

Answer 7

(a)

- i. Less
- ii. Atmosphere
- iii. Troposphere
- iv. Nitrogen, oxygen
- v. Acid rain

(b) 76, 760

(c) Initial volume of the gas, $V_1 = 2000 \text{ cm}^3$

Initial pressure of the gas, $P_1 = 740 \text{ mm Hg}$

Final volume of the gas, $V_2 = 500 \text{ cm}^3$

Final pressure of the gas, $P_2 = ?$

$$P_1V_1 = P_2V_2$$

$$740 \times 2000 = P_2V_2$$

$$P_2 = \frac{2000 \times 740}{500}$$

$$= 2960 \text{ mm Hg}$$