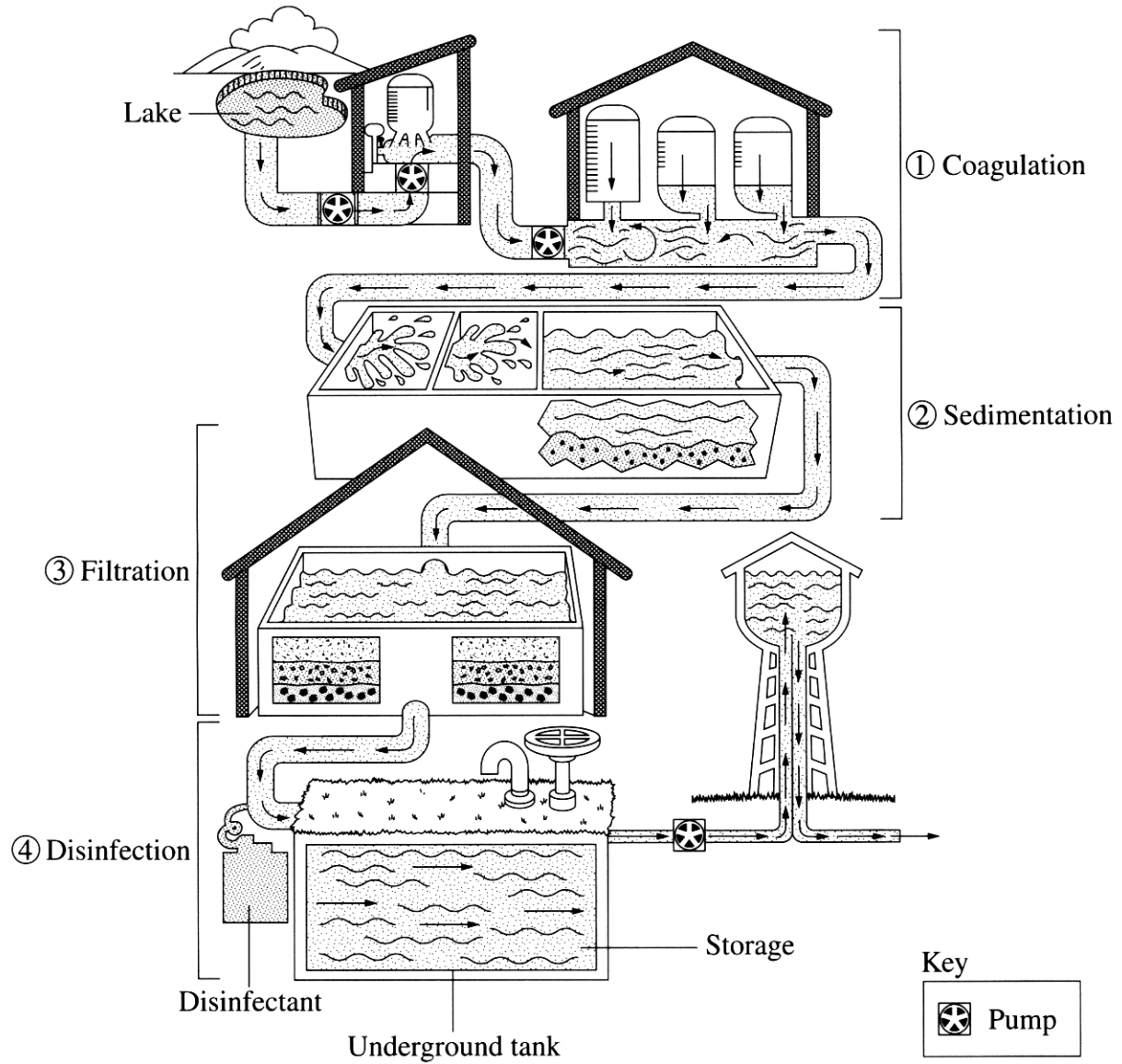


Question 19 (3 marks)

The diagram summarises one method used to treat water to make it suitable for drinking.



Question 19 continues on page 15

Marks

Question 19 (continued)

The treatment method illustrated on page 14 has four processes which can remove the contaminants that may be found in water extracted from the lake.

3

Select ONE of the four processes and explain how this process reduces the risk of infection from pathogens.

Filtration is a process whereby the water is forced through a very fine porous filter. A standard filter has pores of approximately $1\mu\text{m}$. As a result, the water molecules pass through to the other side while impurities are trapped. As pathogens are generally larger than the filter pores, they get trapped making the filtered water cleaner. By reducing the pathogens, it means there is less chance of getting sick from the water.