

**18** A car of mass 1800 kg accelerates along a horizontal road so that its speed increases from  $20 \text{ m s}^{-1}$  to  $25 \text{ m s}^{-1}$  in a time of 5.4 s.

What is the average useful power output of the car's engine?

A 4.2 kW

B 38 kW

C 120 kW

D 1100 kW

**19** A variable force is applied to ensure that a constant power is supplied to a train.