

**18** Water from a reservoir is fed to the turbine of a hydroelectric system at a rate of  $500 \text{ kg s}^{-1}$ . The reservoir is 300 m above the level of the turbine.

The electrical output from the generator driven by the turbine is 200 A at a potential difference of 6000 V.

What is the efficiency of the system?

**A** 8.0%

**B** 8.2%

**C** 80%

**D** 82%

**19** Which row correctly describes the ordering and motion of the molecules in liquid water and in ice?