

- 10** A water pump is driven by an engine. The pump raises a volume of 0.50 m^3 of water in 1.0 minute from a depth of 30 m. The pump has an efficiency of 70%.

The density of water is 1000 kg m^{-3} .

What is the useful output power from the engine?

- A** 2.5 kW **B** 3.5 kW **C** 150 kW **D** 210 kW

- 11** The kinetic energy of a 5.0 kg object is 100 J . Find the speed of the object in m s^{-1} .