

$$ROR = \frac{d(c)}{dt} = \frac{d(P_{RT})}{dt} = \left(\frac{20}{760} \right) RT \times 10$$

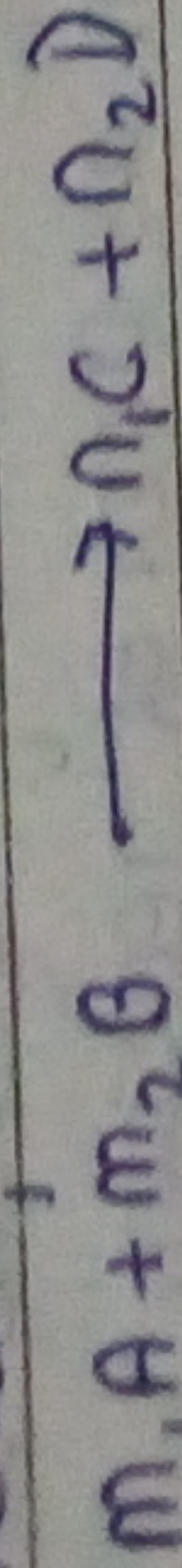
$$ROR = \left(\frac{20}{760} \right) 0.082 \times 300 \times 10 = 1.06 \times 10^{-6} \text{ ms}^{-1}$$

RATE LAW

The experimental expression of a rate of reaction in the form of concentration of reactants.

According to this law rate of reaction is directly proportional to product of concentration of reactants raised to the power or exponent that has to be found experimentally.

In general, (irreversible reaction).



$$r \propto [A]^{m_1} [B]^{m_2}$$

$$= r = k [A]^{m_1} [B]^{m_2}$$

ROR

rate constant

$$\text{If } [A] = [B] = 1 \text{ then } [r = k]$$