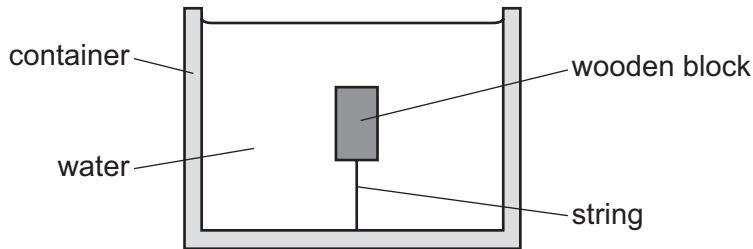**14** A wooden block is held stationary in a container of water using a string that is attached to both the wooden block and the bottom of the container.

The wooden block has mass m and volume V. The water has density ρ. The acceleration of free fall is g.

What is the magnitude of the force acting on the block due to the tension in the string?

A $\rho g V$ **B** $mg + \rho g V$ **C** mg **D** $\rho g V - mg$