

- 12** A hydroelectric power station uses the gravitational potential energy of water to generate electrical energy.

In one particular power station, the mass of water flowing per unit time is $1.5 \times 10^5 \text{ kg s}^{-1}$. The water falls through a vertical height of 140 m.

The electrical power generated is 100 MW. What is the efficiency of the power station?

- A** 5.6% **B** 4.3% **C** 49% **D** 77%