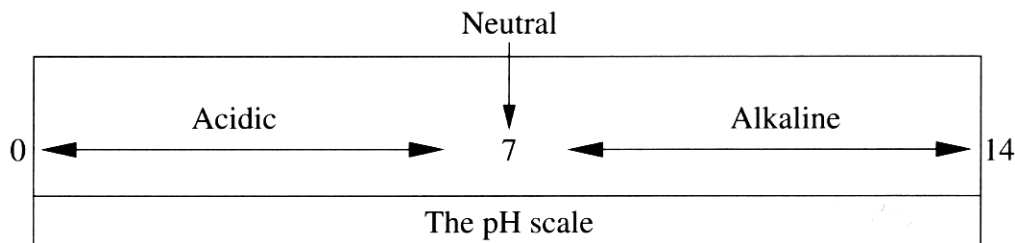


Marks

Question 26 (5 marks)

The following is an extract from a gardening website.

5



Hydrangeas are amazingly versatile in that you can alter the flower colour by changing the pH of the soil. In acid soils, hydrangeas produce blue flowers. In alkaline soils, hydrangeas produce mauve, pink and red flowers.

Describe a first-hand investigation that could be used to verify the effects of pH on the colour of hydrangea flowers.

A first-hand investigation that could be used to verify effects of pH on the colour of hydrangea flowers would be to plant the seeds of the ~~an~~ hydrangeas in pots of different pH levels ^{of soil} and record the colour of the ~~of~~ flowers produced, ~~on~~ the colours may differ with a high level of acidity and a low level, it may also differ with ~~an~~ a high level of alkaline and a low level, the difference may just be darker and lighter shades, the colour difference may not just differ in the fact that the soil is acidic or alkaline.