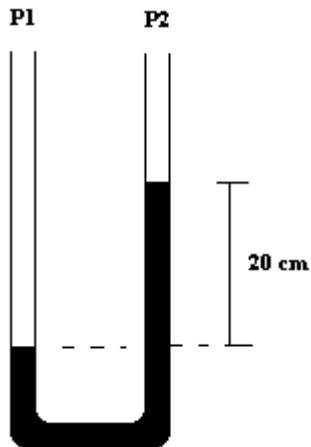


## TOPIC

Fluids – Section X – Question 3

## QUESTION

Consider the manometer shown. The dark fluid is mercury (density =  $13.6 \text{ gm/cm}^3$ ) and the light fluid is water (density =  $1 \text{ gm/cm}^3$ ). The difference in pressure  $P_1 - P_2$  in kPa most nearly is



- (A) 2.00
- (B) 22.7
- (C) 24.7
- (D) 26.7

## HINTS

- Pressure in a fluid depends on height of fluid by  $\rho gh$  where  $h$  is the height of fluid.
- The pressure at the bottom of the tube is the same whether calculated from the left or the right branch.

## CONTRIBUTOR

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