

7 A piston in a gas supply pump has an area of 600 cm^2 and it moves a distance of 40 cm during one stroke. The pump moves the gas against a fixed pressure of 5000 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 m below sea level. To prevent flooding, pumps are