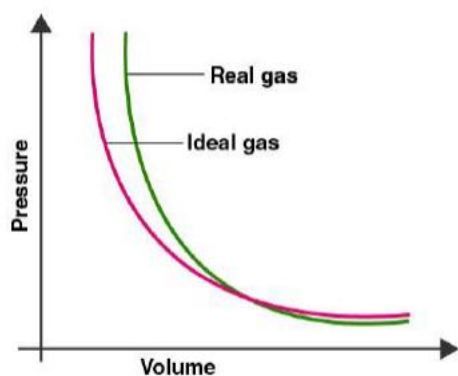


Question 6

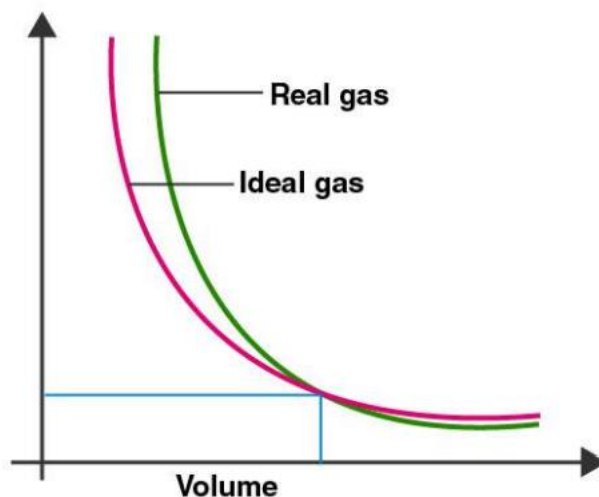
Pressure versus volume graph for a real gas and an ideal gas is shown in Fig. 5.4. Answer the following questions based on this graph.



- (i) Interpret the behaviour of real gas with respect to an ideal gas at low pressure.
- (ii) Interpret the behaviour of real gas with respect to an ideal gas at high pressure.
- (iii) Mark the pressure and volume by drawing a line at the point where real gas behaves as an ideal gas.

Solution:

- (i) At low pressure as the red curve and the blue curve are approaching each other, which shows that the real gas is behaving as an ideal gas at the low pressure.
- (ii) At high pressure as the red curve and the blue curve are deviating and going away from each other, which indicates that the real gas and ideal gas have distinct characters at high pressure



(iii)