Question 25 (5 marks)

What is the relationship between dissolved oxygen and biochemical oxygen demand and why is it important to monitor both in natural ways?

Dissolved oxygen is the amount of oxygen that has been dissolved into a body of water. Biochemical oxygen demand is when a sample of water is tested for dissolved oxygen, left in a dark place for five days, and then retested for dissolved oxygen. BOD is the difference between the two measurements. It is important to monitor both in natural waterways as dissolved oxygen is essential for the survival of aquatic organisms such as fish. A high biochemical oxygen demand (BOD) can be a sign of pollution in a waterway. This would mean that there is less dissolved oxygen available to these organisms and also there could be the presence of other potentially harmful chemicals which would affect our health. Hence, to maintain biodiversity and a healthy water system, dissolved oxygen & BOD must be monitored and kept in a healthy range.