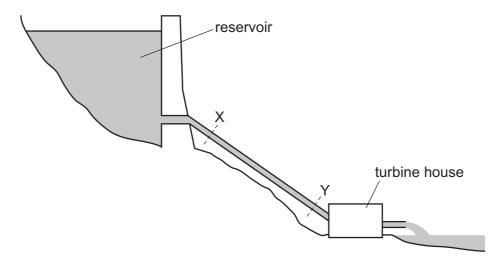
21 The diagram shows a hydroelectric power station.

The reservoir is linked to the turbines by a pipe of uniform cross-sectional area. Water flows from the reservoir, through the pipe and through the turbines at a constant rate.



Which statement about the change of energy of the water as it moves from X to Y is correct?

- **A** It gains both gravitational potential energy and kinetic energy.
- **B** It loses gravitational potential energy and gains elastic potential energy.
- **C** It loses gravitational potential energy and gains kinetic energy.
- **D** It loses both elastic potential energy and gravitational potential energy.

Space for working