

- 7** A piston in a gas supply pump has an area of  $600 \text{ cm}^2$  and it moves a distance of  $40 \text{ cm}$  during one stroke. The pump moves the gas against a fixed pressure of  $5000 \text{ Pa}$ .

How much work is done by the piston during one stroke?

- A**  $1.2 \times 10^2 \text{ J}$       **B**  $1.2 \times 10^4 \text{ J}$       **C**  $1.2 \times 10^6 \text{ J}$       **D**  $1.2 \times 10^8 \text{ J}$

- 8** An area of land is at a distance of  $2.0 \text{ m}$  below sea level. To prevent flooding, pumps are