Question 5

Two different gases ‘A’ and ‘B’ are filled in separate containers of equal capacity under the same conditions of temperature and pressure. On increasing the pressure slightly the gas ‘A’ liquefies but gas B does not liquefy even on applying high pressure until it is cooled. Explain this phenomenon.

Solution: The critical temperature is the term used for this phenomenon. Here gas A liquefies means that A is below its critical temperature and gas B does not liquefy on applying high pressure as it is above its critical temperature.