Question number	Answer	Notes	Marks
10 (a) (i)	pressure difference = height × density × *g*;	allow in words or standard symbols e.g. p = h × ρ × *g* condone d for density	1
(ii)	substitution; evaluation of pressure difference in kPa; evaluation of total pressure by adding 100 (kPa); e.g. (pressure difference =) 35 × 1000 × 10 (pressure difference =) 350 (kPa) (pressure = 350 + 100 =) 450 (kPa)	allow 343 (kPa) for use of g=9.8 N/kg ECF candidate's water pressure allow 443 (kPa) for use of g=9.8(1) N/kg allow 450 000 Pa with clear intent from candidate i.e. removal of 'k' from unit on answer line. -1 for POT error but not if due to physics error such as missing *g*, substitution of 100 (kPa) for g 350 kPa gets 2 marks 350 100 kPa gets 2 marks unqualified 350 000 (kPa) gets 1 mark	3
(b) (i)	pressure = force ÷ area;	allow in words or standard symbols e.g. p = F / A	1
(ii)	substitution; rearrangement; evaluation; corresponding unit of area; e.g. 260 000 = 430 / area (area =) 430 / 260 000 (area =) 0.0017 m^2	condone pressure in Pa or kPa accept standard form i.e. 1.7×10^{-3} (m^2) allow 0.0016538... m^2 etc allow 17, 16.5... (cm^2) etc allow 1.65... m^2 scores 3 allow 1.65...cm^2 scores 2	4
(c)	pressure (at bottom) is greater than before / eq; wider base /eq;	allow stronger material/eq ignore taller	2

Total for Question 10 = 11 marks