

- 17 A small diesel engine uses a volume of  $1.5 \times 10^4 \text{ cm}^3$  of fuel per hour to produce a useful power output of 40 kW. It may be assumed that 34 kJ of energy is transferred to the engine when it uses  $1.0 \text{ cm}^3$  of fuel.

What is the rate of transfer from the engine of energy that is wasted?

A 102 kW

B 142 kW

C 182 kW

D 470 kW