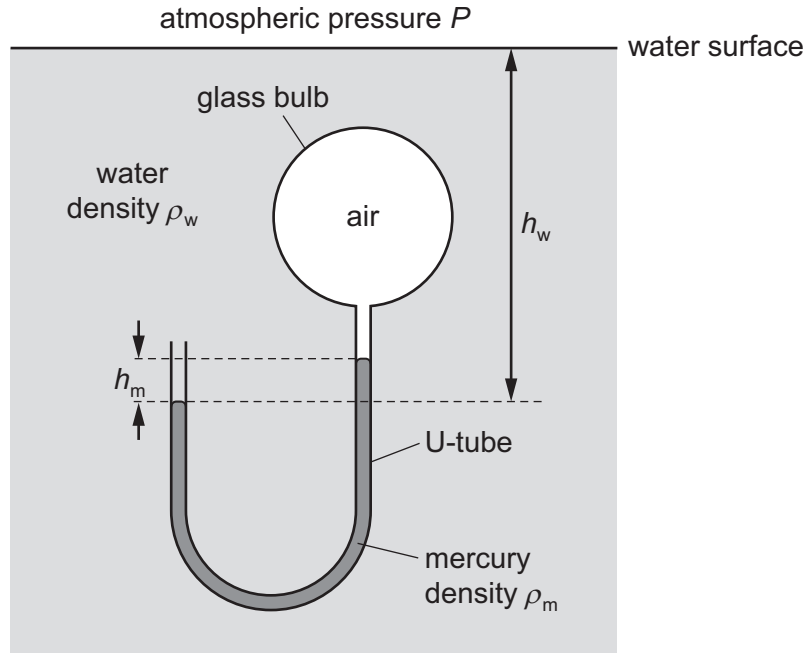


- 15 Air is trapped inside a glass bulb which is immersed in water and attached to a U-tube containing mercury. The densities of water and mercury are ρ_w and ρ_m respectively. The surface of the water is open to the atmosphere where atmospheric pressure is P .



The acceleration of free fall is g .

What is the pressure of the air in the glass bulb?

- A $P + g\rho_w h_w + g\rho_m h_m$
- B $P + g\rho_w h_w - g\rho_m h_m$
- C $g\rho_w h_w + g\rho_m h_m$
- D $g\rho_w h_w - g\rho_m h_m$