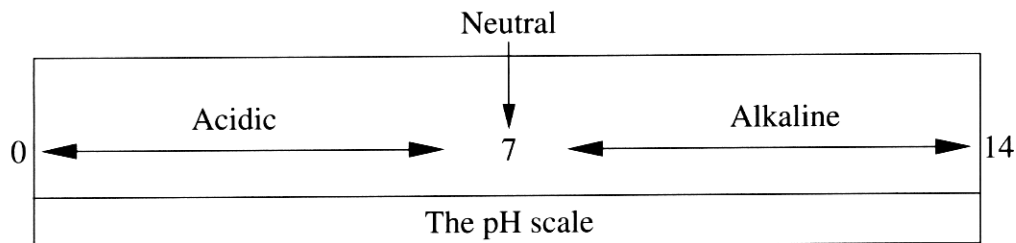


Marks

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.

.....
Gather 2 hydrangea plants, both of the same age and height (or as similar as possible) and place each in a separate pot. In one pot place potting mix with a relatively alkaline base, and mark the pot as "Alkaline"; in the other place a relatively neutral potting mix, then add an acid agent to the soil and mark the pot "Acid". Place both pots in the same location, water both the exact same amount and time. Record your findings.